Abstract

In order to improve information literacy, reduce plagiarism and develop pride in authorship of written work amongst international students a research study was undertaken at the University of Hertfordshire within the Business School, trialling a holistic approach to dealing with these issues. The key objectives of the project were to raise awareness of the issue of plagiarism amongst students, develop understanding of academic integrity and authorship, encourage the use of ‘quality’ information and correct referencing, improve academic writing skills and inform educational policy within the Business School and the wider University.

The project was carried out with thirty-four international students studying a Business Strategy module in the Business School. The project was directly linked to a Business Strategy assignment through a sequence of re-usable blended learning workshops, with input from an Academic Skills tutor and the use of i-Spy, the university’s online information skills tutorials. In addition, students used the plagiarism detection software ‘Turnitin’ as an educational tool for formative feedback to develop their authorship skills.

The success of the project was evaluated against the student success in course assessments, together with feedback obtained from students via reflective logs, a focus group and a questionnaire. Feedback was also obtained from tutors and external examiner via interviews. The workshops were found to have improved the skills of the sample cohort. Students used a wider range of sources, referenced them correctly and, according to the module leader, did not plagiarise. It is recommended that benefits may be derived from adopting a holistic approach towards dealing with the issues of authorship and plagiarism.

Background

This paper presents the findings of a University of Hertfordshire Learning and Teaching Institute funded project ‘Fostering Pride in International Students’ Authorship.’ carried out in collaboration with Karen Robins, now the Business School’s Director of Learning and Teaching and Mary McCauley from the Business School’s Academic Skills Unit. The project ran from October 2008-January 2009. The aims of the project were to develop an understanding of authorship and originality in a cohort of principally Chinese international Business School students studying for the Graduate Certificate in Business at the University of Hertfordshire, through a series of ten workshops. Data was collected using qualitative and quantitative methods to evaluate the success of the workshops.

In order for students to understand authorship and originality and take pride in authorship of their own written work, workshops were devised to raise their understanding and awareness of plagiarism, and empower them by giving them tools to create an original piece of academic writing. The workshops gave the students the opportunity of using the
originality checking software Turnitin for formative feedback, along with underpinning in-
formation literacy and academic skills input. The approach adopted was intentionally a
holistic one (see Figure 1), based on research already undertaken in this area.

Figure 1. A holistic approach

Plagiarism

Plagiarism has been defined by Dahl (2007 p.174) as ‘anything where a student incorpo-
rates a substantial, unacknowledged amount of materials derived from the work (published or unpublished) of another student.’

There are of course many reasons why plagiarism is a problem. Park (2003) cites the reasons for tackling plagiarism as fairness, academic reputation and integrity, promotion of good study skills and independent learning, and fostering a sense of responsibility amongst students.

As far back as 2002, it was noted by Johnson and Rader (2002) that students are in-
creasingly using the internet for their information needs. Given the wealth of easily avail-
able information, it is very easy to ‘borrow’ text without acknowledging it. The extent of
the problem is not readily quantifiable but there is rising concern (Park 2003). Park (2003)
also argues that the causes of plagiarism are many and complex, ranging from a genuine
lack of understanding to deliberate cheating.
Potential causes of plagiarism amongst international students

Although studies such as that by Varga-Atkins and Ashcroft (2004) found little difference between the information skills of home and international students, there are concerns that there are higher incidences of plagiarism amongst international students. There could be many reasons for this, including culture and language.

The cultural issues surrounding plagiarism have been explored by Lake (2008), who suggests that in China to paraphrase could signal disrespect to the author and Holmes (2004) who suggests that in China there is greater allegiance to established authorities; however Gu and Brooks (2008) argue strongly against generalisation whilst Liu (2005) argues that plagiarism is not acceptable in China. Zhang (2006) and Song (2004) discuss the challenges faced by international business students at the University of Illinois in using virtual reference resources.

Gu and Brooks (2008, p338) suggest that this goes deeper: ‘learning to write in an unfamiliar academic discourse requires, at the deepest level, a conceptual understanding of knowledge construction and conventions in the dominant academic community, rather than practice of mechanical aspects of citing and referencing’.

Another cultural issue is the perception that international students have difficulty with critical thinking. Gu and Brooks (2008) argue that independent thinking is part of the Chinese tradition but that there could be a problem for Chinese students in understanding the concept of building on a body of knowledge to advance original thinking. Holmes (2004) discusses the problems of students having to change their learning styles.

