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Introduction: Robert Butroyd

The excellent work produced by staff at Heckmondwike Grammar School on the Action Research Route of the MA in Professional Development led to collaboration between the University of Huddersfield and the school on a year long action research project, focussing upon issues arising in subject study during pupil transition from Year 11 into the Sixth Form.

Two issues prompted this initiative. Firstly, an Ofsted (2009) subject survey identified one area for school development to be to continue ‘to develop opportunities to take account of the student voice in order to inform practice in teaching and learning and in student’s personal development and well being.’ Secondly, the school sixth form had undergone a recent rapid increase in numbers, sourced largely from intake from other schools, and a view was expressed that the transition of these students into the sixth form was an area the school wished to explore with a view to improving student experience. Action Research (Baumfield, V. et al. 2008), with the student voice at the centre of its methodology is well placed to develop improvements in the student experience.

Six teachers from five subject areas – History, Spanish, French, Psychology and Chemisty met with myself, as leader of the Action Research route of the MA in Professional Development at the University of Huddersfield, to identify areas of research interest and to sketch out a draft plan for the 2009-10 academic year. The project in began in September 2009 with the assumption that transition was concerned with induction. Early data collection by the projects teachers soon revealed that the issues of transition go deeper than that. In the words of one teacher, ‘it’s really about preparation for A2.’ Consequently, much of what you
will find in this report is concerned with equipping students with the skills to become independent and critical thinkers.

Two guiding principles of action research are that it aims to be democratic and collaborative. In essence, research is conducted with students, not on them, with the minimum of disruption to current practice. The research methodology and by implication the findings, analysis and data collection methods described here are not prescriptions for success. Action research is a process, of data collection, reflection, and implementation, followed by – as you can probably guess - another cycle.

As principle investigator for the project, it has been a pleasure for me to work with six such committed, positive and talented individuals. It is intended that this report will contribute in some small way to the reflective practice of those who are constantly seeking for ways to improve or extend their practice.

August 2010.

References


Biographical Note

Robert taught in secondary schools for 14 years, and has worked in teacher education for 18 years. He is currently route leader for the MA Professional Development: Action Research at the University of Huddersfield.

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History: Developing critical reading skills: Ross Oxby

Howells (2000) found that his students were reluctant readers and, even where they did access a text, were unselective and uncritical. This reflected my own experiences of teaching post-16 students and is buttressed by Cottingham and Daborn (1999), who argue that reading is the biggest literacy problem in the history classroom. The History Faculty of the University of Cambridge, for example, advises prospective undergraduates that to ‘learn from what you read and to do this you need to read analytically.’ (Unattributed 2009)

My experiences of post-16 teaching revealed a lack of criticism in pupils’ reading. I perceived slowness or inability to relate texts to existing understanding, especially without the prompting of arbitrary questions demanding specific answers. I observed a reluctance to read texts at all when set for homework. Critical reading is crucial to those many students aspiring to prestigious universities, which not only desire top grades but value critical reading around subjects among prospective undergraduates.

Aims:

I focussed on devising and implementing structures and scaffolding to help students in the process of becoming critical, reflective and independent learners.

More specifically my aims were:

- To devise teaching and learning strategies to encourage AS Level History students to read critically and reflectively.
- To coach students strategies for actively engaging with texts.
- To devise, implement and refine a number of teaching and learning strategies and instruments towards the above goal.
- To pilot teaching and learning strategies with my History class.
- To evaluate and refine these strategies and devices.
**Independent learning as a concern for the A Level teacher**

Le Coq (1999) addressed the problem of how to encourage reflective and analytical thought among A Level historians, Rudham (2001) emphasised the development of critical thought, which has gained in importance in light of the 2008 A Level specification, and Harris (2001) posited that class debate and discussion should form an integral part of the reading process in post-16 History. All recognise that independent study is at the heart of post-16 education and devised strategies for encouraging it amongst students. Hibbert (2002) concluded that ‘the Advanced Level teacher…has the challenging task of bridging several gaps’ (p. 43), particularly the transition from ‘spoonfeeding’ in Key Stage 4 to more critical, independent and reflective learning demanded by further and higher education and the world of employment. The sixth form teacher’s task, therefore, is to develop ‘a range of teaching strategies that engage students and develop their skills as independent learners.’ (p. 43).

**Developing critical reading**

The key to reading critically is for students to be aware of ‘what it is they are reading for’ (Hellier and Richards 2005, p. 45; original italics). This was a problem tackled by Harris (2001), who proposed a ‘reading sheet’ to support extended reading at AS Level. Harris’ intention was to encourage pupils to source their own texts and encouraged the use of full articles, something which my own experience suggested would be asking too much of pupils in their first term of post-16 history, placing me in agreement with Loy (2008) who argues that ‘it is essential to give students appropriate levels of reading’ before making ‘that level progressively more challenging,’ (p. 27) Nonetheless, I did adapt Harris’ ‘reading frame’ (2001) for my own purposes (appendix 6). The use of different strategies
also enabled this research to reflect Loy’s (2008) recommendations that ‘all...students [should have] an equal opportunity’ of access to critical reading.

**Implementation**

The research involved the participation of:

- A class of seventeen AS Level History students (2008-9 cohort)
- Three students of that class who participated in individual interviews
- Five teaching staff in the History department
- Class of sixteen AS Level History students (2009-10 cohort)

I was fortunate to work in collaboration with a critical friend who was conducting her own research project as part of the school’s wider project who was generous in sharing her perspectives and greater experience in conducting research projects.

Students were separated into groups and asked to complete a teacher-designed grid which asked which skills they felt were most needed in AS Level history (appendix 1). The outer boxes on this grid enabled students to list their own thoughts before discussing their findings and reaching group conclusions in the central box. Such an approach encouraged more reticent students into contributing and prevented more confident students from dominating proceedings. Even if certain students were quiet in the group discussion that followed, their written thoughts remained in individual boxes and informed my research. Group findings were communicated and discussed in class, bringing inter-student and group agreement and disagreement and raising new issues.

Colleagues in the history department completed a questionnaire on skills in post-16 History (appendices 4-5). Mindful of the potential pitfalls of leading questions and misunderstanding that accompany questionnaires the questions
were constructed as openly as possible and short interviews with each respondent followed return of the questionnaire. In light of my observations on formulating a focus, I also included a final question that enabled teachers to express concerns in areas outside of my ‘perceived problem’ of skills.

Data analysis indicated that students and teachers tended to view students’ attitude to their studies as the most significant problem in post-16 History. This informed my decision to probe the issue of attitude further by interviewing individual students with this focus in mind. I had taught these students for the previous nine months and had developed a helpful rapport that manifested itself in the openness and candour of their responses. Following the recommendations of Brown and Dowling (1998) these interviews were unstructured with prompts and probes being used to focus students on the issue at hand, while not constraining their responses by using prescribed questions. The data from these interviews informed my pursuit of independent learning as the research focus.

My AS Level History students were separated into small groups and asked to complete a teacher-designed grid on the qualities required of an effective critical reader (appendix 12). This was to form the springboard for further class discussion. Students were then given a short text, focused on a description of the Romanov tercentenary of 1913 (Figes, 1996). They were initially asked to read it in light of what it told them about Russia in the late 19th century before answering teacher-devised questions (appendix 11). This was followed by a discussion of what pupils had learnt from the text.

Students were presented with a chapter from Turgenev’s *Fathers and Sons*. They were introduced to a ‘reading sheet’ (appendix 6) based on Harris (2001). By asking pupils ‘what have you learnt from this?’ and ‘what is the purpose of
reading this?’ this informed the researcher of how far students are engaging critically with a text and facilitated classroom discussion on experiences, difficulties and advantages of the method itself, serving as an introduction to critical reading skills.

A number of strategies designed to encourage critical reading were introduced (appendix 7). Students used one of these strategies to read a longer chapter on the reign of Alexander II (Zakharova, 2006), recording their responses both to the text and in evaluation of the reading strategy. These tasks were then debriefed in class.

**Evaluation**

As the research project progressed I became aware that although students were becoming more critical in their reading, they did not appear aware of *how* they were being critical. In order to deepen the critical approach to learning I refined my original aims and sought to develop their awareness of and familiarity with strategies for reading critically. I was particularly influenced by Holt’s tests for understanding (cited in Hellier and Richards, 2005) and the reading strategies taught were developed with these tests, as well as the recommendations of Loy (2008), in mind (appendices 8-9).

**Attitude**

The initial task, in which pupils worked in small groups revealed an almost equal split in concerns between attitudinal qualities and skills. The questionnaires and follow-up interviews with History teachers revealed a similar concern with student attitude in year 12 History. One teacher considered ‘attitude in lessons and to private study’ as a significant negative influence on student attainment, suggesting that ‘there is an apathetic tendency to wait and be told an “answer”’
rather than to find out for themselves.’ A second teacher was more definitive in their response, commenting that ‘the most important [factor] is attitude. My students don’t work hard enough at the subject and have poor organisational skills.’ This teacher went on to list poor attendance and diligence in copying up missed work as factors that ‘adversely effect performance and results.’ These initial findings were probed further in a series of semi-structured interviews with year 12 History students selected from across the ability range. The interviews revealed that pupils considered attitude and skills to be linked.

**Attitude and skills are linked**

Student B, a high-attaining students who attained a grade A at AS Level History and is targeted an A at A2, recognised a range of skills needed to succeed in AS Level History. Student C, a lower attainer, identified a similar shift between GCSE and AS Level. Student A, a middle attainer said: ‘I think the skills just come along as you learn, you need the skills to understand and apply the content,’ and seemed to question the value of skills, attributing academic success to ‘motivation’ and interest in a specific subject. However, Student B later considered ‘new skills’ as a significant hurdle in adapting to post-16 study. She suggested that post-16 there is more focus on ‘independent research’ and volunteered that there is more scope for further teaching of study skills, ‘especially in new subjects, as it is difficult to get your head around the subject and learn skills as well.’ As such skills are ‘new’, Student B suggests, ‘you might put [work] off and not do it’, suggesting a link between attitude and skills in pupil performance at A Level.

Interestingly, the interviewees considered their attitude to study to be positively proportional to their confidence in using skills, particularly in
independent research. Student B revealed how ‘I would be really motivated to do it for myself’, but felt that the teaching of independent study skills was sometimes limited in post-16 study.

