Student attitudes towards intellectual property – and what this means for libraries

Sarah McNicol
Research Project Officer
NUS Services Ltd
sarahmcnicol@zoho.com

Introduction

There have been dramatic improvements in the awareness of and education about plagiarism in UK universities and colleges in recent years (JISC, 2005). However, the wider aspects of intellectual property (IP) knowledge – for example, copyright, trademarks, patents, designs and confidentiality – are seldom addressed in any degree of detail within the curriculum. And while libraries have played a key role in the development of plagiarism education, most have had limited involvement in other elements of IP knowledge.

A more rounded approach to IP education, extending beyond plagiarism, is vital both to ensure that students successfully complete their course and, more importantly, to provide them with skills for their future careers, to ensure that they gain recognition for their ideas and are able to exploit these commercially.

A recent research project, commissioned by the Intellectual Property Office (IPO) and the Education Group of the Intellectual Property Awareness Network (IPAN) and conducted by the National Union of Students (NUS) and NUS Services, set out to investigate attitudes to, awareness of and aspirations for IP among UK higher education (HE) and further education (FE) students.

An online survey was designed to obtain a nationally representative student demographic from across the UK. Of the 50 000 students targeted, 2146 responded; of these, 69% were female, 31% were male; the median age was 22. The majority (59%) were in the first year of their course and approximately three-quarters were from HE institutions, with the remainder studying in the FE sector. Part-time students made up 29% of respondents, and there was a wide distribution between university mission groups and subjects studied.

What do students understand by 'intellectual property'?

Almost two-thirds of the students surveyed (64%) were able to give definitions of IP that showed an understanding of at least some aspects of the term. Among the most common features mentioned were the ownership of ideas (25%) and copyright (18%). Interestingly, plagiarism was rarely mentioned in response to this question; for example, just 2% said IP meant that something could not be reproduced without permission.

The importance of IP knowledge

Having established their understanding of the term, students were asked about the importance they attributed to learning about IP generally during their time in education. The vast major-
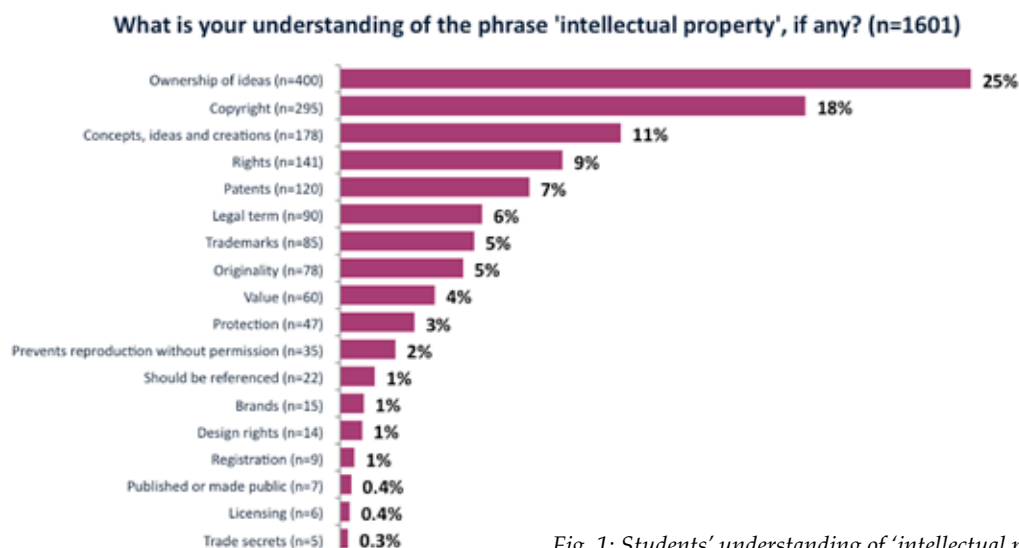

What is your understanding of the phrase 'intellectual property', if any? (n=1601)

