A dramatic strategy against plagiarism

Debbi Boden (University of Worcester, UK) & Alison Ahearn (Imperial College London, UK)

Abstract

Although (or, perhaps, because) Imperial attracts academic 'hot-shots', it has shared, from the start, the national concern regarding student information literacy, including plagiarism and referencing. Imperial's interest in antiplagiarism is heightened by its habit of retaining its own graduates as PhD researchers who require utmost academic probity and appropriate academic skills. Traditionally, Imperial has had a regulatory-discipline approach but that strategy addresses offences: it was clear to the librarians at Imperial that a plagiarismprevention strategy was required and that it needed to be embedded within an information literacy strategy. This paper sets out a description of the information literacy teaching and the specific antiplagiarism tools (both for hearts-and-minds as well as knowledge-and-skills) that have been built up since 2003, with a statement of the underpinning rationale for the approach taken. In particular, it analyses the benefits of collaboration with the enterprise division of the Royal Academy of Dramatic Art (RADA Enterprises Ltd) in creating online resources designed to capture student interest and shift attitudes on plagiarism. These resources include a 10minute movie homage to David Attenborough (where the species being studied is a student, finding their way through the academic jungle, avoiding the pitfalls of plagiarism), a sci-fi movie with an android learning how not to plagiarise (if a robot can learn to avoid plagiarism, a student can) and a podcast. The types of messages presented (and the types of messages avoided) in these antiplagiarism resources are analysed and discussed. Practical considerations are noted for those interested in making their own tools in future.

Like most UK universities, Imperial College London was hit by the information literacy imperative hardest when students became so adept at cutting and pasting from the web. Technology merely threw an old problem into a new light. The response to it at Imperial was strong because the library is a pan-College service and could address a gap that no academic department could or would take on for the rest of College. Given that technology brought the problem to prominence, it seemed logical that technology had to be part of the solution. But the solution determined by the library was not to use police surveillance of student writing (although Turn it In is an option available to academics if they so desire) but to use technology to inculcate the attitude to research and writing that befits an honest, ethical and information literate graduate. Imperial is known for its scientific specialisation, has 12000 students and many of them are from overseas (the largest sub-group is Chinese). Nearly all freshers are under the age of 20, mostly 18. How could the librarians make the topic of information literacy appealing to this group whose first love is maths, mechanics, chemistry or biology and for whom researching and writing is a by-product not an end-product?

"OLIVIA" was Imperial's response to the information literacy imperative: created in 2003 by Imperial's Library, it is an online virtual information assistant for information literacy (IL). It is run in the 'WebCT' Virtual Learning Environment (VLE). It helps students determine the types and extent of information required to meet research objectives, and to manage, communicate, exploit and critically evaluate information. The advantage of such high level skills is not only that the student becomes an effective independent learner able to complete their assessments successfully, improve the quality of their research and avoid plagiarism but it also provides them with the transferable skills required when they enter the workforce. Boden (2007).

The OLIVA module is based on the "SCONUL 7 pillars" but also incorporates "key skills 3 & 4" methodology: it makes use of established benchmarks and norms on content. The programme complements existing face-to-face IL teaching: it is designed for a blended learning approach. First year students are given access to OLIVIA which stays with them throughout their degree programme, allowing them to dip in as needed, at their own pace. Return visits to OLIVIA occur as coursework research requirements growing more complex or students want to 'catch up'. The information time-line (Figure 1, 1(a), 1(b) and 1(c) on the following pages) provides a guide as to the level of understanding students require as their academic career develops. The timeline shows that "bolt-on" teaching about plagiarism would not work. Teaching students about anti-plagiarism and responsible, ethical use of information is part of an education process and should not be taught in isolation.

The module has nine learning units. On seeing the list, the topics seem self-evidently sensible and necessary but go far beyond the "plagiarism and referencing" that most academics seem to expect. The topics in the nine units are:

- 1. Information; 2. Search and retrieve; 3. Intelligent use of the web; 4. Databases;
- **5.** Critical evaluation; **6.** Acquiring, managing & organising information;
- 7. Plagiarism; 8. Referencing and 9. Current Awareness

The tendency is to assume that some things "go without saying", but students whose first resort is to Google for information, actually need to be taught what other sources are available and how to manage the information overload that so frequently disheartens them.