My research into my students’ baseline critical reading skills revealed that students are widely unaware of how to read critically. When asked to work in small groups to define what makes a good independent reader, most students identified factors more concerned with the physical act of reading (‘silence’, ‘sit somewhere comfy’, ‘good eyesight’) or vague engagement with the text (‘enjoy reading’, ‘got to be clever’). Few pupils identified tactics for engaging critically with a text (‘skimming for information’ and ‘highlighting’ were mentioned). Certain lower attainers were reluctant to comment at all, with one remarking how ‘I don’t know; I don’t read.’

Targeting critical reading skills

In response to this, students were asked to consider a small extract from Figes (1996) focused on Russian society in the late-19th century, a topic we had recently studied as part of the introduction to the AS Level course. Students were asked to read the text and consider how it helped their understanding of the AS Level course. In light of students’ earlier observations about critical reading, this was a remarkably successful task. Higher attainers were actively critical of the text, with one commenting how the image of national unity at the Romanov tercentenary might have deliberately masked what the class knew about a socially- and politically-divided society. Lower attainers were able to link the text to their prior knowledge of the topic to reinforce their understanding of the period. The student who had earlier protested that she could not comment on reading skills as she
‘didn’t read’ felt confident to volunteer that the text reinforced her understanding of late-19th century Russia as a ‘hierarchical society’.

This activity revealed that my students could read critically and independently, contrary to the findings of Howells (2000), which suggest that his students were uncritical readers, and Cottingham and Daborn (1999), who argue that reading is the biggest literacy problem in the history classroom. The biggest problem in my classroom is not that students are uncritical, but that they are largely unaware of how they are being critical.

**Strategies for developing reading skills**

I initially used Harris’ (2001) ‘reading frame’ (appendix 6) alongside chapter 10 of Turgenev (1862) as part of a topic evaluating the development of radical opposition in Russia in the 1860s. However, although Harris’ reading frame offered students scaffolding from which they could read certain texts critically, I was not satisfied that pupils had developed strategies through which they might read critically. When asked, several students could not tell me how they came to their answers. In order to satisfy my aims and foster true independence among my students, I had to encourage strategies beyond Harris’ reading frame, ones that could be transferred to any text they ever read.

Students were introduced to a number of reading strategies (appendix 7) and asked to read a lengthy article on the reign of Alexander II (Zakharova, 2006) using one of these strategies. Although students widely disliked the text (‘the most boring thing I have ever read,’ one remarked), they once again showed their ability to read critically. One middle attainer was noticeably more critical than he had been when considering the earlier texts, remarking that the article was too much in favour of Alexander’s reforms, ‘we’ve also learned about how his
reforms made things harder...like the emancipation of the serfs made people want more.’ Students were also critical in evaluating the value of the methods used. One high attainer recognised that collaboration ‘helps to deepen understanding of the text as you can look at what someone else thought,’ while a middle attainer was explicit about the potential for reading aloud to facilitate criticality: it ‘gives you something you can talk about if someone is listening to you,’ and ‘can encourage more questions, re-reading or extra reading.’

Findings

- Students would benefit from being coached key subject-specific and cross-curricular skills using methods similar to those piloted in this research.

- It is particularly important that students are made aware of how to utilise certain skills that they may already possess.

- The benefits of developing critical and independent reading across a number of subject disciplines should be further explored.

The conduct of the research has reinforced a critical and reflective approach to pedagogy and has also sharpened my awareness of the importance of student voice in refining my practice. Action Research Methodology has encouraged me to pursue a more innovative and evaluative practice based around the principles of planning, observation, reflection and action that underpin action research. My findings have encouraged me to adapt my pedagogy and also to liaise with practitioners within the school and in the wider educational community with the goal of achieving my foremost aim of encouraging and developing independent and critical reading skills amongst post-16 students.
Where we go from here.

Dissemination of findings has been ongoing throughout this research project. As a member of the school’s cross-departmental Research and Development group I was invited to summarise and present my work in progress and initial findings. This proved valuable both to me in clarifying the direction and implications of my research, and to members of the research and Development group in considering the role of student voice in the school, particularly in informing and evaluating teaching and learning strategies and practice.

It is intended that critical feedback on the findings of the completed research be provided on an individual, departmental, whole-school and external basis.

Individual feedback will take the form of informal discussions with the many interested colleagues who have expressed interest and volunteered responses during the course of my research. A summary of my key findings, along with evaluation of the implications for implementation across the department, will be offered in a departmental meeting in early 2010 with a view to informing future schemes of work for post-16 study and history further down the school. A full discussion of my research methods and findings will also be offered at a meeting of the Research and Development group. In addition, my findings and their implications will be disseminated to the whole school through my leading an INSET session in June 2010. I will endeavour to work with the school’s Literacy Co-ordinator and departments across the school with a view to introducing strategies to engage students critically with texts throughout the Key Stages, with Hellier and Richards (2005), whose work outlines strategies for
Six approaches to student transition into the sixth form at Heckmondwike Grammar School

developing confident and critical reading in history across the Key Stages, providing a valuable starting point.

It is also intended that my findings should be disseminated beyond the school community. Immediately, this will take the form of dissemination and discussion of my findings and methodology with an ITT student, particularly its implications for his own practice as he prepares to teach post-16 History on his training placement. I intend to present my findings as an article for submission to the Historical Association’s secondary education journal, *Teaching History*.

References


Biographical Note

Ross is in his second year of teaching. His subject specialisms and interests are History, Politics and Citizenship; transferrable skills and knowledge within and across subjects; values in education – intrinsic worth or a means to an end? - assessment recording and reporting. roxby@heckgrammar.co.uk

An action research project in collaboration with the University of Huddersfield
Appendix 1

APPENDIX 1 - Crossed ideas grid for skills in History: to be completed by students

What skills are the most important in the study of History?
Appendix 2
APPENDIX 3 – Summary of pupil responses using grid in Appendix 1.

List of common SKILLS
- Debate
- Essay-writing – concision, analysis, links, judgement, balance, paragraphing (PEEL)
- Source analysis
- Judgement
- Reading
- Time keeping
- Listening skills
- Co-operation
- Independent research skills.

List of ATTITUDES
- Coming to lessons on time.
- Coming to lessons.
- Relaxed
- Enjoy and enthuse about history.
- Commitment to practice.
- Persistence
- Argumentative
- Enthusiasm
- Concentration
- Patience
APPENDIX 4 – Structured questionnaire presented to members of the History department

Skills in post-16 History

What skills do you think are particularly important for the study of History at post-16 level?

Which, in your experience, are especially strong among post-16 students at HGS?

Which require the most development?

How far can skills developed in History be utilised across the curriculum at post-16? Give examples where possible.

Which other factors, besides skills, do you think significantly affect pupil performance in years 12 and 13?
APPENDIX 5 – Completed questionnaire (appendix 4)

Skills in post-16 History

What skills do you think are particularly important for the study of History at post-16 level?

- To evaluate historical sources
- To write essays
- To select relevant information from books, articles, etc.
- The ability to prioritize, that relatable importance of evidence
- The ability to make judgments based upon supporting evidence
- The ability to compare and contrast
- The ability to analyze evidence
- The ability to use data - draw conclusions
- The ability to present work in a logical, coherent and structured manner

Which, in your experience, are especially strong among post-16 students at HGS?

Most of the traditional knowledge is very useful to the future. However, the most important aspect seems to be the ability to think critically and to analyze historical events which is something we need to work on in class generally.

Which require the most development?

Amongst the other ones

- Critical writing
- Synthesizing evidence
- Making judgments on primary evidence
- Interpreting primary documents

How far can skills developed in History be utilised across the curriculum at post-16? Give examples where possible.

These skills can be transferred across many arts, such as art classes, where students need to discuss issues, use evidence and make judgments.

Which other factors, besides skills, do you think significantly affect pupil performance in years 12 and 13?

The most important is attitude. Many students don’t work hard enough to make the most of all their subjects, leading to poor performance. A positive attitude and a desire to achieve can greatly improve performance. This is especially true for students who are not naturally academic, as making an effort to improve will help them succeed. This will also improve their confidence, which will positively impact their performance in the next year. This change often affects performance graphs.
APPENDIX 6 – My adaptation of Harris (2001)'s reading frame

AS History: Reading Frame

Text:

Why am I reading this text?

How did this text help deepen my understanding of my AS History course? Use specific examples.

How useful is this text to the historian wishing to find out about tsarist Russia?

What difficulties did I encounter when reading this text?
APPENDIX 7 – Selection of active and critical reading strategies

Active Reading Strategies

Annotating key points – highlight and annotate key points in the text.

Collaboration – read the text as you wish, and afterwards collaborate with a partner. You might wish to discuss and share ideas/compare notes/swap annotations and add to each other’s work.

Synthesise the essential points – summarise the key arguments of the text in no more than 150 words.

Reading aloud – read the text aloud, vocally emphasising key points or words.

Frame of Reference – use the attached frame (overleaf) as a guide to your reading.

Questions and Answers – set yourself three questions based upon what you wish to find out from the text. Read the text with these questions in mind and then write an answer to each of them, using the text, at the end.

A written response – write a short response to the author. What did you learn? Did you disagree with anything? Is there anything else you would like to know and why?
Appendix 8 – Student evaluation form for reading strategies.

Critical Reading Strategies: - Evaluation

What strategy did you adopt when reading the text?

What are the advantages of this strategy?

What are its drawbacks?