Regarding language, Pecorari (2008) considers some of the linguistic issues that can put international students at a disadvantage. To cope with poorer language skills, international students may well employ the habit of patchwriting, where chunks of text are stitched together, defined by Howard in 1993 and seen by Pecorari (2003) as an essential phase before students’ own voices can emerge.

Potential remedies

To maintain academic integrity, despite all these considerations there remains a need to tackle plagiarism and JISC (the Government funded Joint Information Systems Committee) commissioned the Electronic Plagiarism Detection Project which reported in 2001. According to JISC (2000) ‘Electronic detection has its place in institutions but the real solutions lie in appropriate assessment mechanisms, supportive institutional culture, clear definitions of plagiarism and policies for dealing with it and adequate training for staff and students’. In 2002 JISC set up Plagiarism Advice.org which has a resource bank of good practice across institutions.

One electronic plagiarism detection tool is Turnitin, which was developed in 1998 and won a contract with JISC to serve HE institutions in Britain (Park 2004). Turnitin produces
originality reports so that it is easy to see how much text is the student’s own work.

In recent years, the emphasis has shifted from the use of Turnitin for detection to that of an educational tool, so that the term ‘text matching’ is preferred to ‘plagiarism detection’. Introna and Hayes (2008) call for a move away from a punitive legalistic approach to plagiarism that equates copying to plagiarism and move to a progressive and formative approach.

The importance of educating students in using Turnitin is underlined by Davis (2007) who recommends tutor guidance in the use of Turnitin and also stresses that this is not a single solution but should be used as part of an integrated approach.

Recently there have been more calls for Turnitin to be used for formative feedback. Introna and Hayes (2008) argue that inappropriate use of Turnitin is unfair, but that it should be used formatively. Brick (n.d.) at Coventry University describes using Turnitin for formative feedback. Ledwith and Risquez (2008) found a decrease in plagiarism when anti-plagiarism software was used with peer reviewed assignments. Davis (2007) worked with students on a Pre-Masters Diploma at Oxford Brookes University and recommended using Turnitin with first drafts prior to assessment. This approach was reinforced more recently by Davis and Carroll (2009).

A holistic approach

Instead of a punitive approach, seen by Leask (2006) as discriminatory, a holistic approach has been advocated by Gu and Brooks (2008), and Macdonald and Carroll (2006). Education along with effective detection is seen as the best approach by Angelova (1999) and Dahl (2007). Barrett and Malcolm (2006) from the University of Hertfordshire discuss the importance of embedding plagiarism education in the assessment process. The project aimed to supplement the use of Turnitin for formative feedback with two other areas, information literacy and academic writing skills.

The importance of assisting students with information literacy has been identified by Rowell (2009) while Barry (2006) discusses the importance of critical thinking and evaluating sources and the need for instruction and practice in referencing. For this project, it was felt that if students could be encouraged to use good quality sources of information and were equipped with the skills to search good sources and evaluate them, the risk of plagiarising websites could be reduced.

i-Spy ([www.studynet.herts.ac.uk/go/ispy](http://www.studynet.herts.ac.uk/go/ispy)) is the University’s information skills framework, and is populated with online tutorials covering all aspects of working with information. The i-Spy information skills framework, described by Bilson et al (2007) and shown at Figure 2, was initially introduced to the University of Hertfordshire in 2007, following consultation with staff and students and research by external consultants into the way people work with information. Whilst most frameworks until this point were linear, the i-Spy model is iterative, and populated with online tutorials in ‘bite-sized’ chunks, reflecting the
fact that students do not work in a linear, sequential fashion. In this sense they can be described as reusable learning objects (Mardis and Ury, 2008).

**Figure 2. The i-Spy framework**

Academic writing skills are also vital and Elander et al (2010) have since shown that paraphrasing practice brings positive results. The Academic Skills Unit (ASU) runs as a discrete unique unit in the University of Hertfordshire Business School (UHBS). ASU’s role/mission is:

- To encourage students to complete their studies at UHBS to their best ability by providing a range of supportive resources, and empower them to develop their full potential as independent learners.
- To liaise with UHBS staff to improve teaching and learning

ASU, whose website is shown in Figure 3, runs skills workshops almost daily to support all students, including academic essay/report and dissertation writing, Harvard referencing, editing and proof reading, team work, presentation skills, reflective writing, creativity, critical evaluation, statistics and numeracy, exam revision tips and various self management workshops such as managing stress and time management.

