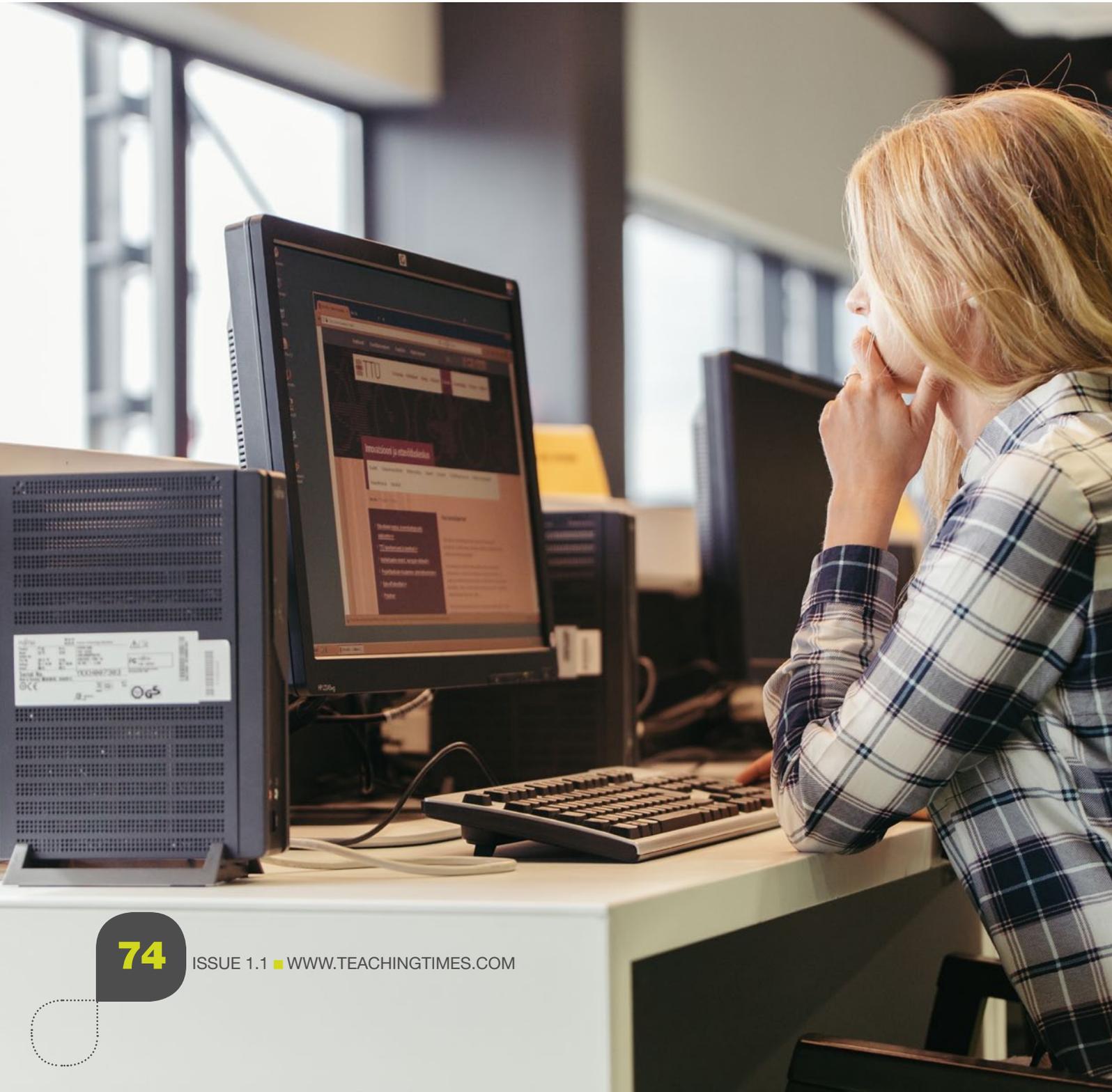


Sleuthing the Gaps in Students' Literacy



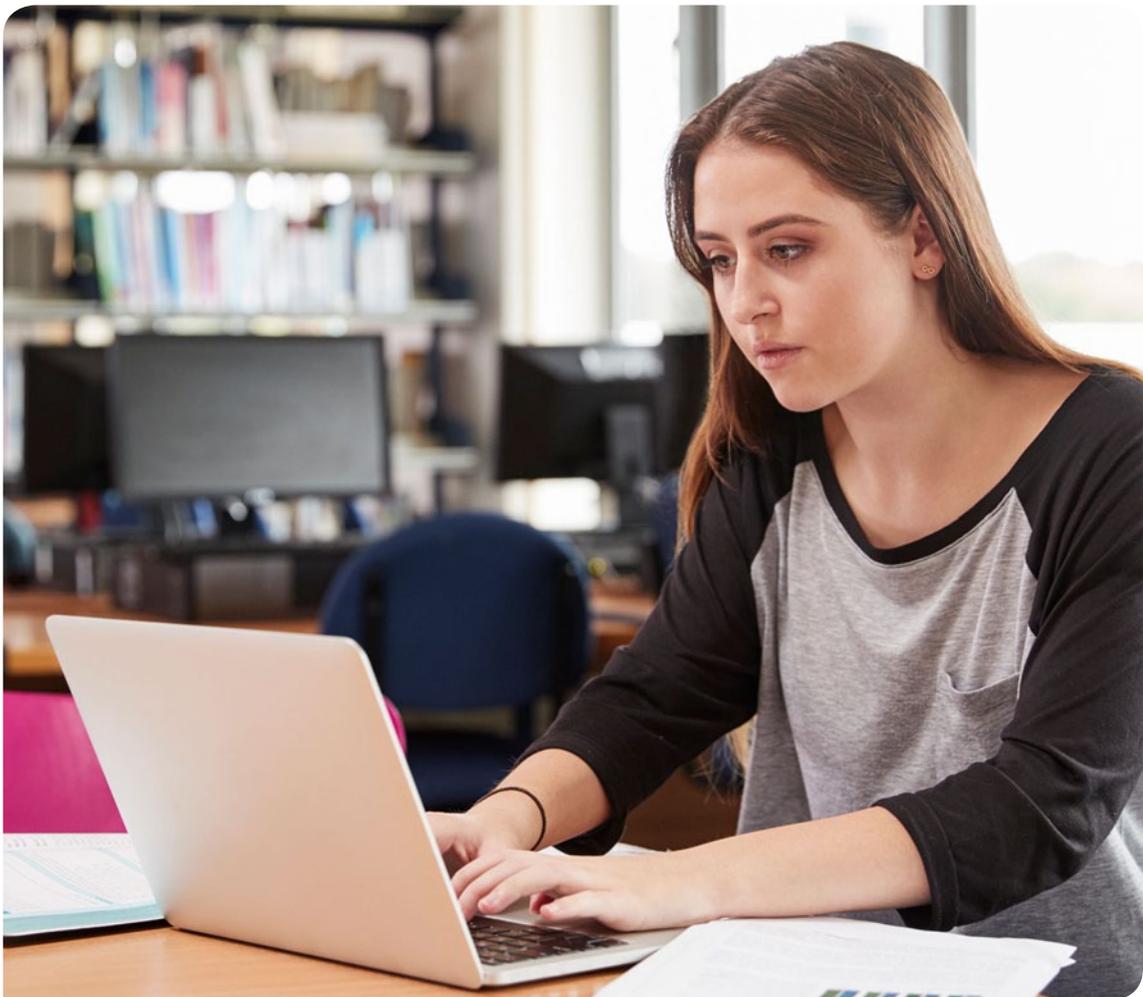
■ It's easy to lament that there are often fundamental problems in Independent Study projects undertaken by students, but the specific difficulties are not always identified. Dr Andrew Shenton digs deeper into the Extended Project Qualification work of Sixth Formers and shows where the information literacy gaps arise.

THE PROBLEM

How often do teachers lament apparently basic failings in the independent learning work of students that seem to recur year after year, irrespective of the topic? Still, when taking a long-term perspective, unless a conscious attempt is made to probe the problems in some detail, the danger emerges that teachers rely too much simply on impressions they have gained over time, rather than on systematically gathered data. In 2016, keen to adopt a more rigorous approach to the exploration of student shortcomings, I set about analysing the work of Sixth Form candidates pursuing the Extended Project Qualification (EPQ). The inquiry led me to collect evidence over three years so, in total, I scrutinised the efforts of candidates from 2016, 2017 and 2018. I had worked closely with all these students as their EPQ teacher, supervisor and co-assessor.

