Enhancing academic integrity during a period of rapid change
Rebecca Awdry, University of Canberra

Introduction
This paper presents the case study of a young Australian university undergoing a period of significant change and development. Student number expansion through partner development and increases in online and flexible modes of delivery of courses are being introduced in large numbers. Alongside this, the University has recently introduced text-matching software, resulting in changes requiring online assessment submission and marking. This paper presents the background to the University, current systems being put in place, policy changes and processes for plagiarism detection, academic skills support and student education in relation to text-based academic misconduct. New tools introduced to provide a supportive and educative environment for students whether on-campus or online will be also be presented. The paper will solely refer to plagiarism, as per the university definition (given below), and will be the focus of any discussion of academic skills training and dealing with misconduct. Future implications that have arisen from the changes, expected reviews and pilots, and what the University is currently developing to create a more all-encompassing system of academic integrity, from 2015, will be given.

Background to strategic changes and university implementations
Under the current 5 year strategic plan 2013-2017, the University is progressing with large-scale expansion and development regarding course delivery and course providers. Student number increases are targeted to be 46% in 4 years. The University is expanding the number of higher education and further education partnerships and third-party providers it has, together with increasing the numbers of courses run by partners. Alongside this, the University has developed a large proportion of flexible and online delivery modes for existing courses (see chart below). Only 64% of units are now delivered completely on-campus. Targets for mode changes are as follows:

- Percentage of units supported by online resources: Includes units delivered in the following modes: on-campus, flexible, online, intensive, and self-paced. 2013, 54.3% by 2017, 100%.
- Percentage of units delivered completely online, on-campus attendance is not required. 2013, 1.5% by 2017, 40%.
Online units (which are equivalent to modules) have been introduced across the four faculties, providing students with the opportunity to enrol and study entirely online, submitting assessments electronically and receiving results through the Moodle site and Gradebook. In parallel, the University has introduced mandatory online submission of written assessments for all students and all courses since January 2014 (start of 2014 academic year). The University, having not previously had a consistent system or software in place for text-matching, has begun a pilot of using text-matching software, with URKUND selected for the first trial. This has allowed for the scanning of work following online submission through Moodle.

Staff development was expanded to promote online learning initiatives and innovative learning strategies, in parallel with staff use of Moodle and URKUND. Staff received information on the most appropriate ways of developing courses including relevant concept designs in the online environment. Online resources were also available to provide staff with information on creating interactive and online learning materials, and how, and which technologies to use. As a result of the wide-spread and high impact changes introduced for 2014, a considerable amount of planning was undertaken to determine appropriate resources required to support students and staff during implementation, and in providing the appropriate levels of academic skills training and awareness of URKUND. Student resources included developing academic skills workshops and individual support, online assignment advice and improving the University’s risk identification system for students at risk of academic failure.
The academic integrity strategies have been bound within an educative and proactive philosophy with the focus being on academic skills training and learning (allowing multiple submission to URKUND), and support for students by the University and peers and encouraging students to become autonomous learners. There is a plethora of research across the sector regarding the most appropriate ways to address plagiarism. Proactive strategies were deemed to be the most effective ways of tackling the problem, by arming students with the tools and knowledge to avoid plagiarism (www.unisa.edu.au/eaip; Carroll, 2007; Ellis, 2012; Park 2004; Carroll and Macdonald, 2006). Little emphasis is placed on detection and punishment, with University-wide communications promoting academic skills rather than focusing on the ability to detect plagiarism through text-matching software.

Student engagement and early intervention strategies, whose objectives are proactive and flag students at risk at an early stage, were focused upon. Analysing the problems that have arisen in the past, in relation to student grades and instances of misconduct, demonstrated the need for supporting students in their academic skills training and educating students to the dangers of poor referencing, copying and pasting, etc. Plagiarism is defined broadly at the University as ‘... claiming and using the thoughts or writings or creative works of others without appropriate acknowledgment or attribution’. (More expansive examples are given following the definition, in the Academic Integrity Policy.) Collusion sits within the current university plagiarism definition. However, an expanded definition is being developed this year, to separate collusion from plagiarism to provide clearer guidance for students on types of misconduct and appropriate forms of working and permitted collaboration.