This project was a vehicle for i-Spy tutorials, academic skills content and the use of Turnitin to be brought together to support students conducting a specific piece of work, so that the students could see the immediate benefits rather than viewing the workshops in isolation.
Preparing for the workshops

The Graduate Certificate in Business Programme is a 15 week pre-Masters Programme where international students study four business modules with intensive language and study skills support. Successful completion of the Programme takes students on to a Masters course. The Programme is divided into two two-module blocks; the Programme which starts in September has a second block beginning in November.

It was decided to work with students on a core module, Business Strategy, taken by the whole cohort of thirty-four students in the second block. The learning outcomes of the Business Strategy module focussed on research and critical analysis which fitted well with the aims of the project.

The assessed piece of work for this module was a group assignment on Google’s business strategy. The workshops were designed and timed to support this piece of work. The students on the Programme (and this module) were predominantly from China with a smaller number from India and Nigeria, and one from Hong Kong. For the group assignment they were mixed into multi-national groups.
Although no credits were attached to the workshops, it was agreed that students would be told that attendance was compulsory and that non-attendance could lead to them dropping a grade. The workshops took place over three weeks in November and December 2008, as the students were preparing their assignments. The workshops were divided into five blocks of two hours, held over three weeks in November and December, 2008. We divided these into five sections as follows

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
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<tbody>
<tr>
<td>Thursday 13th Nov</td>
<td>SEARCH</td>
</tr>
<tr>
<td>Monday 17th Nov</td>
<td>READ AND CONSIDER</td>
</tr>
<tr>
<td>Monday 24th Nov</td>
<td>WRITE AND REFERENCE</td>
</tr>
<tr>
<td>Thursday 27th Nov</td>
<td>PRIDE IN AUTHORSHIP</td>
</tr>
<tr>
<td>Monday 1st Dec</td>
<td>REFINE WORK</td>
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</tbody>
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**Running the workshops**

Workshop attendance was compulsory and monitored. Students were given individual invitations to attend the workshops, signed by the Acting Programme Tutor to sanction the workshops and demonstrate the importance of attending.

Attendance was generally good, even if a small number of students arrived quite late in the session. All thirty-four students registered on the module attended the workshops.

At each workshop students were given handouts to accompany the online work or presentations. A ‘team teaching’ approach was used, and this was found to be useful for transferring knowledge between the team members. All the materials were also available electronically in weekly folders on the students’ module page on StudyNet. At the end of each workshop students were asked to complete a reflective blog which was saved in their Personal Development Portfolio area on StudyNet. This lent cohesion to the workshops and aimed to make the students feel valued.

**Content of the workshops**

The first workshop, Search, shown in Figure 4, covered identifying sources of quality information. Students were introduced to the i-Spy tutorials and asked to work through two: Identifying Sources and Systematic Searching. Identifying Sources illustrates different types of information, books, journals, databases and websites. Systematic Searching gives tips on effective searching using keywords. The students were then directed to an online tutorial on the module site which guided them to quality sources of information to help them with the Google assignment. This was accompanied by a checklist listing good sources of information for the assignment.
The second workshop, Read and Consider, covered evaluating sources. Students were asked to work through the i-Spy online tutorial *Evaluating and Verifying* which asks them to look at information considering Who, What, When and Why. This was followed by the i-Spy *Thinking Critically* tutorial which looks at analysing and questioning viewpoints. This was followed by a presentation on Academic Reading and students were given an ‘ASU Guide to Academic Reading’ which includes the SQR3 technique and a handout on planning for written assignments. Figure 5 shows some screenshots from the i-Spy tutorials used by the students.

**Figure 5. i-Spy tutorials**

The third workshop covered *Write and Reference*. The first task was to show the students the Avoiding Plagiarism website, to which the University had contributed. The students were then introduced to the i-Spy *Citing and Referencing* tutorial, which links to an interactive quiz where students are asked to decide what constitutes plagiarism in a number of scenarios. Students looked at an online ‘Harvard Referencing Guide’ on the Business Information pages of StudyNet and were asked to bring the results of a referencing quiz to the next workshop. This was followed by a presentation introducing them to Turnitin, and a very successful interactive session using the Electronic Voting System, where students...
At the fourth workshop Pride in Authorship, the results of the Harvard Quiz were examined as a group. Students then looked at ASU’s Report Writing and Academic Writing Style guide and the i-Spy Essay and Report Writing tutorial. Figure 7 shows some of ASU’s presentation on Academic Writing.

The groups then submitted their draft assignment to Turnitin, with the target for the similarity index 10% and individual matches 1% or less. This was salutary, as some group reports initially showed these as much higher.