Youngsters undertaking the EPQ are required to conduct, over a period of many months, an independent learning study on a subject of their own choice. They document their research processes in a diary (or logbook), write a 5,000-word essay and deliver an oral presentation. The evidence I used in my investigation consisted of:

- my own reflective evaluations of my taught sessions with the students
- notes that I had compiled during one-to-one tutorials with them
- observations I had made while watching them work
- my analyses of the completed essays
- my appraisals of the final presentations and the answers students gave to questions that were asked by the audience





This article sets down the key deficiencies I identified in EPQ work across different disciplines and by students in different cohorts. In keeping with the central focus of *Digital Learning Magazine*, I will restrict my discussion here to issues that arose in the electronic environment.

QUALITY OF INFORMATION

The most frequently occurring weakness in the candidates' essays lay in their use of poor calibre source material. Ideally a balance of computer-based and traditional materials should be struck, but there was, overall, an excessive reliance on electronic resources, some of which were websites whose quality could not be assured. Many students spurned academic journal papers, considering them too demanding and overwhelming, and my efforts to encourage the youngsters to exploit a paper's abstract in order to direct them to suitable content within the main body of the article met with limited success. Still, at least the students avoided using posts on social media.

As part of an extensive EPQ teaching programme that has drawn praise from the Board's moderators, all the candidates were trained in evaluating information and had been presented with a choice of frameworks that would help them do so. Moreover, each learner had been made aware that 20 per cent of EPQ marks are awarded for the effective use of information

resources. Yet, in several cases, the web pages consulted were anonymous and undated. This raised problems when the source came to be referenced. I afford EPQ candidates the option of citing according to the Harvard system or a numeric approach, but when such fundamental details as the author and date of creation/updating are missing, in practice there is little alternative than to apply the latter convention.

USE OF SURROGATES

I have become concerned in recent years at how many students resort to taking information from monographs entirely on the basis of the material they have been able to access via *Google Books*. One girl referred to a treatise that I had read myself and gave a misleading impression of the author's position by dealing with only one aspect of it. When I drew her attention to the fact that her summary needed to refer to the totality of the author's argument, she acknowledged that it was possible that she had omitted key elements because only certain passages of the work had been available to her via *Google Books* and she had just relied on those. Later, I explored the prevalence of this practice with other students and became aware that several more EPQ candidates had employed the same approach, in effect using the material made available through *Google Books* as a surrogate for the complete work. In extreme instances, the student misrepresented what the author was saying, although usually it was simply the case that the context in which the writer set their ideas was missing.

RELIANCE ON FINDING TOOLS

Watching the candidates work, both at school and in local university libraries they visited on study trips, I was struck by their inclination to seek information within individual documents using the *Find* facility, enter an obvious key word and passively accept the results the system delivered. Many ignored strategies such as formulating an alternative term, like a synonym, or varying the specificity of their search. We can equate this kind of limited approach with one where,



when consulting paper materials, the user looks for information under only one term in a back-of-the-book index. Experts in information literacy decry how the traditional higher order reading skills of skimming and scanning have died out in recent years, yet they remain important when the subject of interest to the reader is discussed via language that they may not have expected or when it is alluded to in a less than specific manner.

INTEGRATION OF INFORMATION

Most students found it far from easy to link material from different places, with a few relying heavily on the barest handful of items. We might anticipate that competent scholars will make connections between related arguments and contrast different ones, drawing on content from books, journal articles and high quality web pages within the same paragraph. In general, however, the students tended to address an issue in one paragraph by drawing mainly or perhaps even exclusively on the ideas of one commentator, before progressing to another matter in the next paragraph and reporting the thoughts of someone else, rather than moving seamlessly between the different perspectives posited by different writers on the same

issue. Although I wondered briefly whether students may be able to achieve the kind of integration I expect when they are working solely with electronic materials, as it is easier to incorporate content from various source documents in one destination file and then work with all that they have assembled when investigating a particular issue, even this proved too difficult for many. I concluded that most students had not yet developed their powers of abstract thought sufficiently for them to tackle the challenge effectively.