Ownership of ideas (n=400)	25%
Copyright (n=295)	18%
Concepts, ideas and creations (n=178)	11%
Rights (n=141)	9%
Patents (n=120)	7%
Legal term (n=90)	6%
Trademarks (n=85)	5%
Originality (n=78)	5%
Value (n=60)	4%
Protection (n=47)	3%
Prevents reproduction without permission (n=35)	2%
Should be referenced (n=22)	1%
Brands (n=15)	1%
Design rights (n=14)	1%
Registration (n=9)	1%
Published or made public (n=7)	0.4%
Licensing (n=6)	0.4%
Trade secrets (n=5)	0.3%

Fig. 1: Students' understanding of 'intellectual property'

Reasons for knowing about intellectual property

Very Important — Important — Neutral — Unimportant — Very Unimportant — – – Level of importance
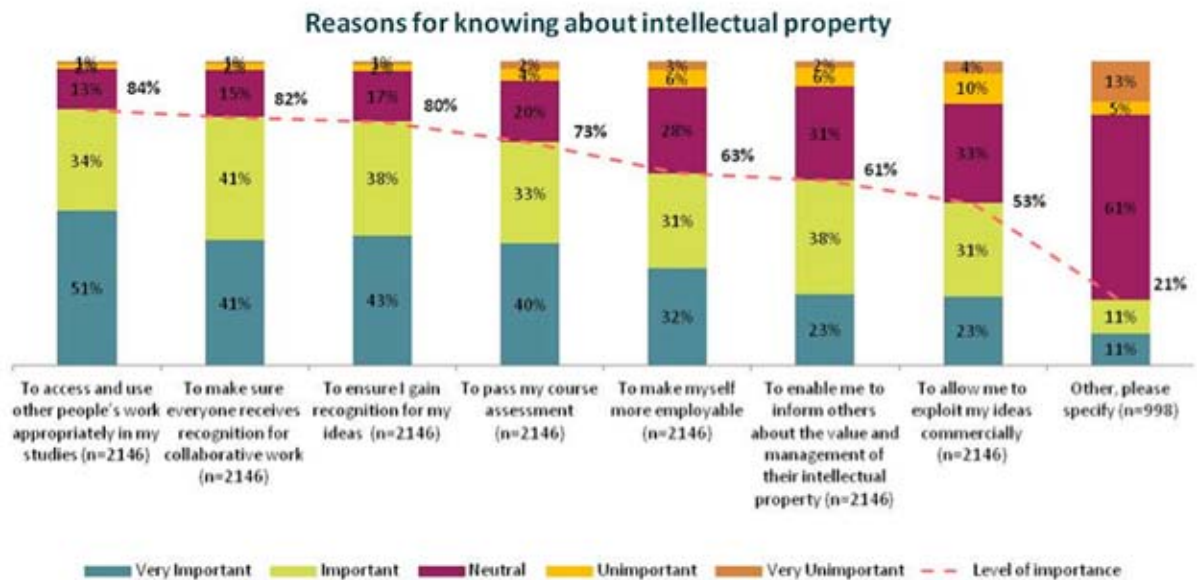
Fig. 2: Importance of reasons for knowing about IP

ity (82%) felt it was important or very important to know about IP, and only 3% thought it was unimportant.

In addition, more than three-quarters of students (77%) believed an awareness of IP to be relevant for them in their future career, and just 13% did not feel it was relevant for their future employment. Interestingly, there was a statistically significant difference (p<0.01) between students studying different subjects; those studying mass communication, law, technologies and engineering were most likely to feel that an awareness of IP was relevant to their future careers.

Worryingly, only 40% of students said they considered their awareness and understanding of IP to be sufficient to support them in their future career, and 33% indicated that they definitely did not believe their awareness and understanding of IP to be sufficient for their future needs.

Students were given a list of more detailed reasons why they may want to know about IP and were asked to rate the importance of each. Possibly influenced by plagiarism information and training they had received, the most important reasons for knowing about IP were concerned with ensuring that everyone receives recognition for work and ideas; at least 80% of respondents believed it is important or very important to know about IP in order to 'access and use other people's work appropriately' (84%), 'make sure everyone receives recognition for collaborative work' (82%) and to 'ensure I gain recognition for my ideas' (80%). Students appeared to be more focused on immediate, course-related, reasons for knowing about IP, rather than the longer-term implications;

relatively few (63%) believed it would improve their future employability or allow them to exploit their ideas commercially (53%).

