



Strand One

Transition from school to higher education

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Strand One, unusually, links an aspect of information literacy learning to a specific point in the undergraduate career. The content of this strand focuses on the transition from school to higher education – a perfect time to engage students in their own learning process by giving them a vocabulary and analytic structure through which to address the significant changes in expectations, teaching styles and attitudes to learning that occur at this point. This deeply reflective opportunity is mirrored by the content of Strand Ten, which supports the transition to the workplace and everyday life. Book-ending the curriculum, these strands deal with the transference of information literacy skills, behaviours and attitudes to new cultures, and with ongoing exploration and development of the learner's identity in relation to information contexts.

Sarah took part in the expert consultation carried out as part of the ANCIL research and was chosen because she is a qualified librarian working in the independent school sector. In many ways her experience is atypical, as the demands of the International Baccalaureate, which are very different from those of A-levels, explicitly help students make the transition into higher education. Sarah's approach to information literacy, and the learning culture at Box Hill School, form a sound basis for helping students make the transition to the higher education environment. In particular, her teaching makes explicit the transitional issues that need to be addressed when students move through school and into higher education.

Institutional context

Box Hill School is an independent co-educational, part-boarding school for students aged 11–19 years, and also has an International Study Centre.

Twenty-five countries are represented among its 425 students, and many staff have experience of teaching abroad.

The school follows the philosophy of Kurt Hahn, experimental educationalist and founder of Gordonstoun. It helped to initiate Round Square (www.roundsquare.org), a worldwide association of more than 80 schools. Students are committed to participating in the six pillars, or IDEALS: International understanding; Democracy; Environment; Adventure; Leadership; and Service.

In 2008 the decision was taken to abandon the traditional English syllabus in favour of the International Baccalaureate Diploma (IB). The International Baccalaureate Organisation (IBO) requires any school it endorses for the Diploma to have a library, and recommends that this library be managed by a qualified teacher-librarian (IBO, 2004). In May 2008 I was appointed to create a new library and to develop independent learning throughout the school.

Students join the school at one of three stages. The youngest intake is 11 years old, Year 7 (Key Stage 3). Preparatory schools in the UK can retain students until the end of Year 8 (age 13) when they sit the Common Entrance Examination and join our school in Year 9 (Key Stage 3 to Key Stage 4 transition). The oldest students join the sixth form, aged 16. They sometimes undertake a pre-IB year to improve their language skills. Any information literacy and teaching of skills for independent learning must take these divisions into account. This chapter will describe each of the approaches adopted and the outcomes.

Transitions at school level

In the primary sector there are not many formal libraries: a qualified information specialist is a luxury only a small number can afford. Hence, few students gain any knowledge of research skills as we know them. A bad habit transferring with these students is a sense that reward is for presentation rather than content. There is a copy and paste culture present in most work and an abundance of irrelevant images and zany fonts to make their work 'look nice'. As the Demos report (Bartlett and Miller, 2011) confirms, there is little evidence of evaluation, synthesis and understanding. At Box Hill School we are aware that parents question the degree of 'learning' that takes place in this type of 'research' homework.

At our school it is important to try and retain as many of our students as possible in the sixth form. Students believe the Diploma is ‘hard work’ in comparison with the more traditional A-levels. Much of this stems from the emphasis the Diploma places on independent work and critical thinking. This may be why IB Diploma students fare well in higher education (Higher Education Statistics Agency, 2011). We feel it is imperative to teach these skills throughout the school to ensure our students stay until they leave to higher education.

Herring’s (2009) research looks at how younger secondary students can be taught to use good information skills as evidenced by outcome. In our own collaborative action research with Year 8 (Pavey and Monk, 2012) we found a basic platform in information skills led to an intrinsic curiosity about the topic. Murdock and Anderman (2006) demonstrate that intrinsic motivation can lessen plagiarism. Initial findings of our study show that it is essential for both teacher and librarian to work closely together to gain the best results. We used formative assessment to mark work alongside the student rather than simply giving a grade. We gave verbal and written feedback. This, too, engendered a desire to improve that was self-motivated. The standard of work produced was very high and written in a formal academic style, with illustrations correctly titled and supporting the text.