The reason for setting the similarity index target at 10% was to encourage students to paraphrase and use their own words. This was to avoid their work being highly derivative which would indicate an excessive use of sources even if they had been referenced correctly. For homework, students were asked to use the Turnitin feedback to revise their draft reports. Figure 8 shows a Turnitin originality report, as explained to the students.
The final workshop, Refine Work gave the students the opportunity of working in their groups to refine their group assignments and resubmit them to Turnitin. The students were advised on editing and proof reading and given an ASU Guide on drafting, editing and proof reading. One group was happy to have their Turnitin results projected onto the screen, as they had achieved a very pleasing low Turnitin score, meaning that they had used their own words in the assignment and were able to paraphrase effectively. Students were asked to email an overall reflective log, using the reflections from each of the individual workshops.

Impact Assessment

The impact of the project was assessed in a number of ways. Feedback was obtained from students using the students’ own reflective blogs, an online evaluation form and a focus group. Feedback from staff was obtained through interviews with the English tutor supporting the module, the module leader and the external examiner; the latter two also provided written reports.
Feedback from students

Fourteen reflective blogs were received, which provided a rich source of evaluative data. The prompt questions asked after each workshop were:

- What did you learn today?
- What do you still need to work on?
- How can you use what you learned today in your studies?

A final evaluative blog was also requested, with the questions:

- What did you learn from the workshops?
- What do you still need to work on?
- How can you use what you learned in the workshops in your studies?

The standard of English in the reflective blogs was not very good in the case of the Chinese students, and there is one case where two students have used identical incorrect phrases. However, as a way of reinforcing what was covered in the workshops they are useful. Although some of the blogs suggested the need for practice and the difficulties students face regarding language, the reflections were very positive about the usefulness of the workshops and the students seemed to have really understood their purpose. Some examples can be seen at Figure 9.

Using the Bristol University online survey, a questionnaire was set up for students to provide feedback on the workshops in December, 2008. The questionnaire consisted of nineteen multiple choice questions to gauge how far students had understood the content of the workshops, with two open questions on perceptions of i-Spy and the workshops generally.

Figure 9. Examples of comments from students’ reflective blogs

<table>
<thead>
<tr>
<th>Results: Students’ reflective blogs</th>
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<tbody>
<tr>
<td>“There is more to Internet searching than just Google”</td>
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<tr>
<td>“It seems that I found gold when I practice to use the dictionaries”</td>
</tr>
<tr>
<td>“Gave us a good basis to know how to fine-tune our work … left us feeling proud that we were on the right track”</td>
</tr>
<tr>
<td>“Paraphrase the references and put into our assessment is much more better than Quotation directly”</td>
</tr>
<tr>
<td>“It is necessary to combine thinking critically that means not just taking everything you see, hear or read at face value”</td>
</tr>
<tr>
<td>“I think this session is useful for not only business strategy assessment, but also for master modules”</td>
</tr>
<tr>
<td>“It will help us forever”</td>
</tr>
</tbody>
</table>
Students were emailed with a link to the questionnaire. However, the response rate was disappointing with only thirteen out of thirty-four students completing the survey, despite a £50 Amazon prize draw incentive. This may be attributed to the students being busy completing assignments and having a Christmas/New Year holiday. However, the results were generally very positive as can be seen in Figure 10. The fact that only 78% of respondents agreed/strongly agreed that they knew how to think critically following the workshops could be attributed to the fact that this is the most difficult type of work, or that the workshops had not addressed this area fully.

**Figure 10. Results of questionnaire to students**

This was followed by a one hour focus group in January, after Chinese New Year and before the students embarked on their Masters Programmes. Six students of different nationalities were chosen from those who agreed to give their time. Students were paid £25 Amazon vouchers to participate. However, only three students attended the focus group, all from China, so this was not a very representative sample. It was felt that the timing of the focus group clashed with their holiday. However, it was necessary to collect data at this time, before the students moved onto Masters Programmes, when it would be difficult to get them together again and it was also felt that it was good timing as recollection of the workshops were fresh in their minds.
Figure 11. Results from focus group.

The feedback (Figure 11) shows that students thought they would have benefitted from having the workshops earlier in their Programme. They would also have liked to see more examples of what constitutes good work. The students recognised the differences between studying in China and the UK, with the emphasis on writing essays, and interestingly noted that plagiarism is not an issue in China although they knew that it is not tolerated here.