An overview of IP within the FE/HE curricula

The survey collected a wealth of data about the delivery of IP education within HE and FE institutions from students' perspectives. The following section provides a short overview of these findings. When students were asked which IP topics had been included as part of their current course, plagiarism was by far the most common response (73%). This is not surprising given the emphasis on the prevention of plagiarism within the sector in recent years. All other IP topics were much less likely to be included, for example, copyright (35%), confidentiality (30%) and publishing and IP (20%). 17% of students said that no aspects of IP had been included in their course.

Although various aspects of IP might be taught, these are often not assessed elements of a course. Two-fifths of those respondents who had learned about IP said their knowledge was not assessed.

Elements of IP included in a course were most often delivered within the student's department, either by the module tutor (69%) or by another lecturer from the department (26%). There was limited involvement from other university departments, or from central services, including library and information services, knowledge transfer offices and similar support services; only 11% of students were aware of other university staff from outside their department being involved in IP information delivery.

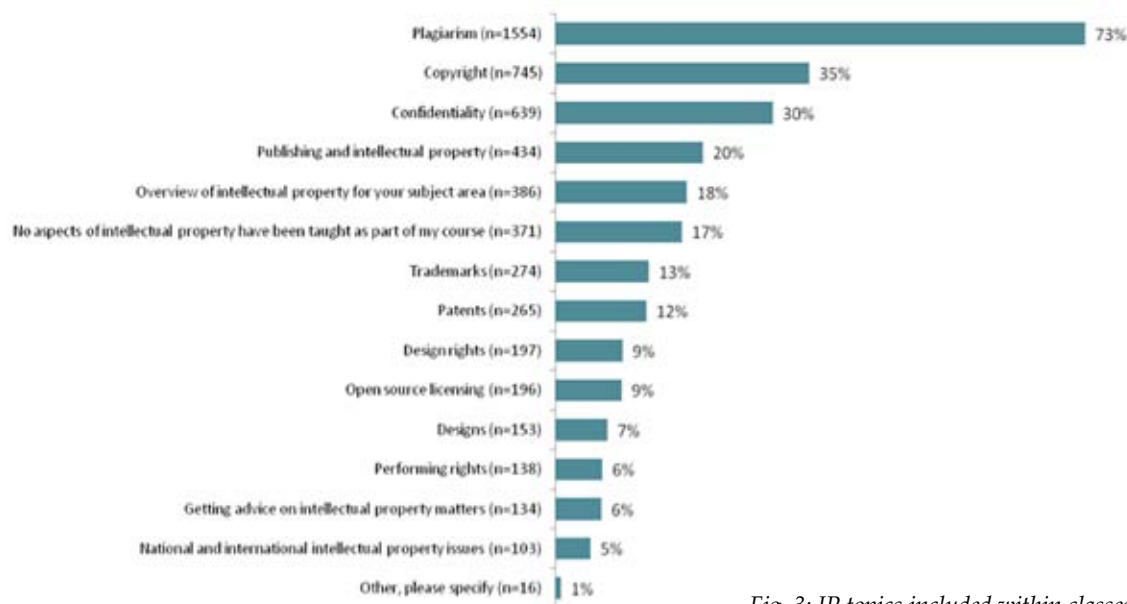## Topics that have been included as part of their course (n=2144)

Topic	Percentage
Plagiarism (n=1554)	73%
Copyright (n=745)	35%
Confidentiality (n=639)	30%
Publishing and intellectual property (n=434)	20%
Overview of intellectual property for your subject area (n=386)	18%
No aspects of intellectual property have been taught as part of my course (n=371)	17%
Trademarks (n=274)	13%
Patents (n=265)	12%
Design rights (n=197)	9%
Open source licensing (n=196)	9%
Designs (n=153)	7%
Performing rights (n=138)	6%
Getting advice on intellectual property matters (n=134)	6%
National and international intellectual property issues (n=103)	5%
Other, please specify (n=16)	1%

Fig. 3: IP topics included within classes

Lectures were the most common resource students used to learn about IP (45%), followed by course handouts (34%). However, a noteworthy proportion of students, 28%, said they learned about IP via independent study. It seems that many students are not aware of resources available to support them in independent learning about IP, as only 12% reported using web-based resources such as the IPO website, and just 6% used resources from professional or governmental bodies.