What strategies will you use again/in the future? Why?
## Appendix 10 – Summary of multiple research methods

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<th>Date</th>
<th>Research</th>
<th>Respondents</th>
<th>Instruments used</th>
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<td>Class exercise – what skills are need in History?</td>
<td>17 AS History students</td>
<td>Group discussion grid</td>
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<td>History Department questionnaire.</td>
<td>History teachers.</td>
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<td></td>
<td>Individual pupil interviews.</td>
<td>3 AS History students selected to represent the breadth of the ability range.</td>
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<td><strong>Autumn 2009</strong></td>
<td>Class exercise – what makes an effective critical reader?</td>
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<td>Critical reading skills and strategies.</td>
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<td></td>
<td>Evaluation of critical reading strategies.</td>
<td>16 AS history students.</td>
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APPENDIX 11 – worksheet to accompany work on Flighs’ *A People’s Tragedy*

The Tsar and his People

1. From where in the Russian Empire had dignitaries come to St. Petersburg to join in the tercentenary celebrations?

2. What does this tell us about the Russian Empire in the late-19th and early-20th centuries?

3. List the ranks of Russia’s ‘ruling class’ outlined on page 4:

   ![Russia’s ‘ruling class’](image)

4. What difficulties might such a hierarchical system pose for Russia?

5. What role does religion play in these celebrations?

6. Why is the Russia Orthodox church so central to the power of the Tsar?

7. What picture does this extract give of the social and economic differences between classes in late-tsarist Russia?

8. In what ways is the extract useful for deepening your understanding of Russian society in our period?
APPENDIX 12 - What makes a good independent reader?
Six approaches to student transition into the sixth form at Heckmondwike Grammar School

APPENDIX II – Completed grid: what makes a good independent reader?
APPENDIX 14 - What makes a good independent reader: analysis

Reading aloud
Being able to discuss with others
Looking at the pictures
Skimming through
Silence
Read information twice to understand
Read alone
Taking in the information instead of just skimming
Concentration
Got to be clever
Highlight stuff
Patient
Repeat information you don’t understand
Understand language used
Interested in the text
Read frequently
Read a range of books
Recall information
Sit somewhere comfy
Read without encouragement
Enjoy learning
Skimming for information
Sharing your knowledge
Good eyesight
Understand the context
Not easily distracted
Appendix 15 – Completed reading frame

Text: *Fathers and Sons*

**Why am I reading this text?**

*To get an understanding of the Nihilist Party and what they stood for.*

**How did this text help deepen my understanding of my AS History course?**

*I am now able to comprehend with the nihilist ideas. I know that they didn’t like Russian society and wanted to completely reform it and start over. And I can understand the other side of the argument which suggests that Russians are happy but want and need civilization.*

**What difficulties did you encounter when reading this text?**

*I didn’t fully understand the aims of the nihilists and what they planned on doing to achieve this reform.*
APPENDIX 16 – Completed reading frame

AS History Reading Frame

Text: Rather a song

Why am I reading this text?
To understand notion and opposing notion of it.
Differences between generations.

How did this text help deepen my understanding of my AS History course? Use specific examples.

Nothing is

Want to con de all Russian culture.
Condemnation is more useful than anything else.
Pulling everything down.
Clear the ground.

Differences in generations.

What difficulties did you encounter when reading this text?

I understood the text.

Names were difficult.
Six approaches to student transition into the sixth form at Heckmondwike Grammar School

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<th>Focus of dissemination</th>
<th>Format</th>
<th>Date</th>
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<td>Informal conversations and discussions on a one-to-one basis.</td>
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<tr>
<td>History Department</td>
<td>Presentation and discussion at departmental meeting.</td>
<td>January 2010</td>
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<td>Whole school</td>
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<td>Wider dissemination</td>
<td>Dissemination and discussion of findings with ITT student.</td>
<td>2010</td>
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Tailoring of research findings for publication in *Teaching and History* (Proposed) | 2010

An action research project in collaboration with the University of Huddersfield
Spanish: Developing grammar and grammatical structures with Year 12 students with a GCSE achieved via coursework: Della Lawson.

Context

The MFL department runs AS and A2 courses in French, German and Spanish and the intake comprises of both internal and external students. This research was prompted by three U grades in the 2009 AS results. One of the U grades was unexpected and was partly due to the candidate not fully completing the exam paper. The other two U candidates had been offered extra tuition from the spring term (January 2009) but attendance and effort had been sporadic. This gave rise to the question that had the intervention been earlier and more focussed, would the candidates have retained motivation and achieved better grades?

This research has been carried out with a group of year 12 AS Spanish students. Of the nine who took part (Appendix 4), six were internal students and were taught by me for GCSE; of that six, four had studied Spanish for three years, following an AQA course (Specification B) which required a higher level written exam, whilst two studied an AQA one year fast track course (Specification A), using coursework as the only method of written assessment.

The remaining three students were external entrants; candidate 7 completed an AQA GCSE Spanish course and was examined using the higher writing option and the remaining two completed GCSE Spanish courses with the Welsh Examination Board. They were assessed via coursework only. Candidate 8 achieved an A* in Spanish, achieving an average B GCSE grade in all subjects, while candidate 9 achieved a B in Spanish, achieving an average grade of C.
GCSE grade in all subjects. Both appear to be stronger in Spanish – achieved via coursework - than in other subjects.

The school has historically admitted students onto AS language courses with a GCSE grade B or higher. However it has been noted that there is sometimes a considerable difference in ability among students holding the same GCSE qualification from the same examination board.

The award of an A* grade required the equivalent of a pass rate of 89% across an accumulation of the results of listening, oral and reading exams, together with the results of a writing exam or written coursework. For a higher tier GCSE writing exam students had to answer two in-depth questions in exam conditions, without reference to any source materials or a bilingual dictionary. GCSE written coursework for MFL involved producing three pieces of written work, two of which could be completed with reference to all source materials. The third piece also allowed access to source materials during the first draft, but the submitted second draft had to be completed in controlled conditions, with access only to a bilingual dictionary. It seems then logical to suppose that candidates were able to score higher marks more easily using the coursework option as they had numerous models of language structures and verb conjugations within the source materials, which they were at liberty to manipulate and offer for submission

Given that one remembers something better if one has to process it or think about it (Craik and Tulving, 1975) it was of interest to know if students following a coursework route put as much effort into learning grammar as those being tested via a written exam.
Can coursework students independently apply grammar rules, if in order to achieve well on the GCSE exam via a coursework route, they are able to ‘copy’ or ‘manipulate’ ready given structures from source materials?

Aims

The purpose of this Action Research was to bridge the GCSE – A-level gap, in terms of grammar, with a particular focus on students who had achieved their GCSE via coursework. The specific aims were therefore:

- To establish each student’s joining point in terms of knowledge and use of GCSE grammar and grammatical structures and use this data to pinpoint gaps in knowledge.
- To focus the first four weeks’ grammar teaching on their gaps, rather than revising the traditionally hard grammar points from GCSE, as had been in the original scheme of work.
- To consider the implications of the findings for recruitment to Spanish AS.

Implementation

Students were first introduced to this Action Research project in the Spanish session during the year 12 Induction Day in June 2009. They were briefed on the aims of the project - to improve teaching and learning at the GCSE – AS gap-bridging stage of the course, in order to raise attainment - and their consent was sought for participation and for use of the data. It was made clear that the research would not necessarily have an effect on their particular cohort’s results and they were given the option not to participate, without prejudice. All those present at the induction and who went on to enrol on the AS Spanish course agreed to participate.
Students were set two induction tasks; the first was to complete a self-evaluation of their grammar ability in Spanish. Grammar terms used on the self-evaluation were taken from the GCSE AQA Spanish specification, where they are listed as course requirements at either production or recognition level. The questions therefore asked the students if they recognised the grammar term and whether they felt they could use each particular grammar term without support, with support and whether or not they would be confident to be tested on it. The expectation was that they would express difficulty in either recognising or using those grammar points which were only required at recognition level at GCSE.

The second induction task was to write an answer, in examination conditions, to question two of the GCSE Spanish Specification ‘A’ May / June Higher Writing Exam (2006). This is the more difficult question out of two and it was used to allow for judgement of their actual use of the Spanish grammar terms in relation to their perceived level of understanding, shown on the self-evaluation. The task allowed for students to show off their understanding of the grammar points listed on the self-evaluation, however differentiation was by outcome in that only the work produced and therefore grammar structures attempted could be judged.

As a result of this induction diagnostic assessment the scheme of work was altered so that the first four weeks were given over to explicit grammar teaching tailored towards their gaps and GCSE grammar revision, through GCSE level language tasks. This differed from the previous scheme of work which had followed the AS course book and used a new topic and therefore new language as a vehicle to revise some of the main, difficult GCSE grammar points.
At the end of the four-week period, further diagnostic tests were carried out. These were commercially produced tests, designed as part of the AS level Spanish teaching resources and recommended as a starting point. The tests required verb conjugation from a given infinitive. All questions were in Spanish and both staff and students considered these to be difficult as the language was not necessarily GCSE level. This diagnostic test was then adapted so that the same style of testing was carried out, but with more accessible language within the tasks and with an English translation provided. In this way, only the students’ knowledge of the grammar was being tested which provided a fairer indicator of what had been learnt.

The results of Diagnostic Test 2 (Appendix 1) showed that students 3, 6 and 7 had underachieved or significantly underachieved. As other work completed by this stage did not reflect the same conclusion, and in light of student 6 only having studied Spanish for one year, no intervention was deemed necessary at that stage and the students were directed to verb drill software in private study time in order to improve.

Students 8 and 9 were identified as having significantly underachieved, which was surprising based on the original data, where it appeared that based on GCSE achievement, they were stronger in Spanish than in other subjects. However the results were consistent with other work completed by this stage and so both were offered 30 minutes extra per week with the Spanish assistant to concentrate on grammar and one hour per week supervised study with their Spanish teacher. Student 9 made full use of both interventions, but student 8 was unable to, due to timetabling difficulties. This student was therefore given the same direction as students 3, 6 and 7 to be completed in private study time.
Results of class work in the interim showed improvements for students 3, 7 and 8. Students 6 and 9 did not show evidence of progress, as can be seen by comparing the October grades with the November grades (Appendix 2).

Student 6 was identified as having specific language gaps owing to only having done a fast-track one-year course the previous year. Therefore the slower rate of progression was not of serious concern, as the student was working hard and responding to specific targets set. Intervention at this stage was to concentrate on essay writing skills with an AFL approach. This was delivered as lessons within the scheme of work, where the skills were explicitly taught and are continually tested periodically for the whole group.

Student 9 was of more serious concern because independent study was evidently lacking in his work, although the student continued to attend the extra study support sessions. The intervention adopted at this stage for student 9 was a formal referral to the pastoral team, in keeping with school policy, and an added direction of fifteen minutes’ daily use of the verb software was also put into place.

Appendix 3 shows how the students for concern achieved on significant tests during the course. Whilst all students have improved, it is still interesting to note that students 8 and 9 are still significantly underachieving in relation to their AS target grade, despite all of the intervention measures taken and despite the initial conclusions drawn from their GCSE data. Student 9 was finally able to make use of the extra tuition offered, since the end of January. All other students in the group achieved their target grade on the January 09 AS paper, meaning that the entire group is now either at or one grade below their target grade, apart from the students 8 and 9.
Findings

The sample in this study is too small to draw generalisations, however it is interesting to note how external students who have achieved well by following a coursework route at GCSE have struggled to cope with the demands of the language, and most particularly the grammar, of AS Spanish.