Figure 1: The information literacy timeline: 3 levels (stages) of outcomes 1(a) Learning outcomes levels 1 and 2

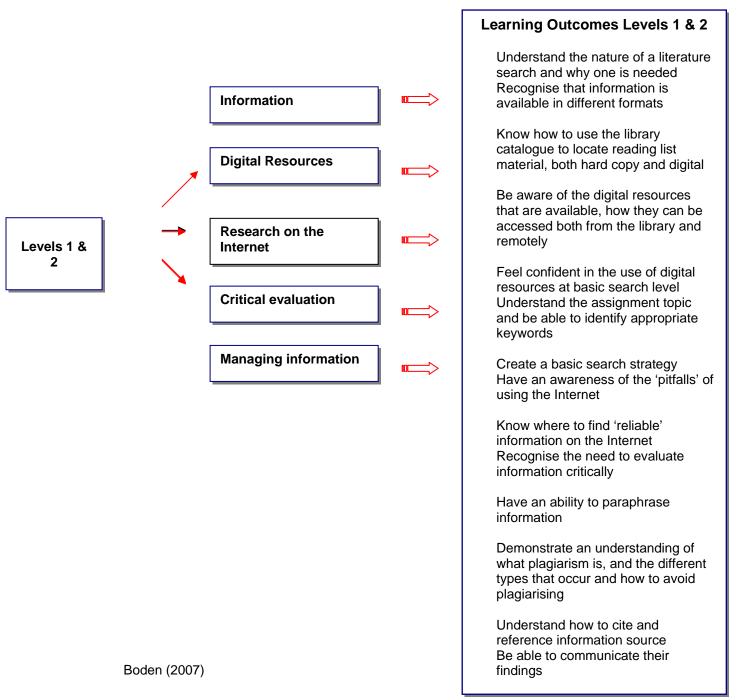


Figure 1: The information literacy timeline 1(b) Learning outcomes levels 3 and Masters (UG and PG)

Information Digital Resources Research on the Internet Critical evaluation Managing information

Learning Outcomes form Level 3 & Masters/MSc

Illustrate an ability to build upon previous information literacy skills Establish appropriate targets, and explore the information resources available

Demonstrate knowledge of the different types of information that are available both within in and outside the institution

Recognise that information may be open to bias e.g. Cultural, political etc

Have an ability to create a search strategy with a complex search string using parentheses, truncation etc Monitor and critically reflect on overall strategy

Be confident in the use of digital resources at an advanced search level

Critically analyse, reflect and comment on conflicting information content

Be able to synthesise and construct new hypotheses

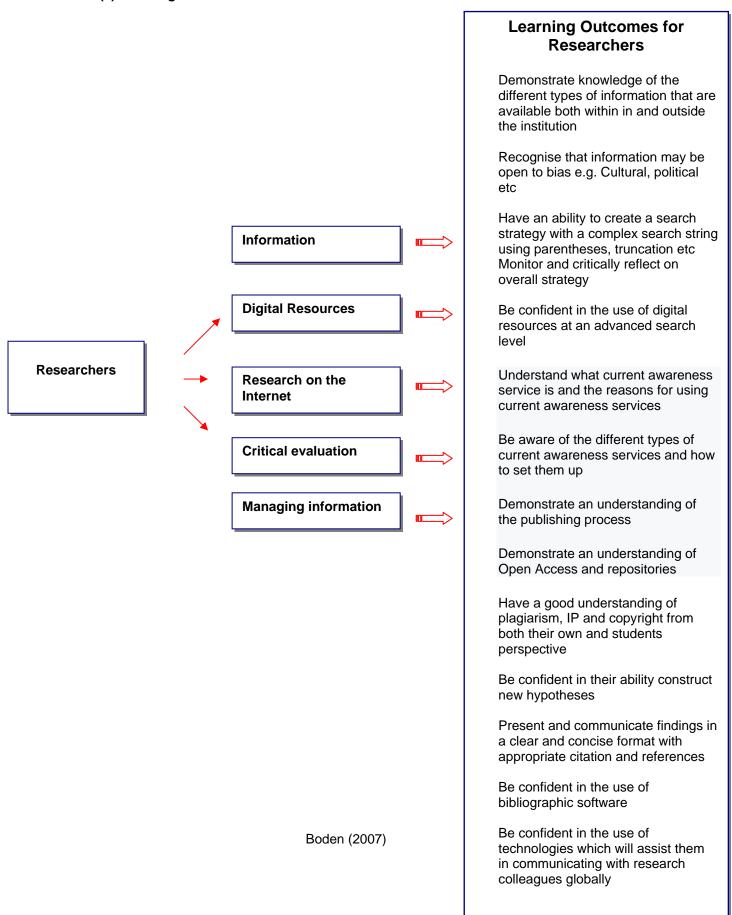
Demonstrate an understanding of what plagiarism is, and the different types that occur and how to avoid plagiarising