Another distinct group are students taking GCSE examinations at Key Stage 4 (age 14–15). The very nature of this examination does not reward information literacy and it is hard to build upon what has been covered in earlier years. The government has argued that A-level papers should be set by universities rather than examination boards to ensure that students meet the criteria expected at undergraduate level. It states that there is too much ‘spoon-feeding’ and ‘teaching to the test’ (Stratton, 2012). Such an approach would widen the gap between A-level and GCSE, and so it would be important to structure the qualifications students take at 16 years in a similar fashion to avoid this happening. Many ‘skills’ asked for by universities (Black and Lee, 2009) revolve around critical thinking, reflection, research skills, essay writing and independent learning, which can be instilled through a sound information literacy policy in schools, maybe even down to primary level.

The IBO expects a qualified librarian to play a role in delivering these skills. At Box Hill School, I have considerable input at sixth form level into many parts of the IB Diploma. A general introduction to the library and a brief

demonstration of the subscription online databases are given in the first-year induction session. All students are signed up to Surrey Libraries and we have access to local university libraries at Guildford and Kingston. A corporate membership of the London Library gives access to further print and online material, including databases, such as JSTOR. Use of these resources is pushed through individual research-based lessons using joint classroom delivery followed by library research with corresponding documentation.

My approach to teaching

As Librarian, my role is to ease the progression from school to higher education by giving students the tools they need to become information literate. Many schools view the librarian's core role as encouraging and promoting the reading of fiction. While this is undoubtedly important, my belief is that teaching information-handling skills should take precedence, since the librarian is often the sole member of staff able to deliver this important life skill.

The majority of my lessons involve collaborative team-teaching with a subject specialist. The information literacy element is embedded in the overall lesson plan rather than being a discrete element. A key contributor to the success we have achieved in adopting the approach of the ANCIL strands has been my involvement in assessment. I have ensured that information literacy is given equal value to subject knowledge. For example, we reward students who show reflective, critical learning and who demonstrate they can construct an argument. Extra marks can be gained if they use resources beyond Google and Wikipedia and even for using a presentation format other than PowerPoint. The lessons outlined next in this chapter illustrate this approach to learning.

Introducing the library: Years 7 and 8 – Key Stage 3 (11–12+ years)

The youngest students arrive at Box Hill School from a variety of primary and preparatory schools. Many feeder schools do not have a formal library (Brennan, 2010). With busy working parents, students may be unfamiliar with public libraries too (Goulding, 2006). The initial library induction is designed to be a fun introduction to what is available.

In the autumn term induction session, I explain to students there has been a disaster and the library leaflets have all been destroyed by accident. I ask for help in designing a new one to show what we have in the library. For 30 minutes they look around and add ideas to their leaflet. My assistant, teaching colleagues and I act as prompts. In a plenary we review the leaflets and decide with the students which ones would give the best overview of the library (carefully making sure all the leaflets are commended for something).

This exercise is useful on several levels:

- 1 It allows both form teachers and me to gauge prior knowledge of libraries and experience of finding information.
- 2 It permits students to touch and explore the resources.
- 3 It encourages students to ask questions and interact with adults in their quest for information.
- 4 It encourages an independent approach to learning.

The main library induction occurs two weeks into the term, allowing time for students to settle in, having been set homework. Five one-hour dedicated lessons are conducted through English and Personal Social Health Education (PSHE) slots. Some classes may get two lessons a week. The course is short and snappy. PHSE covers ‘emotions’ and so library lessons are themed around ‘happiness’ to engender good feelings about our department. The lessons promote an understanding of the different resources on offer, organization, and independent thought and decision making.

Lesson 1 (fiction)

This coincides with Book Trust’s ‘Booked Up’ scheme, offering free books to Year 7 (replaced in 2012 by a subsidised scheme, ‘Bookbuzz’ – see www.booktrust.org.uk). We describe the titles on offer and lead a discussion about the features of fiction books and reading choice. The lesson also considers arrangements of fiction books. Each student is given a paper ‘bookworm’ who has a liking for a specified genre. Students have to find a book they think their worm might like to read in order to feel happy, and explain why to the class.

Lesson 2 (reference)

Here we explore encyclopedias, dictionaries and thesauruses. I show different types of reference books and we debate the merits of finding this information online, via an app or in print form. In particular, the advantages and disadvantages of Wikipedia are discussed. A dictionary exercise involves pairs of students making a word web beginning with the word 'happy'. This is placed centrally on the paper. One student looks up 'happy' using a dictionary and finds an alternative word. A link is drawn to it. The paired student looks up this new word to find an alternative and so it continues until a web is formed. This gives students confidence in using dictionaries, alphabetical order and spotting unusual links between words and concepts (qualities very much needed for independent learning and critical thinking).