Throughout the work done at the University to embed academic skills in the learning environment, and to respond to the issues related to plagiarism, little focus was given on assessing penalties being applied to instances of academic misconduct; although this is an area that may be developed after reviewing the results of the first semester outcomes from the use of URKUND. As Macdonald and Carroll (2006) argue, it is important to foster a holistic approach to the management of academic integrity and plagiarism. This must focus on the proactive and educative resources and philosophies and assessment design, rather than focus attention on punishments and retribution. University strategies must involve empowering the student with the academic skills required to avoid plagiarism (Macdonald and Carroll, 2006). Furthering this, Awdry and Sarre (2013) demonstrated the importance of placing the responsibility on students to foster a sense of morality amongst the student body to strengthen the culture of academic integrity, rather than focusing on punishments and creating a feeling of distrust of students by academics. It was found that students themselves, contrary to academics’ beliefs, placed a high moral stance on academic misconduct (Awdry and Sarre, 2013). Following these ideals, the Teaching and Learning Centre (TLC) developed support strategies that gave more autonomy to students, and placed the responsibility on them.
What’s new?

Due to the number of changes that were introduced simultaneously, it is important to recognise that these new processes, policies and systems have not yet been reviewed or analysed, but will be from the second half of this year and during 2015. Therefore, the information presented below is given without a critique of the methods selected or being employed. Review will be undertaken from the second half of the academic year following returned figures for cases of academic misconduct, subsequent to the completion of semester one assessments being submitted through URKUND. A variety of strategies (as shown below) are in place to support and nurture a culture of academic integrity at the University. It is important to note that URKUND is being used as a trial only and it is anticipated that Turnitin will be trialled for 2015 to allow for a tested comparison of different text-matching software.

Policy and Procedures

A large proportion of academic and related policies and procedures had to be reviewed as a result of the changes introduced. The review is being undertaken in accordance with the objectives and methods detailed in the ‘Australian Policy Cycle’ (Bridgman and Davis, 2000); ensuring that the review is coordinated, with relevant consultations, decisions on changes needed being reviewed before and after implementation, and issues identified with old policies and systems currently in place. The work of the Exemplary Academic Integrity Project (Bretag et al. 2011, through: www.unisa.edu.au/eaip) has developed a framework for enacting exemplary policy which helps to create an inherent culture of academic integrity. The work has identified five core elements that are necessary to cultivate good practice: Access, Approach, Responsibility, Detail and Support (Bretag et al. 2011). This encourages policies on academic integrity to be easily accessible with links to relevant documents; for a context (for example, educative) to be aligned with the policies and clear statement of purpose given; for relevant stakeholders to be outlined; for support systems for students and staff to be developed; and for clear details to be given of types of misconduct on classifications of breaches and possible penalties. Six recommendations for developing the approach are then promoted, amongst them: Regular review of academic integrity policy and process, this requires feedback from stakeholders and analysis of effectiveness of current systems; education on academic integrity for all relevant persons in the institution; and student engagement, so that students are not seen as passive recipients but have the chance to provide feedback on systems (see www.unisa.edu.au/eaip).

As electronic submission of assessments and the use of URKUND was a mandatory condition of assignment submission, assessment policies had to be updated to state the requirements and note that it was the default process. Alongside these policy changes were also large-scale changes to policies for online teaching and learning methods and procedures, which
were developed through collaboration with the Teaching and Learning Centre (TLC) and faculties to create innovative online resources. More focus was placed on designing innovative assessments that were unique and would reduce the ability for replication/plagiarism. Consequent to the submission of online assessments came the obligation for tutors to employ online marking methods through Gradebook in Moodle. These processes were introduced as a benefit to students to expedite processes and allow for easy access to information and their student record through the Moodle sites, as well as allowing parity of treatment of students on-campus, at partner institutions and those enrolled in online/flexible courses.