Present and communicate findings in a clear and concise format with appropriate citation and references

Be confident in the use of bibliographic software

Boden (2007)

Figure 1: The information literacy timeline 1(c) Learning outcomes Research Level



OLIVIA starts by introducing students to 'information', searching effectively and evaluating the quality of the information they retrieve. It also introduces the concept of intellectual property (IP). As they become more confident, the programme aims for a more in depth understanding of plagiarism and the issues surrounding the ethical use of information. It encourages them to think about how they utilise secondary resources and blend their ideas into their essay and develops their skills in paraphrasing. It is presented as a part of 'ordinary' modules which carry coursework and is thus embedded in the curriculum, although there is flexibility for each department/course organiser to have the OLIVIA teaching configured to fit, with relatively little effort from the librarians. This enhances staff take-up of the service teaching, which is funded by the library and cost-free to the departments, so that there is no financial disincentive.

Effort is made to have enough information under a topic to allow students to learn significant points, without drowning them. Figure 2, below, shows the menu page in "Unit 7- Plagiarism". The figure shows that students can look at the goals of the unit, a definition (what is it?), the application (about more than just writing), why not to plagiarise (see next paragraph), types, ways to avoid plagiarising, a film to provide a different mode of getting the message across, plus a summary and congratulations (end with a feel-good factor on a topic that is usually very negative about students).

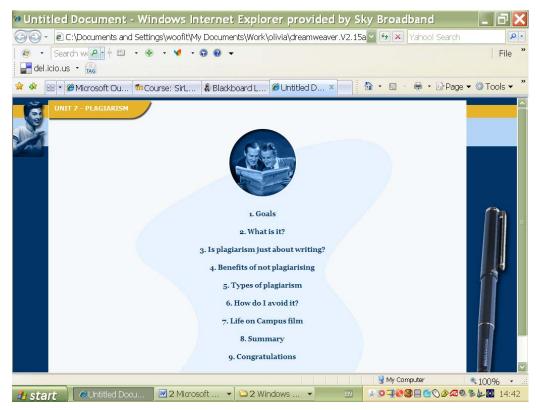


Figure 2: Screengrab of the menu page for the anti-plagiarism page, delivered via WebCT OLIVIA module.

Alison Ahearn, Debbi Boden & Alan Doherty (2007)

The ethos of the OLIVIA programme is to 'sell' the benefits of IL to students and in a similar fashion the plagiarism unit uses the 'carrot' rather than a 'stick' approach. Hence students are informed that:

'By not plagiarising you will:

- feel more confident when tackling exams
- feel confident at seminar discussion
- know how to express an academic opinion, backed up by strong information sources
- be better able to answer questions at your project viva or presentation
- be competent in handling literature searcher for major course work projects (including your PhD if you go into research)
- gain academic credibility (and thus gain credibility with future employers)
- have pride in your work, its all yours
- apply for jobs with confidence, knowing that you wont be discovered as incompetent in basic information-handling skills'

The plagiarism unit looks at the different types of plagiarism for example collusion, word switch, or copy and paste. It then moves onto the area of avoiding falling foul of accidental plagiarism by looking at paraphrasing and quoting: it encourages them to think about how to blend the ideas gained from secondary resources with their own ideas and how to represent this in their writing. Boden & Holloway (2004).