Lesson 3 (non-fiction)

Students are introduced to Dewey Classification. We begin with a 'Tower of Information' game (Pavey, 2006) whereby the students are assigned to be caretakers of a floor corresponding to a Dewey series. For example the reference section is manned by a 'Know All' in reception and the 'Boffin' resides on Level 5. Later, we put into practice what has been learned with a lateral thinking exercise (Pavey, 2006). This lesson gives some basic organizational information to aid independent learning followed by encouragement of independent thought, critical thinking and decision making.

Lesson 4 (selection)

The penultimate lesson comprises a team quiz. Groups have a set of four questions and four books. The questions are designed to test different ways of searching for information. One is factual, requiring the index; another is in a book where the answer is found via the contents page; the third necessitates the reader skimming through the book for the answer; and the final question involves the reader in making up their own mind, e.g. a book of party cakes with the question 'Which cake would you be happiest to receive?'. After ten minutes there is a table swap and this occurs twice more. A plenary allows discussion on how challenging the students found the exercise and why.

Lesson 5 (synthesis)

Finally, the students create their own poster for an alien to describe the concept of ‘happiness’. Each has to contain a quote from a fiction book, a non-fiction book and a reference book with a bibliography. This introduces recording where information has come from and choosing suitable quotes. We use the posters in displays.

Library induction lessons are deliberately biased towards print resources, being the medium least familiar to our students. However, work continues with projects where research involves use of the library. Such lessons begin with team teaching alongside the subject teacher in the classroom. A resource box is set up and this is taken to the classroom where I can introduce students to appropriate websites and mobile apps. A research guide is added to the library catalogue and also to the library Netvibes pages (www.netvibes.com/boxhillschool).

Additionally, in collaboration with the science department, we decided to try and teach students in Year 8 to research and compose a short Diploma-style essay using a mind map planning approach. We presented our interim findings at the LILAC 2012 conference (Pavey and Monk, 2012).

Project-based work and classroom topics: Years 9 to 11 – Key Stage 3/4 (13–16+ years)

Year 9 is the final period before students begin the GCSE syllabus. It is students in Year 9 who gain most experience in using the library for project-based work. Teachers work with me as Librarian to introduce the topic in the classroom and then to research in the library. I am very insistent that I am included in the outcome of this work and have a formal role in assessment.

In the module ‘African Music’ the teacher and I decided that, instead of using PowerPoint, we would ask the students to prepare a podcast. Each student was given a different African country to research, comparing and contrasting traditional and modern music. I explained the book resources on offer, demonstrated online information sources on the topic and led a discussion on ‘what makes an effective podcast’. I prepared information sheets for the research and on making a podcast. Both the teacher and I marked the final work. The teacher awarded points for content and music technology and I gave marks for presentation, referencing, evidence of critical thinking and organization of information.

This approach gives the students an understanding that copy and paste will not gain the best grades. When peer marking is added to the process students are quick to spot presentations without all of the required elements. Students can understand the need to synthesize their own interpretation of their research – a vital quality for higher education.

With our GCSE students, we are aware that any involvement of the library has to be beneficial to the examination course if it is to be taken seriously by students. Opportunities are limited. In some subjects such as design technology there is a paper including a research element. In 2012 this involved designing a small container in the style of Charles Rennie Mackintosh. I conducted a lesson with the teacher explaining the available resources in print and online and set up supporting documents, catalogue entries and a Netvibes page. I explained the importance of demonstrating to the examiner that students had carried out their own research. It is this synthesis that proves so difficult for students, especially because GCSE courses generally expect students to regurgitate facts rather than use facts to express original thoughts. Teachers, too, are unused to handling independent learning research in this way.

Through PHSE, I collaborate to produce a two-lesson programme covering use of the internet and media. The purpose is to keep an interest in information literacy with the emphasis on this being a life skill rather than something to be learned for an examination. For Year 9, I devised a lesson to fit in with a module on friendship entitled ‘Celebrity Best Friend’. This required students to research a definition of friendship, examples of ideals of friendship, and qualities their best friend had. Students picked a celebrity and decided what best friend qualities they had. Referencing of sources was obligatory. Finally, they created an avatar for the person (celebrity or current best friend) that they would choose as their best friend and revealed the answer by creating a QR Code.