Where we go from here.

The Examiners’ Report for the 2006 GCSE written exam question, that the students attempted at induction, showed examples of complex language produced by candidates and were highlighted as examples of what was expected for the highest marks – i.e for the award of an A* grade. The same report also encourages teachers entering candidates for coursework, to enter their candidates for the ‘more imaginative’ coursework titles, implying by default that candidates can still achieve an A* grade without being fully stretched, as is the case with the written exam.

The January 2009 Examiners’ Report for AS Spanish stated that ‘the grammatical accuracy and range of linguistic structures ranged from outstanding to poor’ in relation to the written essay which forms part of the AS Spanish exam. Considering that most centres accept students onto AS Spanish courses with a GCSE grade B or higher, it seems absurd that after a further year of higher level study, grammatical accuracy should still be classed as ‘poor’.

It would be of use to know whether or not those with a ‘poor’ ability to independently use Spanish grammar had followed a coursework route or not.

References


**Unreferenced**

- The Examiners’ Report for the 2006 GCSE
- The January 2009 Examiners’ Report for AS Spanish
- ‘Sociology Review’ and ‘Psychology Review’ – various articles connected to Action Research and Educational research

**Biographical Note**

Della is an Advanced Skills teacher for MFL, and a Graduate Training Programme mentor for MFL. She previously taught in a maintained school and has also worked as a Primary outreach language teacher for years 3 and 6 in a number of Primary schools in Kirklees. She has experience as an adult education teacher of French, and was a language assistant for one year in France.

[dlawson@heckgrammar.co.uk](mailto:dlawson@heckgrammar.co.uk)
### Appendix 1: Results of Diagnostic Test 2

<table>
<thead>
<tr>
<th>Student</th>
<th>Internal / external?</th>
<th>years studying Spanish</th>
<th>GCSE Spanish</th>
<th>Coursework (Cwk) / written exam (W/E)?</th>
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<th>Spanis...</th>
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<th>Achieveme...</th>
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<td>-1 grade</td>
<td></td>
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### Appendix 2: Comparison of October and November grades

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<th>Cwk / W/E?</th>
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<th>Spanish AS target grade</th>
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<td>-3 grades</td>
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<td>B</td>
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Appendix 3: Achievement in significant tests

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<th>AS target grade</th>
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<th>Significant Listening / Reading Writing Classwork (November)</th>
<th>End of Unit Test result Media topic November</th>
<th>End of Unit Test result Popular Culture January</th>
<th>AS Jan 09 Inc. speaking test February</th>
<th>Achievement in relation to target grade</th>
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</tr>
<tr>
<td>Cwk</td>
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<td>D/E</td>
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Appendix 4: Achievement at GCSE

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<td>46</td>
<td>B</td>
<td>42.40</td>
<td>C</td>
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GCSE points scores: A* = 58, A = 52, B = 46, C = 40, D = 34

Green indicates a Spanish grade in line with or better than the average GCSE grade achieved
French: Devising vocabulary learning strategies and tasks to support students who struggle with this aspect of language learning: Amra Hewitt

Context

As a linguist, my initial interest in the issues surrounding Y12 stemmed from how students study languages in their own time. I previously taught students of a similar age (as well as adults and younger children) at a private language school in Moscow. I was impressed by their personal study habits: namely taking responsibility; independence; demonstrating initiative; and, above all, eagerness to extend their own learning beyond the targets of the module or topic. I realised that these qualities were, on the whole, lacking amongst students at this school - regardless as to whether they were external or internal students.

Initially, I did wonder if this observation was linked to the perception of the English as poor language learners (Coleman 2009), a line of thought enhanced by the presence of a Yr12 French student from Eastern Europe who displayed all the aforementioned qualities and who demonstrated them readily in her studies of English and French. However, upon further interview and inquiry into language learning in her native country, it became clear that these traits are not common to all European language learners - she stood out, then, as an independent learner – and that becoming a confident language learner depends on each individual, their ambitions and their understanding of what learning a language really is.

A separate issue to that of skills development is that of academic ability. The perception, amongst staff, is that internal students are more academically able, beginning Y12 with a firmer grounding in the subjects. I believe that this has
several negative consequences: some students believing that previous ability and knowledge will be enough to see them through (without further development of their skills), and external students feeling demoralised and isolated from the very start of the course.

Aims

Initially I wished to investigate:

- how students viewed their own abilities in particular language skill/ability areas
- how teachers viewed students’ language skills/abilities
- how important students considered these to be in the course of their studies
- what teachers can do to encourage these skills in all students, regardless of their previous academic background

After reading and early research I progressively focussed upon:

- devising vocabulary learning tasks/strategies to support students who struggle with this aspect of language learning.

Implementation

The first step was to draw up a skills audit (Appendix 1) drawn up in collaboration with two colleagues in the MFL department. Sixteen Year 12 AS level students (the whole cohort) were offered the skills audit (Appendix 1) in a lesson early in the Autumn Term, shortly after they started. They were addressed as a whole class, and asked to read through the skills and decide which were the most important when studying languages. The majority realised that they were all key to learning languages. I then asked them to identify 5 or 6 that they found difficult, or struggled with. They highlighted these on the sheets. Names were included on the sheets so that a number could be selected for interview later on. A photocopy was made of their sheet, which I kept while the original was returned to the student. We then had a class discussion focussing
upon the reasons for this exercise. A substantial number of them identified learning grammar and learning vocabulary as priorities, and there had also been a number of occasions in the classroom when pupils had raised these issues as particularly problematic.

The importance of vocabulary

I then decided to focus on learning vocabulary because at AS and A2 the amount of vocabulary required is substantially greater than that at GCSE and the students’ ability to express themselves using a wide range of vocabulary is key to success at this level.

The AQA AS Performance description for French/German/Spanish states that in order to achieve A/B in Assessment Objective 3, which relates to grammar and syntax, the candidates characteristically, “make effective use of a range of vocabulary,” and, “are able to manipulate language appropriately when required”. For Assessment Outcome 1 (response to spoken language), candidates at Grade A/B, “are able to develop their ideas, and express points of view with some appropriate justification.” Although the marks explicitly awarded for vocabulary appear small (for the essay 5 marks are awarded for vocabulary), in order to be able to express points of view with some appropriate justification and in order to gain the highest marks for content in the essay a candidate must respond to the task with “a good depth of treatment”, and it is only possible to do this and to “sustain a meaningful exchange…respond well to regular opportunities to react spontaneously in developing ideas” with a wide-ranging vocabulary base.
The student voice

Having decided to focus on learning vocabulary, I asked the entire class to complete a questionnaire (Appendix 2) designed to focus their minds on how they learn vocabulary, what they find particularly challenging and to what extent they actively improve their own level of vocabulary through independent study. Their answers enabled me to better understand why so many of them had highlighted vocabulary-learning as a weak point, identify students for further interview, and begin to think of support activities and tasks to assist them in their vocabulary learning.

I selected 4 students, 2 representatives of the top (one internal and one external student), middle (internal student), and bottom (external student) ranges of achievement, for interview. Based on the whole-class answers to the questionnaire and those given by the group of 4, I put together a crib sheet of advice/targets designed to help students with their vocabulary recording and learning (Appendix 3). By giving students a mixture of advice, “write down any word that is new to you,” and achievable, measurable targets, “include at least 10 new words in your work this week,” I hoped to support and encourage those students who were already becoming responsible for their vocabulary learning, and providing realistic goals for those who found this more difficult. Initially, I discussed these points with the class, and we agreed that they would try the advice for 2 weeks before we next discussed the advantages/disadvantages of it.

Student voice: recording vocabulary

Of the fourteen Year 12 students who completed the study skills questionnaire, 13 said that they had a method of recording vocabulary regularly, either a vocabulary
book or file paper, while one said that he wrote vocabulary down, but nowhere specific. Some students were quite specific about how they recorded vocabulary, “write it on file paper…then categorise it (describing words, connectives, subject specific)…I sometimes put all the verbs together.” Although 2 students swapped between a vocabulary book and file paper, it was encouraging to note that the majority of them were systematically recording vocabulary.

**Student voice: remembering vocabulary**

In terms of learning vocabulary, again several students indicated that the method encouraged from Year 7 onwards, that of remembering, covering the word, trying to recall it either in writing or in speech, and finally checking it was the one that worked best for them. One student also highlighted his method of making connections with English words to aid recall, while two others stressed the importance of learning the words out of the sequence in which they are listed, in order that they learn the word, not the order. These points demonstrate an effort on the part of the students to learn the words for use as opposed to only with a view to performing well in a test.

**Evaluation**

My initial observation of vocabulary learning at Key Stage 5 level was that it was perceived as an extension of Key Stages 3 and 4 where students expected to learn vocabulary only with a view to being able to recall a set list in a test. One student interviewed mentioned that he was accustomed to learning vocabulary from pre-prepared topic-specific lists at GCSE, and several did mention that they only learnt set lists for tests. Despite the merits of this system where students learn
words that the teacher knows will be necessary for the exam, this does not allow for the development of independent learners, confident in discovering new vocabulary on their own, from wider sources and incorporating this into their work. Through the responses to the study skills questionnaire and interviews this initial observation was confirmed. One could argue that independent study skills should be encouraged much earlier on in a pupil’s school life, but in MFL this does not appear to be taking place to a significant degree for it to be embedded in every pupil’s skill base.

**The Foreign Language Assistant**

In addition to students’ and teachers’ points of view in this research, I also took on board the observations of the Foreign Language Assistant. Each Year 12 student spends 2 half hour sessions per week with the FLA, practising general conversation skills, improving pronunciation, and preparing for the speaking exam. The FLA is a fantastic source of colloquial phrases, vocabulary that students often want to include in their work, and cultural information. As soon as lessons with the FLA began, it became clear that few of the students were making full use of the resource at their disposal. The FLA commented on how few of them made notes on any of the new vocabulary, or even went with a booklet and pen. Even if the students did have a method of recording new vocabulary, it became clear that they needed a reminder to use it. Reminders in class time may, therefore, have had an effect on the students, as 10 out of 14 students said that they recorded vocabulary from the FLA. By taking notes and recording vocabulary during these sessions, students demonstrate that they are making full
use of this resource and do not simply see it as another lesson they are obliged to attend for someone else’s benefit, but rather, for their own.