Levels of confidence in IP knowledge

When asked about their level of confidence in performing various IP-related tasks, overall students felt most confident in understanding the implications of disclosure and confidentiality (68% confident or very confident) and, probably based on plagiarism education they had experienced, knowing the implications of using someone else's

intellectual property (59%). They were generally least confident in matters involving interacting with external IP sources, such as understanding how to use information about patents (31%), understanding how not to be taken advantage of in IP matters (32%) and communicating effectively with an IP professional (33%).

The subject a student was studying appeared to impact on their level of confidence in performing IP tasks; there was a statistically significant relationship ($p<0.01$), with students who were studying law, technologies, engineering or business being most confident in performing these tasks, while those studying arts or humanities subjects felt least confident. There was also a statistically significant relationship ($p<0.01$) between confidence and prior learning, with students who had learned about IP prior to their current course being more confident in performing IP-related tasks than those who had not.
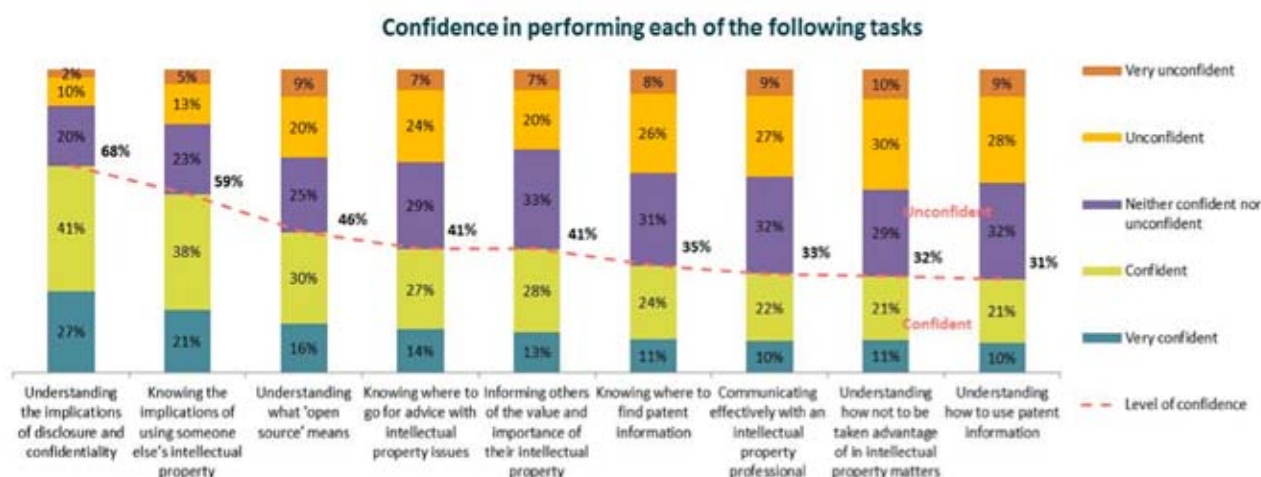
Confidence in performing each of the following tasks

Fig. 4: Students' level of confidence in performing IP tasks

Support with IP issues

When students wanted help with IP issues, they were most likely to use familiar institutional resources, particularly course lecturers (59%). Other university services such as knowledge transfer offices and library services were used, but much less frequently (20%) and very few students used external information resources or support. Of those external resources that were used, the most commonly mentioned were the British Library (9%) and the IPO (5%). Given students' reliance on lecturers for help with IP issues, it is worrying that only half (52%) felt their lecturers were well informed about IP, with just 18% believing their lecturers to be very well informed.

We just covered plagiarism, so everything else!

Most of the information about intellectual property has been very brief and just giving a quick overview more detail would be better.

When asked which topics they felt were appealing to be included as part of their course, those with the widest appeal were the topics which would be immediately relevant to the majority of students, such as a general overview of IP for their subject area (70%), plagiarism (74%) and publishing and IP (66%).