Significant changes were introduced in 2013 in preparation for the 2014 implementation of URKUND. These included altering policies that considered course delivery and modes of study in response to the increase in the number of online and flexible units, and courses that would be offered by the University. Aside from the actual implementation, the changes in environment required a lot of faculty staff involvement to ensure that they received the support necessary in teaching students and providing assessment feedback in an online environment, an approach advocated by Ellis (2012). She argues that an institution must streamline plagiarism detection, and that problems of managing the workload implications of plagiarism detection are part of a larger issue of assessment management. This needs to be handled and placed within a holistic approach to educational integrity and for online strategies to consider the wider implications of managing online and electronic assessments, coupled with relevant staff training in appropriate design of assessment tasks (see Ellis, 2012). She stresses that there is an over-reliance on text-matching software and that staff may become complacent; ‘...common to all of these tools... require human engagement to be effective.’ (Ellis, 2012, p. 49).

The development of academic skills training and alerting students to the uses and detection of matched text in the URKUND software required procedural change in creating a person of authority in the interpretation of URKUND reports in each unit area. URKUND training is provided by TLC, who holds individual faculty sessions on a requirements basis, teaches staff how to use the software and how to interpret similarity reports. In reviewing these policies to reflect forthcoming changes in the institution, it became apparent that changes would be needed in relation to the type of support that students would be receiving in the new virtual learning environment. Aside from academic skills support, this also related to assessing the effectiveness of the Early Intervention Strategy Policy (aimed to identify students at risk of academic failure and provide them with further, and relevant, support). This was reinforced by software alerts to staff which highlighted students at risk of academic failure through Centralised Learning Analytics and Student Support (CLASS) (explained below). The policy is university-wide and applies to partners, both domestic and international.

As Park (2004) argued, it is essential to create consistent systems of policies and procedures that followed the same objectives and are appropriate to the culture of learning at the
institution. Therefore, review of these systems was also important in creating a supportive and uniform institutional framework for developing academic integrity. Overall, all academic policies were, or are, being reviewed to ensure that they align with the current university strategies.

Text-matching software and URKUND

Until recently, the University has not had a process for text-matching software either for student learning, or for formal scanning of assessments. During 2012 and 2013 students were provided informal access to a free plagiarism checker to check draft assignments. It was identified that a more consistent system was necessary to provide a uniform system of using text-matching software to educate students in referencing styles and to detect potential instances of plagiarism. Different text-matching tools were considered in 2013 for effectiveness and suitability. The work of Weber-Wulff et al. (2013), who promoted the effectiveness of URKUND over other software types, was also considered. They carried out statistical testing on the effectiveness of highlighting poor referencing, copy and paste plagiarism and also tested software for detection capability in a non-English language. The authors found that URKUND provided the most positive detection of plagiarism and had an easy system to use with good user support (Weber-Wulff et al., 2013). Wide-spread consultation was conducted, and due to differing views of staff and students throughout the institution, the decision was made to trial more than one piece of software. URKUND was selected to be piloted first. Of import was the consideration of intellectual property rights of students and the retention of student assignments in the software’s database (URKUND requests permission from students before retaining their document in the database), something strongly advocated by the University of Canberra Students’ Association.

Currently only selected units and courses are scanning student work through the software. From June 2014 the pilot will be extended to all courses and units, however, academics can opt to not use the software to scan their students’ assessment tasks. Students can also choose to submit their formative work through the software. On submission, students are given a similarity report of their work, to protect student identity it was requested that when a source matches to another student’s work, the matched text is highlighted, but would not identify the student to which the matched text originated. However, in the first semester uses of the software there were some faults in which students became identified when quotes or text matched to others on the same course. Although fixable, this demonstrates a negative aspect of the software that appears to be a problem in the interface between the current version of MOODLE used at University of Canberra. Further, it proved to be a time-consuming tool to use for initial set-up, with staff having to create an URKUND email address for each unit, rather than it using their staff email through MOODLE. There were also problems with submission uploads not working correctly through MOODLE and students not having their assignments scanned.
However, URKUND has provided similarity reports in the majority of cases that have been used by faculties to consider whether there are cases of plagiarism. Students have also given positive feedback to being able to see what elements of their work are poorly referenced, and where they may need to work more on their paraphrasing skills. This pilot, although not fully rolled-out until June 2014, has demonstrated to the University the importance of testing systems before full implementation. Records of the positive and negative features and responses by users (staff and students) are being collated to compare to the future trial of Turnitin in 2015. This also supports the mixed literature present on different text-matching tools. Due to costs associated with purchasing, implementation and training in text-matching software, the University wants to determine the most effective system for its needs, which may differ to another institution.