Evaluation

Advice on vocabulary learning (Appendix 3)

When, as a class, we discussed the advice in Appendix 3, one of the issues to emerge was that of time. Students felt that 10-15 minutes vocabulary learning every evening was far too time-consuming when faced with homework in 4 other subjects. Several found it difficult to remember, despite the advice to record this time in their planners. Consequently, I advised those who struggled with 10-15 minutes to at least try 5-10 minutes every other day. My aim was to encourage them to take the advice and adapt according to their abilities. Despite this, it became clear following further discussion, that, in addition to providing advice on students’ own independent study, that in-class support could prove beneficial to providing the motivation to learn which was mentioned in one student’s questionnaire responses.

The Information Gap Vocabulary Exchange (Appendix 4)

A common way of presenting new vocabulary in the sixth form is that of handing out vocabulary lists sometimes with the English definition sometimes without it. Students will then be expected to either learn a certain number of words for a test or use the list when producing written pieces of work or in reading and listening comprehensions. As one of the aims of the project is to encourage independent vocabulary learning and use I tried to adapt this method of vocabulary
Six approaches to student transition into the sixth form at Heckmondwike Grammar School

presentation, particularly after having heard some students from various year groups complain about being given lists of vocabulary. The aim of information-gap activities (Appendix 4), frequently used in Teaching English as a Foreign Language, is to encourage peer teaching and thereby collaborative learning, and this vocabulary list was based on such activities where each student must gain new information from another. Each student was given a list of vocabulary where a list of 30 words would be split in half. Student A would get a list of approximately 30 English words or phrases, with only the bottom 15 including the French meaning. Student B would have the same list of English words or phrases with only the top half having French definitions.

In pairs the students exchange vocabulary. Student A would ask student B a question from the top half of their list: e.g. how do you say “thrill” in French? Student ‘B’ having the French definition would tell them and spell it if necessary, and student A could then complete his/her list. By the end of the activity, both would have full vocabulary lists and both would have taught the other a number of new expressions whilst learning them themselves.

The Year 13 class with whom I first trialled this method of vocabulary presentation became thoroughly engrossed in teaching each other, and several commented on how useful they found it. In the subsequent vocabulary test 6 out of the 9 students gained 80% or more, followed by 8 out of the 9 students gaining 90% or more in the next vocabulary test. Not only were the students able to recall the vocabulary accurately for vocabulary tests, but they were also able to use them freely in their spoken and written production of the language.

Following this success I decided to use this method of vocabulary presentation with the Year 12 class firstly to see if this would help to increase
their motivation to learn vocabulary, and secondly to see if this activity would actively support their vocabulary learning without making it feel like an arduous task to be completed in isolation.

This method allows each student to learn what he/she is teaching by reading, repeating, spelling, hearing and writing the words, thereby using all of their language skills (and learning styles) to complete a task. The emphasis is on active, as opposed to passive learning, which a lot of the students appeared to have the most problems. Having seen the success of this activity, I have already created more such vocabulary sheets and intend to use them next year with the Sixth Form, and potentially with Key Stage 4 and 3 classes.

Where we go from here.
I believe that, by listening to students’ comments, and experimenting with ideas, this study has helped me to develop resources to use early on, and more systematically with the next cohort of Year 12. I will ask all Year 12 pupils to think about their independent language learning skills by requesting that they complete the study skills audit, with a view to checking it each half term as part of a self assessment process whereby each student can assess his/her own progress and set his/her own targets. As part of a wider school initiative, students are given Common Assessment Tasks every half term in order to assess their academic progress, and, I believe, linking this process into that of assessing their skills will be more fruitful than assessing their skills in isolation. In order to give the students the confidence to find and use their own vocabulary, I will include a dictionary skills lesson very early on in the school year, as part of the induction programme. By allowing the students to develop their confidence in using such a resource, I believe they will become much more independent learners and more
competent linguists. Also, the advice in Appendix 3 will be given as part of the induction process to focus students’ attention from the outset on the importance of systematically learning vocabulary. As the advice may not be useful to every student, I will, as I have this year, adapt the advice depending on students’ individual needs. Finally, I intend to use the teaching and learning vocabulary sheets in Appendix 4 throughout Key Stage 5 lessons, and I also intend to try this method lower down the school to promote the process of vocabulary learning as engaging and motivating.

With a view to providing more out of lesson learning support, my intention is to develop more activities on the school’s virtual learning environment, where students can test themselves on vocabulary and grammar, receiving instant feedback. Their results are sent directly to me in order to keep me informed of their progress. This has already proved popular as exam revision and my hope is that students will continue to use it as yet another aid to effective independent learning.

References


Biographical Note

Secondary Experience: Heckmondwike, Doncaster and Bradford (as ITT), British International School in Moscow (Teacher of English, French and Russian)

Other teaching experience: TEFL in Moscow, Language Assistant in Rouen.

ahewitt@heckgrammar.co.uk
### Appendix 1. Language Learning Skills Audit

**Skills necessary to be a successful language learner at AS-Level**

Please highlight on the list below which skills you believe are necessary in order to become successful and independent linguists. I have left blank boxes for any additional skills you believe are missing from the list.

Now highlight 6 skills you believe you should focus on this term.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recording vocab.</td>
<td>Read for gist</td>
</tr>
<tr>
<td>Learning vocab.</td>
<td>Read for detail</td>
</tr>
<tr>
<td>Using a dictionary to check vocab.</td>
<td>Scan reading</td>
</tr>
<tr>
<td>Using a dictionary to check gender</td>
<td>Skim reading</td>
</tr>
<tr>
<td>Using a dictionary to find meaning</td>
<td>Listen for gist</td>
</tr>
<tr>
<td>Managing grammar notes</td>
<td>Listen for detail</td>
</tr>
<tr>
<td>Learning grammar</td>
<td>Adapt a text to express one’s own ideas/opinions</td>
</tr>
<tr>
<td>Practise grammar using interactive resources</td>
<td>Know how to use a verb table</td>
</tr>
<tr>
<td>Prioritise vocab. (i.e. which vocab. will they often use again)</td>
<td>Use texts covered, synthesise the main ideas to inform your writing/speaking</td>
</tr>
<tr>
<td>Check written work for errors</td>
<td>Use a variety of tenses and grammar structures irrespective of what has recently been covered</td>
</tr>
<tr>
<td>Refer back to textbook/text</td>
<td>Use recently-learnt vocabulary as well as standard GCSE vocab.</td>
</tr>
<tr>
<td>Know how to use a dictionary</td>
<td>Speak without using a written script</td>
</tr>
<tr>
<td>Know which dictionaries to use (i.e. not Google translate)</td>
<td>Give reasons for opinions</td>
</tr>
<tr>
<td>Look for patterns in spelling/grammar</td>
<td>Listen <strong>and respond</strong> to a given question</td>
</tr>
<tr>
<td>Good organisational skills (i.e. filing)</td>
<td>Read around the subject</td>
</tr>
<tr>
<td>Being a confident speaker</td>
<td></td>
</tr>
</tbody>
</table>
## Appendix 2. Y12 Language Study Skills Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Do you find learning vocabulary easy?</td>
</tr>
<tr>
<td>2. What method do you have for recording vocabulary?</td>
</tr>
<tr>
<td>3. Do you have a method for learning vocabulary?</td>
</tr>
<tr>
<td>4. When do you focus on learning vocabulary?</td>
</tr>
<tr>
<td>5. Do you learn the entire list, or do you try to split it up? What is your reason for doing it this way?</td>
</tr>
<tr>
<td>6. When do you start learning vocabulary for a test?</td>
</tr>
<tr>
<td>7. When do you record vocabulary?</td>
</tr>
<tr>
<td>8. Do you ever record vocab. from other sources? (e.g. the Foreign Language Assistant, private reading, listening, dictionary, film, TV, radio, holiday)</td>
</tr>
<tr>
<td>9. What do you do with this vocabulary?</td>
</tr>
</tbody>
</table>

## Appendix 3. Tasks

<table>
<thead>
<tr>
<th>Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make a note of <strong>any</strong> vocabulary that is new to you in lessons.</td>
</tr>
<tr>
<td>2. Find (from the FLA, dictionary, reading/listening on the Internet, magazines etc.) at least 10 new items of vocabulary every week. (Use a different colour to record these)</td>
</tr>
<tr>
<td>3. Ensure you always have your vocabulary book/list with you when you see the FLA, and note down any new vocabulary (if there isn’t time to explain it all, just make a note, and check in a dictionary later)</td>
</tr>
<tr>
<td>4. Set aside 10-15 mins. every evening with the specific aim of learning vocabulary. (Mark this in your planners every evening so you don’t forget – it could be a break between other, more time-consuming homework tasks)</td>
</tr>
<tr>
<td>5. Use at least 10 items of vocabulary from your vocabulary book/list in your work this week (spoken, or written). Show with a tick in your vocab. book/list that you have used a word/phrase. <em>If writing an essay, increase your target to 20 new words/phrases</em></td>
</tr>
</tbody>
</table>
### Appendix 4. Information gap vocabulary exchange