Referencing is a process which can be taught quite easily but the concept of plagiarism is more difficult to grasp, especially if they are straight from school. Many GCSE and A-level students seem to have been taught to cut and paste material into essays or thinly paraphrase secondary sources. Students arrive in HE with little or no understanding of the issues surrounding plagiarism and not realising they are doing anything wrong in the way they tackle coursework. Boden (2005). International students also find the concept very difficult to grasp, especially if they come from countries that encourage the reproduction of secondary sources.

'In many countries, it considered sufficient for students to show that they understand what the experts in their fields have written. In their written papers, students show that they have mastered the experts' ideas, and they restate and synthesize those ideas coherently. As you can imagine, students from this tradition often encounter serious conflicts with our ideas of plagiarism.' Feldman (1989)

Standing in a lecture theatre talking at students about plagiarism for an hour will not help students understand the concept of plagiarism, therefore it is essential that an active teaching approach is taken. IL teaching existed at Imperial before OLIVIA, but was based in the library. Imperial's librarians redesigned their approach to teaching about plagiarism so that they give a short classroom presentation (in the students' home classrooms). The short talk constantly refers back to the plagiarism unit within OLIVIA, and is followed by group work where small groups consider six scenarios of students being accused of plagiarism, with a view to setting the penalties for the fictitious students. Discussions are lively, especially in the area of

collusion if the class has a substantial number of international students. Then a quiz using a Personal Response System results in 'winners' getting small packs of Smarties, which has a disproportionate effect on feel-good factor in the room. Past classes resulted in a clearer understanding of plagiarism: feedback sheets told us that the session had been interesting and fun. It was felt by the teaching team, however, that further resources were required to develop the sessions further.

One of the Imperial learning technologists' laments is that academics in this technological college ironically have a tendency to use of online learning environments as a low-tech dumping ground for notes. Whilst OLIVIA moved well beyond that from the start, the potential for visual and audio material was clear. Further, the dryness of IL as a topic,-especially for an audience that finds partial differential equations an interesting thing to argue about with your mates over lunch-, meant that 'hooking' the students' attention was essential if we were to win their hearts and minds. Knowledge, skills and attitudes are the curriculum trinity in modern course design, so it was clear that it is not enough to merely supply students with the information about how to be information literate, but to proactively seek to shift their attitudes so that being an information ignoramus was undesirable and to be a plagiarist was to be a 'loser'. How to achieve this?

A brief review of a few 'home made' anti-plagiarism efforts or 'transferable skills' efforts that had been made by other institutions and by well-meaning Imperial College staff was sufficient to persuade the library team that quality and professionalism had to be by-words for any multimedia efforts. The remarkable rise of YouTube shows that audiences distinguish readily between fly-on-the-wall and scripted efforts. What they tolerate in one, they do not in the other. Scripted efforts compete against high standards which are notoriously unaffordable.

The solution was to work with the Royal Academy of Dramatic Art's business enterprise unit. It should be noted that no RADA undergraduates were harmed in the filming of this work, as RADA refuses to exploit its own students. They do, however, have access to a huge pool of actor alumnae talent and excellent connections to the technical film-crew, scriptwriting and producing world. Whilst it is impossible, on a limited budget, to produce Speilberg-level effects, it is possible to do work that can amuse students, has sufficient credibility and holding power to keep them entertained and which gets a good reaction. Partly, the students like seeing their own university world reflected back at them through imaginative eyes.