Student Support

**Academic Skills Centre**, supported by the Teaching and Learning Centre and the Library provides a university resource in the dissemination of academic skills and associated learning and teaching methods through a visible presence within the library, but also through cross-campus sessions and their own website. Academic skills training is held throughout the University, in various formats and modes, in small group and one-to-one sessions, to formal seminars and larger group drop-in sessions. The centre, staffed by mostly academics, provides advice to students on the use of URKUND and the interpretation of the similarity reports. The centre also has a dedicated URKUND student support staff member. Academic Skills Centre (ASC) co-ordinates the academic skills training carried out by other areas of the University, and also in training and nominating students to become academic skills rovers.

**Academic Rovers** are available throughout the campus to help students in their understanding of referencing, academic skills, assignment writing and how to avoid accidental plagiarism and collusion. This provides informal peer support in all areas of academic skills and integrity training, which is non-discipline specific. Most students are enrolled in an education undergraduate degree, in their third year, or a masters level student. Students can nominate themselves to become rovers and following successful interview, are provided with the necessary training by TLC and ASC staff. This enables them to become expert in giving students the support needed to produce assessments with a fuller understanding of referencing, assignment structure and academic skills. Academic Rovers wear ‘Rover’ t-shirts to allow them to be identified by students across the campus, so that students may approach them whenever they need. A pilot was conducted in the second half of 2013 and received very positive feedback; this was then rolled out on a full-time basis from January 2014. Encouraging students to be autonomous learners, as shown through relevant literature, is an important part of their development at university, to provide them with the appropriate knowledge and skills (see Carroll and Macdonald, 2006).
By formalising peer-to-peer learning in this way the University is aiming to foster a strengthened culture of integrity supported by the student body and not reliant on teaching staff.

**Academic Skills Workshops** Workshops are faculty/discipline specific and held throughout the academic year. These help students receive more relevant academic skills training for their subject area and assessment type. General large-scale workshops are also held each semester to allow students to attend a more formal lecture-structure. These sessions are all optional, but allow students who may feel that they need or want more support, to attend without having to make an appointment in advance with a lecturer or tutor. The sessions are run by faculty and ASC staff. Students who have been highlighted through the early intervention systems as being at risk of poor grades or leaving university early may also be referred to these sessions to encourage engagement with the processes involved in assignment production, within the expected conventions of academic skills.

**Academic Integrity Module** The Academic Integrity Module (AIM), available through Moodle, was introduced in 2013 and provides students with training and knowledge on academic skills. It provides information on how to structure assessments, how to research and prepare for the work, and how to produce a piece of work that follows the relevant referencing styles and format. Within AIM are links to frequently asked questions about URKUND and its use. Currently, the module is optional and does not carry credit towards their student profiles. From 2015 it is expected that all instances of plagiarism and collusion that are upheld, will carry an automatic penalty requiring the student to retake the module to educate them in academic skills, reiterating the importance of correct referencing and the avoidance of academic misconduct. There has been positive engagement with the module, as shown in the below table. The data entitled ‘activity’ demonstrates some form of action within the module, rather than just logging in and looking at the material, it indicates that they have either tried some of the examples, or completed the quiz questions. To date there have been 755 attempts at the full AIM quiz in the final part of the module (by week 7 of Semester 1).