**Sports extrêmes**

<table>
<thead>
<tr>
<th>French</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>la sensation forte</td>
<td>thrill</td>
</tr>
<tr>
<td>le saut</td>
<td>jump</td>
</tr>
<tr>
<td>le casque</td>
<td>helmet</td>
</tr>
<tr>
<td>l’accident (m)</td>
<td>accident</td>
</tr>
<tr>
<td>l’acte (m)</td>
<td>act (action)</td>
</tr>
<tr>
<td>la conséquence</td>
<td>consequence</td>
</tr>
<tr>
<td>le sauveteur (de montagne)</td>
<td>(mountain) rescuer</td>
</tr>
<tr>
<td>le blessé</td>
<td>casualty (injured)</td>
</tr>
<tr>
<td>le mort</td>
<td>casualty (dead)</td>
</tr>
<tr>
<td>casse-cou</td>
<td>reckless</td>
</tr>
<tr>
<td>ridicule</td>
<td>ridiculous</td>
</tr>
<tr>
<td>incroyable</td>
<td>unbelievable</td>
</tr>
<tr>
<td>effrayant</td>
<td>frightening</td>
</tr>
<tr>
<td>impressionnant</td>
<td>impressive</td>
</tr>
<tr>
<td>terrifiant</td>
<td>terrifying</td>
</tr>
<tr>
<td>inconscient</td>
<td>reckless</td>
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<tr>
<td>inacceptable</td>
<td>unacceptable</td>
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<tr>
<td>cingle</td>
<td>crazy</td>
</tr>
<tr>
<td>à la recherche de</td>
<td>in search of</td>
</tr>
<tr>
<td>à (mes) risques et perils</td>
<td>at (my) own risk</td>
</tr>
<tr>
<td>oser</td>
<td>to dare</td>
</tr>
<tr>
<td>apprendre à</td>
<td>to learn (how) to</td>
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<tr>
<td>sauter</td>
<td>to jump</td>
</tr>
<tr>
<td>descendre une pente</td>
<td>to go downhill</td>
</tr>
<tr>
<td>se faire mal</td>
<td>to hurt oneself</td>
</tr>
<tr>
<td>se tuer</td>
<td>to kill oneself</td>
</tr>
<tr>
<td>mettre qqn en danger</td>
<td>to put sb at risk</td>
</tr>
<tr>
<td>entrainer (la mort)</td>
<td>to cause (death)</td>
</tr>
<tr>
<td>risquer sa vie</td>
<td>to risk one’s life</td>
</tr>
<tr>
<td>venir au secours de</td>
<td>to go to sb’s help</td>
</tr>
<tr>
<td>Empecher qqn de</td>
<td>to prevent sb from</td>
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Psychology: Towards deeper understanding: Induction into year 12, or year 13? Karen Peach

Abstract

Deep learning is commonly expounded as a more profitable learning activity than rote or surface learning. However, there is an increased concern that ‘teaching to the exam’ is replacing depth of understanding. The aim of this action research project was to explore strategies for encouraging deep learning without compromising, or even perhaps enhancing, attainment in national examinations in Psychology.

Rationale

I am employed as Head of Psychology in a high achieving state selective grammar school. During an Ofsted inspection (February, 2009), it was suggested that students in the first year of the sixth form, experience difficulties in the transition from GSCE to AS level work. In response to this, Heads of all A-level subjects were asked to provide students with induction materials to help bridge perceived gaps in knowledge. For Psychology students, gaps in knowledge are not so much an issue, as for the majority of the students. It is an entirely new subject. That is not to say that knowledge and skilfulness from other subject areas are not of an advantaged to them.

However, on the basis of an internal review process within the department during the year of 2008-9, it was noted that students were failing to extend their studies outside of the classroom environment. Informal observations of students who achieved higher than their GCSE profile revealed that they had a habit of reading around a topic area ahead of lessons rather than in a post-hoc way. As a department we decided that to meet the induction task requirement, that we would
focus more on *how* students study, rather than *what* they study in their independent time.

Additionally, lesson observation, informal and formal teacher discussions revealed that there was a general concern with lack of skilful development in the deployment of the material and a view that student understanding did not extend beyond that which is achieved by rote, surface level understanding. This concern was expressed most vigorously during the month of October 2009, by teachers responsible for the A2 level course in Psychology, when an emergency meeting was called to respond to a general lack of understanding among Year 13 students of foundational concepts, themes and perspectives in psychology.

The focus for this study was therefore:

- To explore both teacher and student expectations of A-level Psychology students study habits independently of the classroom environment
- To explore ways in which student study practices related to the development of their understanding in the subject.

**Literature**

It has been argued that the political pressures and demands for accountability in education have increased the emphasis on students to increase their examination scores (Posner, 2004). Although speaking of US education, anecdotally teachers in the UK complain of ‘teaching to the exams’. There is the assumption that they are compromising their pedagogy for teaching practices that compromise their students’ education. In the US, this has been more formerly stated. For example, Smith and Wesley (2000) have argued that increased results pressure has led to teachers choosing between ‘teaching to the test’ and ‘teaching for understanding’,
the implication being that teaching to the test is not as desirable as teaching for understanding. A proliferation of research into surface vs. deep learning, surface vs. deep understanding, contains the assumption that deep learning and depth of understanding are desirable outcomes. So what is the difference and why is deep learning, deep understanding and teaching for understanding so important?

Marton & Saljo (1976) were the first to distinguish between two different approaches to learning. They gave an academic passage to students to read. They were told they would answer questions about it later. They identified two approaches to the task: surface, where students tried to remember facts and details they thought they would be questioned on later; and deep, where students tried to understand the article as a whole and the intended meaning of the author. The distinction in itself does not imply the superiority of one over the other. It was more that they found a correlation between the two approaches and learning outcomes. Deep approaches, led to deeper understanding of the article.

There are two main strands in conceptualising deep understanding. One is focused on how the mind represents knowledge. In this version, new concepts are synthesised with already established concepts and integrated with it. This is evident in Dewey’s writing (1933), Bruner’s (1960) work on the spiral curriculum and Grotzer (1999). In some cases, this may lead to conceptual changes in the representation of pre-existing knowledge, particularly where misunderstandings are evident. The second strand of research focuses on deep understanding as more of a skill. This is evident in Perkin’s writing on teaching for understanding, (Perkins, 1993), where he describes it as the ability to do new things with a topic, such as explaining, generalising, applying and re-representing the knowledge to integrate with that already held in mind.
This notion of re-representation does not sit well with rote or surface learning where knowledge is regurgitated in the form in which it was first received. One theory of cognitive development, which is consistent with findings of research into implicit and explicit learning processes, is proposed by Annette Karmilloff-Smith (1995). In this model, she proposes that cognitive change is a reiterative process of representational re-description. First concepts, when first acquired, are represented on an implicit level. For example, a child who learns that their pet is a cat, but is unable to say why it is a cat, or they call all cats by their own pet’s name. With increased understanding, this conceptual knowledge become re-represented in the mind and becomes more explicit. They are then able to recognise all instances of cat (although the neighbour’s dog might be mistakenly labelled as a cat for a period of time). When a concept is fully explicit, the knowledge can be integrated conceptually with other domains of knowledge. The child will be able to distinguish between dogs and cats, specific instances of each and perhaps relate the behavioural characteristics of each.

This explanation of cognitive development fits well with many of the characteristics of deep understanding so desired by educationalists. Information is not simply available in the form that it was acquired and expounded merely to pass a test, but is re-worked in some form so that it can be applied later. This is well-phrased by Cerbin (2000):

Learning with understanding is a “sense making” activity. Understanding develops as a person uses what s/he already knows (i.e., prior knowledge) to construct meaning out of new information. Learning with understanding is like working a jigsaw puzzle—the person determines relationships and connections among new ideas and facts and prior knowledge—just as one takes new pieces out of the box and tries to determine their relationship to the puzzle pieces already assembled on the board.

The essence of the statement, places the learner at the heart of the learning process. There are several things to take from it:
a) The learner is not a blank slate, they already have understandings that enable them to make sense of new information.
b) The learner is active in the construction of new knowledge
c) Learning with understanding entails developing conceptual connections and relationships

These principles are very much present in current exponents of teaching for understanding. Learning for understanding is something teachers can promote, but cannot *do* for students:

What is important through the learning process of the students’, is that they really think through all the arguments on their “own” and “construct” further knowledge upon already understood concepts. A good instructor can further prompt the students to construct a mental model, instigate them to reflect on their own thinking, and finally provide examples of how to transfer the knowledge to other situations. The ultimate goal is to promote deep learning in the students’ own minds.” (Zirbel, 2006, p.1)

The notion that good learning is student constructed is not a new phenomena. Constructivist approaches to teaching and learning were initially based on the work of Piaget (1951), Bruner (1990) and Vygotsky (1978) and have influenced a number of approaches to teaching and learning, such as ‘Socratic dialogue’ and ‘Problem-based learning’, to mention two that have are implemented to varying degrees within the social science department within which I work. However, our experience has been that such techniques fall by the wayside when time constraints and examination demands become salient. However, this does beg the question of whether not only the depth of understanding is compromised by such choices, but also examination performance.

For example, the examination board whose specification we follow includes the following assessment objectives:

- select, organise and communicate relevant information in a variety of forms.
- analyse and evaluate scientific knowledge and processes
• apply scientific knowledge and processes to unfamiliar situations including those related to issues
• assess the validity, reliability and credibility of scientific information.
• analyse, interpret, explain and evaluate the methodology, results and impact of their own and others’ experimental and investigative activities in a variety of ways.

These objectives would seem to reflect a need for deep learning and deep understanding. Additionally, much of the research into deep learning has been done in the context of higher education environments. 90% of students in this institution go on to higher education study where deep learning and understanding are particularly advocated. It does seem our priority should be to help students make the transition from surface to deep learning and promote it as a means for A-level attainment and for future adjustment to the higher academic demands of university courses.

In students’ written responses, it is difficult sometimes to assess how deep their understanding is. Use of the objective assessment criteria set by the examination board can often be a tick list of how many times an evaluative or analytic point was made, rather than really unpack if the student was ‘doing’ evaluation. One means for assessing the depth of understanding in written work by students has been developed by Biggs and Collis (1982), who asserted that there is a dominance in education to utilise quantitative methods of assessment, even on open-ended tasks. They devised a taxonomy designed to elicit the depth of understanding evident in student assessment tasks. I feel it would be useful to perhaps not only reconsider teaching practices relating to understanding, but also the assessment tools. Perhaps such a taxonomy would be of value?
I like this jigsaw analogy of the learning process. When using constructivist approaches to teaching and learning, I often find that students question its rationale and the need to justify its use to them. I think there is mileage in formulating a body of actions, a tool kit if you like, that makes use of the jigsaw metaphor, so not only do students deepen their understanding in the subject, but also their understanding of what their teacher is trying to achieve with them.

**Methods**

Initially four teachers of psychology were asked a single, open-ended question to ascertain what teachers of Psychology believe to be induction priorities for new students. On the basis of the responses to this question, a tool was devised to elicit student reflection on their approach to undertaking a given written task. The task followed a fifteen minute induction session into psychology presented in June of 2009. The tool was primarily quantitative, but incorporated the statement of an action plan that yielded qualitative data.