Imperial has collaborated with RADA on two shorts DVDs and a podcast. The rationale for the first film, Life on Campus, is that it is about showing students the choices they have to make. It is a hearts and minds film about why they should bother to make the effort to do real research and learn to be information literate. The approach taken was to parody David Attenborough's astonishingly powerful documentary structure, used in Life on Earth and other

documentaries on wildlife. The parody had to work for students who did not get the parody as well as those who did. A professional scriptwriter drafted a script and Debbi Boden and Alison Ahearn exercised executive producers' rights to alter on grounds of IL accuracy or credibility about modern student life (for instance, we had to tell the incredulous writer that students don't tend to smoke anymore at Imperial). Working with professional writers is speedy and they listen to client/teacher demands, whilst keeping an eye on the 'entertainment' factor. The Life on Campus film shows the evolution from fresher student to post-graduate professional. The fresher has to decide whether to "cut and paste" web or do real literature surveying (the student decides to pursue the course that wins him the long-term advantage over the rest of the herd). The second stage is a post-graduate student having to be original to win funding: plagiarists, by definition, do not generate original ideas. Finally, we see the student-turned-job applicant being grilled at interview and definding his own ideas, speaking persuasively and with some passion: it is not a time when one can look up the words of others or decline to think for oneself. Using a professional actor, we see the fresher evolve into a PhD graduate who gets the job. Filming took one lengthy day: preparation took about 12 weeks. Post-production was 3 weeks.

Using the best aspects of TV advertising, the film is intended to reinforce a positive image of information-literate people as 'winners'. The scriptwriter interpreted this as 'he gets the girl'. Despite protests from the (female) executive producers, the director, producer and scriptwriter prevailed, insisting that the audience would like this seemingly-cheesy ending: they were correct. The students hoot with laughter when the hero gets the girl but also like the upbeat ending, and no female students complained. Love remains powerful in media.

The second film is a parody of the Hollywood film "I, Robot" and is called "I, Student". This film is about the "HOW" of antiplagiarism, whereas "Life on Campus" was about "WHY" not to plagiarise. The premise of the *I, Student* film is that a professor teaches his robot to avoid plagiarism. If a robot (which learns from pattern recognition) can do it, surely a human student can too? And the robot gets the girl in the end, by graduating and becoming free to date the female robot/lecturer. Reduced to a few words in an academic paper, this sounds peculiar as a vehicle for teaching students. However, the benefit of an imaginative, professional scriptwriter is that you can keep the students engaged. Even if the students go into film critic mode, they end up discussing the topic you want them to discuss. That is an accomplishment on a topic that is not maths, not mechanics, not chemistry and not any of the other topics that Imperial's students see as 'core technical knowledge'. *I, student* worked on a restricted budget and, compared to *Life on Campus*, it shows. Post-production had to be limited but, mostly, the costuming and makeup presented difficulties that were not encountered in the first film.

The podcast is another mode: delivery of the material through audio only. It has the advantage of eliminating the visual element which is costly to capture. Use of a professional actor, used to voice-work, confers a real advantage in terms of the effort required to capture a quality recording. The advantage of professionals is that they truly never seem to tire of trying to say the same thing, in the same way, over and over until the capture is as the director wants. If the director wants the performance altered, they seem to be able to produce to order, as per instruction. The podcast describes plagiarism as a game which has rules like any other game. The rules are described in the podcast and gives the message that by playing the game a student can escape falling into the accidental plagiarism trap.

These three multimedia products provide students with alternatives to the writing-based information in OLIVIA. They are housed within OLIVIA and can be used in the classroom by teachers who want to discuss plagiarism issues with students separately from OLIVIA teaching. (For instance, they can be used in feedback lectures if a teacher is concerned about plagiarism, or they can be used as a reminder/warning against plagiarism before a major project). Because the message is self-contained in the media product, the lecturers have standardised content on the technicalities of IL, and can concentrate on discussing that content interactively with the students. Or they can ask students to view online.

And it is fun. Whilst Imperial's primary purpose of Imperial College London is education and knowledge rather than a funpark for adults, there is nothing that says education needs to be dull either. 'Serious but fun' is valuable and valid. OLIVIA and the films/podcasts are an example of how that can be achieved and remain a 'work in progress'.

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