Feedback from the teaching staff and the external examiner

Staff interviews were conducted in December and January. The English tutor who provided four hours of English for every two hours of business content was quite pleased with the outcome of the students’ group assignments and confirmed that they showed evidence of good structure, good use of a variety of sources, and good referencing but were let down by language problems.

The module leader was more positive and stated that although there were language issues, and that this was a small sample, he felt confident that the workshops had helped improve the students’ assignments.

The external examiner was very positive about the impact of the workshops. Following the exam board, he recommended that similar workshops should be available to all Masters’ students. Extracts from staff feedback are shown in Figure 12.
Reflections on the project

The project was quite labour intensive in terms of time spent planning and running the workshops. Great effort was made to ensure that the students valued the workshops through regular reinforcement and encouragement.

It is possible that having an online tutorial guiding students to relevant sources of information for the assignment would result in the good use of a wide range of sources, rather than the i-Spy tutorials on ‘Identifying Sources’ and ‘Systematic Searching’, however this might not be sustainable and could impact on students’ ability to develop independence for future assignments.

One of the anticipated risks of the project was regarding how the students would use Turnitin. One group did attempt to use the software to submit work other than the Business Strategy assignment. However, it could be perceived that they saw the value of using the tool for formative feedback and wanted to use the opportunity to obtain feedback on other assignments they were undertaking.

One possible outcome of using Turnitin might mean that the students’ English is worse because they have to paraphrase more. But it can be argued that having to paraphrase is good practice and will help further in the long term by giving the students the opportunity to use their own words.
Summary of results

The qualitative data from the questionnaire, reflective blogs and focus groups showed that the workshops were very well received by the students. The questionnaire results were extremely positive, with nearly all scores showing that over 90% agreed or strongly agreed with statements confirming that the students had acquired skills in the areas covered by the project.

Students and the external examiner felt that the workshops were very useful but should have been held earlier in the semester. They felt that all Masters students would benefit from similar input, possibly in the Research Methods module. The external examiner reported evidence of wider reading in the assignments. The students would have liked to see examples of good pieces of work and perhaps this could be introduced in the future.

Regarding the use of Turnitin, this was successful and the students were keen to use it further. The module leader reported no evidence of plagiarism in the students’ work and noticed that they had used fewer quotations, indicating that they had paraphrased more.

The area that scored least highly in the questionnaire was that of critical thinking, which is known to be difficult for all students. However, the module leader thought that this was slightly better than with previous cohorts. The English tutor pointed out that he would have liked the students to challenge him more, but this is probably a cultural issue; and more work should be done in this area.

The evidence has shown that the work undertaken by the students has helped them understand the importance of originality and authorship both in the context of the particular module, and for their future studies.

Conclusion and Recommendations

The workshops confirmed the findings of previous research, by demonstrating that intensive underpinning work looking at finding and using good quality information, academic reading and writing, critical thinking and the formative use of Turnitin can all help the standard and quality of international students’ work and help them take pride in their own authorship.

As a result of this pilot project the Business School are opening up the Turnitin draft facility for all students and this is embedded in the new core level 1 skills module. It is hoped that this will help students towards the ultimate aim, identified by Gu and Brooks (2008, p.350) of mastering ‘a different lens through which to view authorship and the ownership of knowledge.’
Recommendations

- Ensure timeliness by holding workshops early in the Programme.
- Continue to embed skills materials into assessed work.
- Continue to make engagement with the materials mandatory.
- Undertake further work on critical thinking and challenging the lecturer.
- Encourage other academic staff to use Turnitin for formative feedback.
- Run the workshops by blended learning for increased flexibility and in order to ‘scale up’ to benefit more cohorts. This can be achieved through online exercises, as with the i-Spy tutorials and quizzes. This would fit with the University’s key aspiration of 25% distance learning by 2015.
- Since the workshops finished a new i-Spy tutorial, Academic Reading, has been launched. This could be used to complement the ASU materials.
- Consider using the ‘Recognising bias’ i-Spy tutorial for more advanced work on critical thinking.
- If the materials are to be rolled out to all Masters Programmes, they could be linked to the Research Methods module with a small percentage of marks allocated for successful completion.

Looking forward

Since this pilot, subject toolkits are available in the Learning Resources area of StudyNet for each subject. These toolkits provide links to quality resources, i-Spy tutorials, and Referencing guides.

In addition, more work has since been undertaken in making Turnitin more easily available for students and staff to use formatively. Information Hertfordshire Knowledge Consultants are working with the Academic Quality Office and the Director of Learning and Teaching in the Business School to provide guidance.

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