<table>
<thead>
<tr>
<th>Period ending (Week)</th>
<th>Views</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 March</td>
<td>5334</td>
<td>778</td>
</tr>
<tr>
<td>22 March</td>
<td>7361</td>
<td>1227</td>
</tr>
<tr>
<td>15 March</td>
<td>8437</td>
<td>1463</td>
</tr>
<tr>
<td>8 March</td>
<td>9066</td>
<td>1483</td>
</tr>
<tr>
<td>1 March</td>
<td>11777</td>
<td>1898</td>
</tr>
<tr>
<td>22 February</td>
<td>16219</td>
<td>2467</td>
</tr>
<tr>
<td>15 February</td>
<td>6457</td>
<td>807</td>
</tr>
<tr>
<td>8 February</td>
<td>21</td>
<td>6</td>
</tr>
</tbody>
</table>
Despite it being optional, some lecturers have made the Academic Integrity Module a compulsory element of their unit, requiring students to submit their certificate of completion with their first assignment. Alongside AIM is a unit which does carry credit, The Common First Year Unit (CFYU). CFYU provides professional support for students in encouraging them to connect with employment and relate their studies to their future career and work area. It develops business skills and alerts them to what is required in the workplace in different industries and professions. The objectives behind this were not just associated with employability of graduates and encouraging connections with the workplace, but also to strengthen the overall perception of integrity in learning by directly correlating study with the potential of work and success in the working environment.

**Smarthinking** This is an online tutoring service (managed by Pearson Education). It provides 24/7 support for students and gives them advice on assignment completion. The service allows all students to access support regardless of mode of delivery, and includes students that are on-campus, studying online or students studying with a third-party provider. Students submit their query, with a draft of an assignment and brief, requesting feedback on the work. This can be related to assignment structure, referencing, grammar or be subject specific. Feedback is given via email and includes comments on their assignment, where applicable. Respondents are academics trained in Australian higher education expectations in the relevant disciplines. An online support service was a critical area that was developed in responding to the needs of off-campus, online students to give parity to the levels of support that all students can access. Online modes of study do not allow for students to engage with the Academic Skills staff, or academic rovers, and therefore Smarthinking can provide this for students. It was trialled in 2012 and had a full roll-out during 2013. There is a range of support available but assessment feedback has proved to be the most used tool with the highest proportional use of the service.

**CLASS** Centralised Learning Analytics and Student Support programme analyses data relating to 57 variables (such as age, educational background, ethnicity, and number of log-ins to Moodle) that can measure risk factors that lead to students failing or dropping out of university. It provides an early warning system and alerts staff to those more at risk, and those with poor engagement. By analysing the variables it sends a warning email to the relevant tutor and the Teaching and Learning Centre when a student meets a certain number of variables that can lead to failure at university (the warnings vary depending on which variables are met, and therefore there is not a blanket number to meet before the
system creates the alert). Those who are, or at risk of, failing to meet course progress requirements are offered additional support and guidance. Course and Unit conveners contact students and take relevant action to support at-risk students; international students are also offered advice by the International Student Advisors. As a result of the promotion of academic skills and integrity workshops and the introduction of URKUND, plagiarism will be added as an additional variable for data collection and analysis, from Semester 2, 2014. This process aims to be as proactive as possible in supporting students who may require additional engagement or learning provision.

**Future implications**

Jurowska and Thompson (2012) promoted the use of a pre-university online module with tasks that students could undertake whenever they wished (trialled at Durham University). This was designed to provide students with required university academic skills, and to encourage them to become autonomous learners, something expected at university but often at odds with school experience. Positive results were seen, despite the vast differences found in students’ prior learning of academic skills; with none of the students in the sample having had any concern of plagiarism or poor referencing noted in their work (Jurowska and Thompson, 2012). Already in place at the University are supporting modules and units, some bearing credit, others not. The University of Canberra College students and other students on pathways from school to the University are currently able to access the Academic Integrity Module. This aims to expand a student’s skills and understanding of university expectations, and also align them to wider work-place assumptions of what a graduate will know when leaving university. These students are also able to log-in and do ‘taster’ sessions of their future units. A future consideration will be to allow access to all students on acceptance of an offer letter; however, there would be difficulty in determining how this would be done with ample lead time.