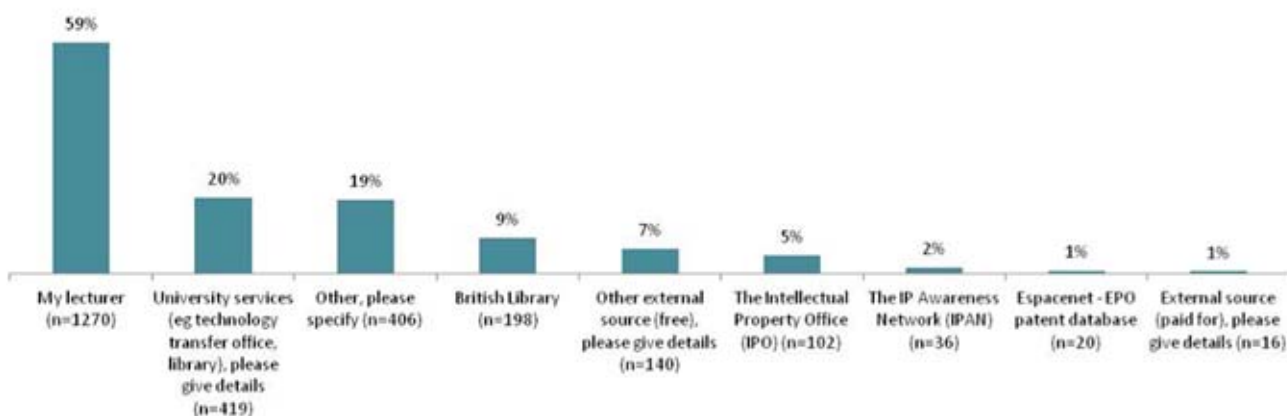## Resource used for help with intellectual property issues (n=2144)

Fig. 5: Resources students use for help with IP issues

The order of resources was broadly the same when students were asked which resources they were likely to use if they needed help with IP issues in the future. Again, lecturers were the resource most likely to be used (75%), but encouragingly, almost two-thirds of respondents (63%) were likely to use other university services and just under a third said they were likely to use key external resources such as the British Library (31%) or IPO (29%).

Future improvements to IP education

The findings of this survey suggest that many students are dissatisfied with the current provision of IP education. Ways in which the delivery of IP aspects of their course could be improved were identified by 83% of the sample. More than half those who responded (53%) wanted IP issues to be linked more closely to the subject they were studying. Open-ended comments indicated that students feel that, other than plagiarism, there is very limited coverage of IP on current courses, so any additional education would be welcome:

CONCLUSIONS

There is clearly an important role for library and information services in supporting students in the wider aspects of IP, as well as in educating them about how to avoid plagiarism. The positive impact of recent initiatives in plagiarism education is clear in students' responses to this survey; the next step is to extend this to other aspects of IP.

This research has demonstrated that, overwhelmingly, students believe a knowledge of IP is important, not only to their education, but to their future careers. However, the majority are more focused on their immediate goal of completing their course successfully; they do not appear to see a link between IP and commercial success and many lack confidence in using external resources and engaging in IP issues beyond the immediate confines of their course and their institution.

Currently, libraries, along with other central university services, have limited involvement in broader IP education within the curriculum.

There is scope for the role of library staff to increase significantly, not only to help students directly, but also to support lecturers who may lack specialist knowledge in this area. An obvious role for libraries is in signposting students and staff to external resources to help them with specialist tasks such as finding and using information about patents and obtaining specialist advice on IP issues. This research indicates that the wealth of IP information available, for example from the IPO and British Library, is currently very poorly used by students, but that once students are made aware of these types of resources, they are much more likely to consider using them in the future. The differences between subject disciplines is also important for library services; these indicate that subject librarians in those fields with a less obvious IP focus such as arts and humanities have a role to play in informing both students and lecturers about the potential IP issues and resources relevant in these areas.

Students are clearly not satisfied with current IP education. So, across all courses, many aspects of IP education would undoubtedly benefit from library staff working alongside lecturers to draw attention to the internal and external expertise available to support students, both during their studies and in the protection and exploitation of their ideas beyond university.

The full report of this research is available at http://www.nus.org.uk/PageFiles/12238/IP%20 report.pdf

Reference

JISC, *Deterring, detecting and dealing with student plagiarism*, 2005 http://www.plagiarismadvice. co.uk/documents/resources/JISC-BP-Plagiarism-v1-final.pdf
[accessed 4 Sept 2012]