In Year 10 the PHSE module looks at the internet versus print as an information source. I use a co-operative learning technique. Students are divided into groups of four and given a research question relating to climate change. Two students form an argument for using print resources and two promote using the internet. They each argue with one person on the opposite side and then again with the alternative pair until a group consensus is formed of how they would conduct their research. This is read to the class who debate the findings. A discussion follows on how much trust we can place on information sources and an analysis of web addresses and domain names. The lessons cover spoof websites and alternative search engines to Google, Yahoo! and Bing.

Through another exercise I emphasize the importance of choosing the right keywords for searching. One student has their back to a screen showing a picture and a word and the class give this student one-word clues without giving away the actual word. The clues are written on a board and once the word is guessed correctly we discuss whether the other words could have been used to retrieve the needed information. We begin with easy words such as ‘car’ and ‘horse’, then progress to concepts such as ‘gentleman’ and ‘resistance’.

Developing reflective and critical thinking – Pre-IB Diploma and Sixth Form (16–18+ years)

The demands of the IB Diploma are very different from those for A-level. Students are rewarded for reflective and critical thinking and for research skills. This is assessed through the Theory of Knowledge course and the Extended Essay, both of which need to be passed at Grade D minimum to gain the Diploma. It is not optional.

Theory of Knowledge is based upon philosophy and questions where knowledge originates. It occurs in every subject of the IB and is also a course in its own right. It is assessed through group presentation and a 1500-word essay. The assessment attempts to judge how well the student can form an argument and debate it to a conclusion using factual information and/or personal experience to support their claims.

The Extended Essay is a 4000-word academic essay. The research topic of choice is drawn from a subject the student is taking and wants to explore further. The essay needs to demonstrate writing and referencing in an academic style. The content has to be reflective, using the research to uphold any points made. Even when the essay is in a practical subject such as chemistry, marks are awarded for the analysis and interpretation of the results rather than on the technical skill of the experiment. Furthermore, all internal assessments gain marks for correct academic presentation.

Intense tuition in information skills is given at timely and relevant intervals in the Extended Essay journey:

Session 1

Rationale of the Extended Essay, research and evaluation of findings. This

covers the mark scheme. Information sheets giving specific details of the requirements within each subject are given to students.

Session 2

Question formation. Ideally students' research is planned around a question. The student, supervisor and I look at the feasibility with regard to available resources.

Session 3

Research. Students complete an essay jigsaw (Pavey, 2011) demonstrating the emotions they may experience in research and write up, e.g. their frustrations, deadlines and elation on completion. Most students will not have written such a lengthy piece of work before. The exercise addresses plagiarism and keeping track of references. In subject-specific groups students are taken through useful databases in more depth. Using the mind map approach outlined earlier and with encouragement to use programs such as Microsoft OneNote or Evernote they plan their essay and begin research.

Session 4

Writing up. Students are given individual guidance on referencing, a style guide, booklets and video links via the Netvibes pages and the catalogue. They use a library checklist to ensure they have the correct emphasis on critical evaluation rather than narrative. Subject content is reviewed by their supervisor.

Session 5

Once the essay is at final draft stage it is put through Turnitin (www.turnitin.com), a plagiarism detection programme. This is used as a teaching tool so that the student can see how their referenced quotations have been found and to highlight areas where they might have paraphrased or missed a reference.

Some sessions run over several days, when students are 'off timetable', giving

them time to complete them. These have been fine-tuned and, together with the IB Co-ordinator, we have amended the content and adjusted the timings. We plan to run Session 3 as a series of optional seminars on different databases plus an appointments surgery for one-to-one consultation.

Conclusion

Overall, teaching information skills at Box Hill School is embedded into some part of the curriculum in every year group. It does not adhere to any strict model, as summarized by Bond (2011), but tends to be needs-driven. The concept of using information literacy to enhance intrinsic motivation is an exciting move that we will explore further.

I am fortunate in having a very supportive senior management team and to work with inspiring, creative and experimental teachers. Many school librarians do not have this opportunity – either because they work alone (and working hours reduce their job to a functional level only), or because they work in schools where teaching to the test is a priority. Increasingly, many secondary schools are closing their library and making the librarian redundant, while others are choosing to replace Chartered librarians with unqualified staff. At Box Hill School we endeavour to develop and teach our students the information-handling skills they need throughout their school career to give them the best start at university. How will students from other establishments meet the demands of higher education with regard to expectations of information and digital literacy?

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