Wider implications of promoting a culture of academic integrity also need to be promoted. As Gallant and Drinan (2006) advocate, it is essential to encourage an organisational framework for addressing academic misconduct. This requires the institution to feed into developments and thinking behind promoting academic integrity. Following this, and advice from the Higher Education Academy (HEA, 2011), successful implementation of an academic integrity framework may be better served by a cross-institutional committee of working-groups to consider issues arising between disciplines. Effectiveness of current systems must be regularly reviewed. Continued consultations with academic staff will be carried out, and initial conversations have highlighted their concern with potential high numbers of academic misconduct following the implementation of URKUND. Comments received have revolved around clearer definitions of collusion being required, with examples that staff can disseminate to students. This will alert all students and staff to their responsibilities in understanding and sharing knowledge on academic integrity. Contract cheating is also an area that has been mentioned in several discussions, and methods to manage this, and
progressing current practice in relation to responding to suspicions of assignments having been purchased, are currently being considered.

Bench-marking has been emphasised as an area for development for 2014 and 2015. An exercise is being undertaken to determine sector norms for where academic integrity is taught, and where misconduct is processed. This will also look at who is responsible for each area, relevant policies and procedures and applicable penalties. The University will analyse best practice when considering its position on academic integrity and misconduct hearings. As stated in the HEA publication ‘Policy Works’ (2011), it is imperative that there are clearly defined principles, policies and examples of practice. Policy documentation should be transparent, provide clear definitions of misconduct, with examples, and be inclusive to engage staff and students into a culture of academic integrity at the institution (see HEA, 2011). It will be interesting to analyse the first semester and year of URKUND results to establish whether more education is required, and whether systems of inquiries and penalties are appropriate to levels, frequency and types of misconduct seen.

A further area to develop will be in demonstrating who is responsible for academic integrity and reasoning why, and when, this would be the case; something important to establish for third party providers. This not only provides systems of accountability but supports the principles of policy and the rationale behind it (educational, retributive etc.). The University is working in a manner which parallels and will utilise the rationale of the Exemplary Academic Integrity Project (www.unisa.edu.au/EAIP). In progressing its policies and academic integrity framework the University of Canberra will look more closely at the project (see Bretag et al. 2011). It has been noted that responsibilities need to be more clearly defined and transparent so that staff and students know who manage academic skills and breeches of academic integrity, which will be particularly important in the progression and alignment of on-campus support and for partner and online students. Further, it will be important to consider assignment design and suitable assessment tasks in the online environment. Placing more responsibility on students to become autonomous learners, through the support systems that have already been put in place will enhance understanding of academic skills and integrity. Overall, following the guidance of Carroll and Macdonald (2006), the University will create a more holistic and institutional-wide approach to academic integrity. The implementations will hopefully reap the rewards in future reviews and see a strengthened and inclusive culture of academic integrity.

Summary

As shown, much of the change that has occurred at the University has been introduced within a proactive and educative framework. The University aimed to provide the most effective systems to engage students and provide them with the necessary academic skills to avoid plagiarism, producing work within expected standards. The support systems were
all aimed at being proactive in teaching these skills, and reactive when a student required more support (through the early intervention in CLASS). Academic skills training was considered to be something that should not explicitly be done through existing lectures and seminars, but should have a large presence throughout the University. This ideal was employed through the Academic Skills Centre, the introduction of Academic Rovers, and the drop-in academic skills lectures and workshops. This allowed students to engage outside of classes and to enhance their knowledge through completion of the online Academic Integrity Module. These implementations aimed to encourage students to become autonomous learners and highlight that academic integrity training is a responsibility that is placed on students and staff alike.

Review of the processes will be critical in developing a system of academic skills and culture of integrity that is inherent throughout all elements of the institution. It will be essential to consider necessary changes following feedback from current systems. Indeed, as the initial use of URKUND has demonstrated, there are often teething problems or unexpected setbacks. These will be compared to the future trial of Turnitin to determine the most effective software for the University. Due to the developments at the University, all systems are considered as working models that need to be updated and adapted as frequently or infrequently as required. Being able to self-critique will be a necessary skill for the University to expand upon current systems to create the most effective, proactive and supportive system of academic skills.

References


Jurowska, J. and Thompson, J. (2012) “Opening Doors Early to Academic Integrity” – aiding the transition to and managing expectations of academic practice at University *International Journal for Educational Integrity* 8(2) pp.4-20