The reflective tool aimed to address some of the teacher priorities as reflected in the exploratory survey. There were three objectives explored on the basis of student responses to this tool:

a) to establish its usefulness as a reflect aid for students in their own learning
b) to examine the relationship between teacher expectations and student practices
c) to examine relationships between student practices and understanding demonstrated in the written task.

To address the perceived need to deepen levels of understanding in Psychology, throughout year 12, in preparation for A2 level work, I utilised content analysis to
assess understanding in two pieces of written work submitted by students using the ‘Solo Taxonomy’, (Biggs, J. and Collis, K. 1982) The first analysed was the written assignment based on the induction task. The second was of a similarly demanding written assignment at the end of autumn term.

A content analysis of teacher commentary on the written work was also conducted, in order to assess a) how feedback influences student learning actions, and b) if feedback was conducive to the encouragement of deeper levels of understanding in the subject.

Following the analysis of the first written assignment and responses to the reflective tool, a qualitative focus group interview was conducted with the target group of students. Several themes for the interview were identified on the basis of student responses evident in the reflective tool. The interview was conducted in the context of a learning scenario in the classroom where they were required to submit a new independent assignment. Students will be presented with their own reflective tool and the teacher-assessed written assignment to which it relates. Additionally, the focus group interview made use of their new assignment for comparison purposes. The rationale for this approach was to replicate as closely as possible a metacognition task that students might ordinarily take part in, if the pedagogical approach is designed to foster independent learning values and strategies.

**Participants**

The population from which the sample was selected was the AS Psychology teaching groups allocated to the researcher as part of their normal working timetable. Three such groups were timetabled, each containing 22, 18 and 11 participants.
Six approaches to student transition into the sixth form at Heckmondwike Grammar School

students respectively. For pragmatic purposes, the smaller of the groups was selected. Being smaller it was felt the teacher would more quickly develop a rapport with the group that would lend itself to her role as a researcher. The group also has a wide spread of abilities as determined from GSCE data. It is mixed gender (2 males) and ethnicity (5 from ethnic minorities). Although small, it is reasonably representative of the cohort of students within the 6th form of the school. As the other two groups were also be experiencing similar interventions, data generated through assignments and test results also served to validate data from the target group. Due to the selective nature of the 6th form of this school, with entry criteria being more demanding than in previous years, the generalisability beyond this particular year group and this institution is highly limited.

Findings

In response to the question, “When year 12s start in September, what do you feel they need for A-level success?” teachers answers revolved around four themes:

1. Whole school provision

Clarity in how to access sources of help: career guidance, mentoring, form tutor, sixth form leadership team; clarity in where to access whole school and departmental information, clear sixth form and departmental behaviour policy.

2. Departmental and Teacher provision:

Clear guidelines through the specification, details of what will happen over the two years, making departmental expectations clear, such as behaviour, sanctions
and rewards, what is expected outside of the classroom, access to model answers and clarity in criteria needed to be met for grade achievement.

3. **Student learning attributes:**

Listening, ability to formulate a stylishly written argument, or to write scientifically, ability to recall facts, willingness to learn, willingness to work independently, willingness to work hard, awareness that learning is not always easy, not being afraid to read, not ready to accept information at face value.

4. **Student learning skills:**

Ability to extract pertinent information from text, ability to find relevant books and information from selected books, ability to search the internet, intranet and the VLE appropriately, ability to reformulate text in own words, ability to synthesise and think critically about the information, ability to organise and structure thoughts coherently.

Whilst all teachers emphasised learning independent of the classroom, there was little offered in what form this should take, it was expressed as: ‘should be working outside of lesson time’, ‘ability to work independently,’ ‘knowledge of what we expect of two hours of your free time outside of homework given tasks’. On the basis of this, I became interested in how students would first approach an independent assignment and how much teacher feedback encouraged the independent work they expected of students.
Study Skills Check Sheet:

On the basis of the teacher interview, I devised a checklist for students to reflect on their own approach to the assignment. First in terms of the sources of information they used, secondly in terms of how they used their sources, thirdly in terms of the structure and quality of the written work itself and finally the inclusion of both an independent learning action plan and action planning relating to the structuring of future written work.

Table 1.1 shows the number of ticks (out of 11 total) that students gave in response to the stimulus item. The most common practice was to make notes in words, rearrange these and plan the essay. The approach does suggest that students are trying to make sense and be clear in their understanding of the material in order to approach the set task. However, an interview at a later date revealed that the notes that they were making were based on those drawn from lessons rather than other sources. This is confirmed in that lesson notes were the most common source stated as used, but, also included in the checklist was internet search engines as equally a most favoured source. Qualitative responses also indicated that of these, Wikipedia was the most favoured of websites, but also that the information they stated that was derived from this was irrelevant to the essay question concerned, indicating a need for them to learn how to make more effective use of sources and a need for student development of means for assessing the relevance of the material they read. What is interesting is that whilst 8 used internet searches as a source, only 3 followed teacher recommended sites.

By the end of the assignment and on teacher feedback, it became evident the students themselves were becoming more aware of the need for wider reading and preparation for their assignments. Teacher feedback also explicitly encouraged
this. Also notable was that students were struggling with the new psychological terminology, and had by the end of the assignment progressed in their understanding that a new writing style was required in this new level of work and a realisation that their writing now needs to be evidenced based and detailed. A comment from their teacher at this time supports the value of the exercise: “This induction check sheet really worked!” (October, 2009)

Further elaboration revealed that it was the extent of with which the students had engaged with the learning tasks that followed and increased level of apparent preparation that led to the comment.

One of the things looked for at this stage was the depth of understanding evident in student’s work and if it was related in any way to students’ expressed approaches to their work. The question that students were given was:

Why did people in the group change their second private guess to something that was closer to the group guess? In other word, why did they conform?

The question was a response to a 15 minute conformity experiment. On analysing student answers, using the SOLO taxonomy my main feeling was that students were generally ‘classifying’ the conformity response as an instance of a psychological concept they had learned, so were often working at a uni-structural level with some occasional explanation of ‘why’ the conformity occurred, suggesting the beginnings of more multi-structural understanding. When a theoretic description was given to explain the causes of the evident conformity, the work was classified as a multi-structural response. It was in only one assignment, that the student’s understanding was considered to be relational. In this case, there were some relational connections made between theory, evidence and the observed phenomena itself.
Questions arising from this data:

Whilst students claimed that they would do more research, I became concerned with what this would mean for them in practice, and also how many of them did follow up their action plan. There was a heavy emphasis on a need to develop their points and descriptions in a more detailed manner. I was interested in what efforts they made to address this and more importantly, how they understood this requirement. Two students also included in their action plan ‘develop deeper understanding’. As this is something I was becoming increasingly interested in due to problems experienced by year 13 students who lacked a holistic understanding of psychological concept, theories and principles, I was keen to learn the students’ personal meaning of this.

Recommendations.

On basis of teacher interview:

Sixth form handbook for students
Subject handbooks for students

On basis of analysis of the pupils’ first assignment:

Study skills check sheet to be revised to include only good practice
Use of internet for more relevant searches
Teacher and whole 6th form guidance,
Innovative ways to encourage reading: Chunked reading (jigsaw reading), just read, love reading, promote and actively talk about any kind of reading, ‘starter debates’. [EDR triangulation data]

References

New York: Academic Press
Marton, F. and Säljö, R. (1976) “— On Qualitative Differences in Learning: Outcome as a function of the learner’s conception of the task” British Journal of Educational Psychology, 46, 115-27

**Biographical Note**

Karen teaches Psychology, Sociology & Citizenship and is also involved in the leadership and management of Politics, General Studies and Critical Thinking. She is particularly interested in how implicit learning can be fostered in the classroom in such a way that we can increase opportunity for insight and the transferability of skilful cognition in one domain across to other domains. Karen has taught for 11 years in Heckmondwike Grammar School, 8 as Head of Department.

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Six approaches to student transition into the sixth form at Heckmondwike Grammar School

Tables

Table 1.1 Number of students (total 11) who stated they engaged in the following preparatory practices for their first psychology assignment and also indicated they would improve upon their preparation by utilising this more.

<table>
<thead>
<tr>
<th>Preparation tasks</th>
<th>What did I do?</th>
<th>New Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saved web pages</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Saved extracts from the web</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Copied extracts from text</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Made notes in own words</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Rearranged notes for essay</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Cut and paste into essay</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Checked the meaning of words</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Reworded source materials</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Wrote a rough plan</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Re-read and correct</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Used spelling/grammar tool</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Checked writing was logical</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Table 1.2: Number of students (total 11) who stated they used the following information sources

<table>
<thead>
<tr>
<th>Sources used</th>
<th>What did I do?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library books</td>
<td>2</td>
</tr>
<tr>
<td>Library journals/other</td>
<td>2</td>
</tr>
<tr>
<td>Department books/other</td>
<td>6</td>
</tr>
<tr>
<td>Asked a teacher</td>
<td>4</td>
</tr>
<tr>
<td>Teacher suggested websites</td>
<td>3</td>
</tr>
<tr>
<td>Internet Search engine</td>
<td>8</td>
</tr>
<tr>
<td>Internet Gateway</td>
<td>1</td>
</tr>
<tr>
<td>Newspapers</td>
<td>0</td>
</tr>
<tr>
<td>Lesson Notes</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 1.3: Number of students (total 11) who included preparation criteria from the study skills check sheet as part of their action plan

<table>
<thead>
<tr>
<th>Check sheet driven targets</th>
<th>No of students who included this target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar/spell check</td>
<td>2</td>
</tr>
<tr>
<td>Research (research well/do more research/read more)</td>
<td>7</td>
</tr>
<tr>
<td>Plan structure of the essay</td>
<td>2</td>
</tr>
<tr>
<td>Check the meaning of words</td>
<td>2</td>
</tr>
<tr>
<td>Re-read own work</td>
<td>3</td>
</tr>
</tbody>
</table>

Table 1.4: Teacher feedback on students’ first assignment

<table>
<thead>
<tr>
<th>Advice given</th>
<th>Number of times comment made across 11 students assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Link point to lesson work</td>
<td>1</td>
</tr>
<tr>
<td>Link point to a specific study/theory</td>
<td>14</td>
</tr>
<tr>
<td>Suggestion of appropriate terminology</td>
<td>23</td>
</tr>
<tr>
<td>More development/detail needed</td>
<td>20</td>
</tr>
<tr>
<td>Spelling/grammar/inappropriate words/lack of clarity in writing style</td>
<td>10</td>
</tr>
<tr>
<td>Need to read around the question (students generally praised for this)</td>
<td>4</td>
</tr>
<tr>
<td>Provide source of information</td>
<td>1</td>
</tr>
<tr>
<td>Need to address the question more specifically</td>
<td>1</td>
</tr>
<tr>
<td>Avoid repetition</td>
<td>2</td>
</tr>
<tr>
<td>Check work</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 1.5: Number of students (total 11) who included teacher feedback as part of their action plan