QUOTING

The electronic facilities of copying and pasting are both a curse and a blessing. They are often condemned for leading to a massive rise in plagiarism, as the ease with which chunks of material can be lifted from one source and placed in the user's own document renders such behaviour tempting. On the positive side, copying and pasting has increased the accuracy of quotes. When





reproducing extracts from a source, it is vital, of course, to repeat the author's exact words, and even inadvertently altering the punctuation can change the text's meaning substantially. I observed, however, a common tendency among the students to quote at too great a length and apply insufficient analytical insight of their own to the reproduced text. On occasion, excessive quoting is, no doubt, a conscious tactic to pad out a document when the individual is struggling to meet a stipulated word count. Even if the student attributes the material unequivocally, accusations of plagiarism can still be levelled as the writer of the assignment is relying too heavily on the work of others. Some candidates pointed to the need to use a lengthy quote in order to ensure that the author's stance was properly represented – they were seeking to avoid the charge that they had taken a single comment out of context. Yet we, as teachers, would encourage the individual to summarise in their own words the author's whole argument, with perhaps a short quote included merely to illustrate. Comparisons can be made between over-quoting and the *Google Books* issue raised earlier. In both scenarios, disproportionate emphasis is being given to the material in particular sections of sources.

REFERENCING

Referencing is a skill that is progressively developed in the high school where I work. It is not uncommon for teachers of Year Nine students to ask their charges

to list, in a closing bibliography, the sources they have used in preparing an assignment. Although the quality of these lists varies from one student to another, often all that is offered is a set of web addresses. While it may be accepted in Year Nine that the learners are only just beginning to appreciate that the materials they consult should be attributed, at Sixth Form level no more than the most rudimentary attention to bibliographic conventions is less than what is required. The occasional EPQ student was seen to have mastered referencing with appropriate in-text identifiers and full citations, but generally the attempts made were idiosyncratic, inconsistent and lacking in some of the source's essential details.



PROOFREADING

Like the reading skills of scanning and skimming discussed above, proofreading is a practice to which most students were seen to devote scant attention, relying predominantly on *Microsoft Word's* auto-correct and spell check features. Frequently errors were not brought to the user's notice when these facilities were employed because the words in question had not been wrongly spelled. Close reading of

the text should, however, have alerted the reader to mistakes in their writing that had been missed by the automated function.

IMPLICATIONS

Although much diverse ground is covered in the key findings within my study, many of the practices revealed are, in effect, shortcuts that result from the desire of students to achieve a quick fix. On the basis of what I learned, we can conclude that youngsters need particular encouragement to:

- draw on high quality information whose age and provenance can be ascertained

- use tools such as *Google Books* only to direct their attention to the complete, unabridged works in question, instead of treating the retrieved material as a source in its own right
- apply a range of strategies for locating relevant information within a document
- seek to unite material from different sources when illuminating individual issues under scrutiny
- take a discriminating approach to quoting, reproducing no more than what is necessary to establish or illustrate the appropriate argument
- follow accepted referencing conventions within and at the end of their document
- proofread the final work rigorously, without relying exclusively on the features offered by word processing software

ACTION

It is, of course, up to individual teachers both to decide how far they themselves recognise the student shortcomings that have been highlighted here and to determine the necessary counter measures they may wish to pursue. My investigation was undertaken originally for my own benefit, specifically to provide insights into problematic aspects of student work and academic behaviour that would inform my future teaching. The remedial actions I have taken are varied. Some have involved giving the students extra practice through exercises and offering demonstrations that model what is done by the skilled academic, while others have merely meant the addition of an extra bullet point on a *PowerPoint* slide used to give a lesson presentation and some elaboration on the matter.

The investigation itself, which demanded that I step back and look dispassionately for patterns that emerge in what has been done by EPQ students over a prolonged period, was instructive and I would recommend wholeheartedly that teachers undertake their own, especially as I cannot state with confidence that the findings from my study are likely to arise in any secondary school where large-scale independent learning projects are attempted, even if many teachers recognise from their own experience a lot of the problems that have been outlined. The inquiry was specific to a certain year group (i.e. Sixth Formers) undertaking a particular course (namely the EPQ). A comparable study scrutinising, for example, younger learners taking a different course in a different context may well yield different discoveries, some of which may be peculiar to the unique situation in which the work took place.

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