<table>
<thead>
<tr>
<th>Teacher feedback driven targets</th>
<th>No. Of students who included this target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop points in more detail</td>
<td>4</td>
</tr>
<tr>
<td>Link points to relevant studies</td>
<td>5</td>
</tr>
<tr>
<td>Describe in more detail</td>
<td>5</td>
</tr>
<tr>
<td>Use more appropriate writing style</td>
<td>2</td>
</tr>
<tr>
<td>Avoid repetition</td>
<td>1</td>
</tr>
<tr>
<td>Increase the range of evidence given</td>
<td>2</td>
</tr>
</tbody>
</table>
Chemistry: Peer tutoring: Gareth Stott

Context

I am head of chemistry and in this role I am interested in supporting students who are under-achieving in this subject although I do not teach the pupils involved as tutors and tutees, which may be a factor to bear in mind. From experience, my feelings were that the changes to the specifications at GCSE in 2008 made the move from GCSE to AS more difficult, and that an increasing number of students were coming into the school with gaps in their knowledge. We have a number of students every year in Year 12 who fail to achieve a pass grade in their AS Chemistry examination.

In 2009 – 10 there were 125 students taking AS Chemistry, from a base of 50 when I first came to the school five years ago. The forecast is that this number will continue to increase in the near future, and it is likely that the number of students who need extra support will also continue to increase. At the beginning of this academic year an internal test identified approximately 20 students in the at risk category.

I already use a number of strategies to address issues of this nature, including revision sessions, and informal one to one sessions between staff and pupils, materials put onto Moodle (the virtual learning environment), and pre-course tasks. The next logical step was to introduce peer tutoring as reading (Coe et al, 1999) suggested that this had been successful in improving retention in higher education. My intention was to explore the use of peer tutoring in the transition from Year 11 to Year 12 in Chemistry.
Aims

The main aim of the project was to support students in the transition from GCSE Chemistry to AS using peer tutoring. The use of peer tutoring as a support mechanism during the initial period of the tutees’ course should enable students to engage with the course and help them integrate into the Chemistry department more easily. It would also have the advantage of reducing the immediate demands on staff time within the department.

Literature

The work of Coe et al (1999) cited previously, described a project to establish ‘Peer Assisted Study Sessions’ (PASS) at Manchester University and UMIST in order to address issues of student retention on undergraduate Chemistry programmes. The main aims were to:

- “provide effective support for the first year programme and encourage the active participation of the majority of first year students;
- benefit PASS leaders; [tutors recruited from upper year cohorts]
- not demand excessive staff time” (p72)

The research suggested that the learning of the active participants in the PASS sessions was improved, leading to increased retention in the longer term. The PASS leaders (tutors) were also positive about the impact of their participation in the scheme.

Research undertaken by Medcalf et al (2004) at the University of Auckland states that peer tutoring “is seen by many as one of the most effective, enjoyable
and practical ways in which to deliver individual learning” (p157) and that “some studies have suggested that peer tutoring may promote greater academic gains than teacher instruction. This may be because students feel comfortable in peer interactions, allowing for a more easy development of cognitive growth and skills” (p159).

I have taken the ideas of Medcalf et al (2004) and my own experience of peer tutoring during my undergraduate studies at the University of Birmingham to develop a similar support program for students embarking on their A-Level studies.

Implementation

Internal assessment data (test marks after 6 weeks) was used to identify the at risk students in Year 12. I then asked for volunteers in Year 12 to act as tutors - these were often the most able students. I then selected the A and B grade students to continue as tutors. I initially considered asking Year 13’s but the largest response was from the year 12 group. At this stage there were 17 AS students interested in being tutors, only three A2 students. It is difficult to identify the reasons for this response, but it may be related to communication issues.

I had 3 lunch time sessions with the tutees to elucidate what they considered to be barriers to learning (Appendix 1: Concept Map). I explored the tutors’ motivation for wishing to become involved in peer tutoring at a separate meeting (Appendix 2: Question and written response). The meetings with tutees identified common issues (Appendix 3: Chemistry Revision), such as re-arranging equations, specific areas of Chemistry, basic formulas etc., and I addressed some of these issues with the tutees through additional subject input at lunch times.
Unfortunately, exceptional factors then delayed bringing the tutees and tutors together for about two months, which appeared to have a detrimental effect upon tutee attendance. Tutors were often pro-active and their attendance was invariably excellent.

At the beginning of February 2010, tutees and tutors met for 6 fortnightly meetings – with materials (sample exam questions) linked to subject matter they were dealing with in their classes. In the alternate weeks I had meetings with the tutors to ensure they were confident in dealing with the materials they were to use in the tutoring sessions. The main issue in these sessions appeared to be providing tutors with a degree of reassurance and increased confidence about their knowledge of the subject matter and some their own development of subject knowledge. Tutors and tutees all had the materials for 3 to 4 days in advance of the sessions. During the sessions I took a limited role, providing additional subject-related support where necessary.

Analysis

During the sessions, I made observations about participant attendance and the relationships and interactions between the tutors and tutees. In addition, as part of the evaluation of the project each participant was given a questionnaire (Appendix 4) to complete at the end of the final session (9 tutors, 5 tutees). Common themes were identified from these questionnaire responses.

Findings

From my observations the project appears to have been a positive experience for both participating tutors and tutees. Interactions during the sessions between tutors and tutees were positive – tutees were clearly willing to talk about
difficulties with the materials and the tutor/tutee pairs were willing to seek my additional input where subject-specific issues could not be resolved.

Whilst tutor attendance was universally good (approaching 100%) at each of the six-tutor/tutee sessions, tutee attendance varied considerably over the course of the project. I do not teach the students involved and communication of meetings via form tutors was an initial issue – as a result, only 8 out of the 16 tutees attended the first tutee only meeting. All 16 tutees attended the first tutor/tutee session, but by the final session this had gradually decreased to only 5, resulting in an obvious degree of frustration on the part of some of the tutors, although they continued to participate in other tutor/tutee groups. The tutor/tutee relationships that seemed to be the most sustained throughout the project were those where there was a pre-existing friendship.

Feedback from the tutee survey responses suggests that:

- all tutees felt the sessions had been of benefit and would improve; their performance and achievement in Chemistry;
- the sessions helped revise and consolidate key areas of chemistry;
- they liked the one to one nature of the peer tutoring sessions;
- they liked the fact that the pace of the sessions was tailored to their needs.

Feedback from the tutor survey responses suggests that:

- all tutors felt they had benefitted from the sessions and thought the sessions would improve their performance in Chemistry;
- they ensured they regularly reviewed their work and consolidated their knowledge of chemistry.
they liked interacting and helping students from their own peer group and also the relaxed nature of the sessions

Where we go from here.

Participation in the project raised a number of questions for consideration-

- Were there any additional skills required by the tutors? Would they have benefitted from additional training?
- Was there anything else that could have been done to support the tutor/tutee pairs, or the individual members of those pairs?
- Why was attendance of the tutees variable?

It would have been useful to follow up attendance issues with some of the tutees who did not come to sessions to determine their reasons for not attending. The competing demands on both staff and student time make running sessions difficult for all involved, particularly having to run sessions at lunchtime when a break is often needed. If peer-tutoring programmes like this were to be run successfully then they would certainly benefit from a time allocation in the school timetable.

References


Biographical Note

Gareth has been teaching for almost 14 years, having taught in comprehensive schools near Chesterfield, and in York. He has been head of Chemistry for five years at Heckmondwike. His professional interests are curriculum development,
and timetabling and he is inspired by a love of Science, practical chemistry and science and society. He has also been actively involved in Duke of Edinburgh’s Award and school and league table tennis.

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Appendix 1 – Concept mapping activity

Appendix 2 – Tutors motivations for participation in the project

Students were asked why they wanted to become involved in the peer-tutoring project. Their responses included-

- Consolidation of their own subject knowledge and structuring their own revision throughout the course
- Inclusion of tutoring on personal statement or curriculum vitae to aid university application
- Use the time towards Duke of Edinburgh’s Award service
- Want to help other students with their work
- Want experience of teaching as they are considering this as a future career
Appendix 3 – Common barriers to learning in chemistry

Tutees gave the following responses to the barriers to learning in Chemistry concept mapping activity-

- Weakness in basic areas of mathematics
- Lack of exposure to practical work in previous schools
- Lack of understanding in key fundamental areas of chemistry e.g. balancing equations
- Unable to understand and interpret A-level style questions

Appendix 4 – Project evaluation

Written responses to the following questions were obtained-

- Are you a tutor or tutee?
- How many sessions have you attended?
- Are there any reasons why you have not attended sessions?
- What have you got out of attending the sessions?
- Do you think the sessions will improve your performance and achievement in AS Chemistry?
- What is the best thing about the sessions?
- What is the worst thing about the sessions?

What would you like to improve about the sessions?

- Would anything else have helped you to perform your role in the sessions?
- What advice would you give to other people thinking of being a tutor or tutee?
Chemistry: Developing a learning journal with AS level Chemistry students: Stephen Gregson

Context
The focus of this action research project is to investigate whether the use of a learning journal would be of benefit in enhancing student reflection to learn more about how and what they learn. In effect a reflection on learning rather than reflection in learning. Recent initiatives in schools namely: Personal Learning and Thinking Skills (PLTS); Assessment for Learning (AfL); Learning to Learn and Building Learning Power have focused attention on the attitudes and dispositions necessary for effective student learning.

Common to all these approaches is encouraging students to reflect on their learning as an integral part of the learning process. It therefore attempts to situate student learning at the centre of their experience to empower and motivate them to take greater responsibility for their own learning. Teachers are increasingly being invited to adopt teaching and learning strategies that are specifically designed to encourage students to critically reflect on their learning. King (1995) argues that students need to learn how to think critically by continually questioning everything around them.

This is a development from the classical Socratic approach to learning through questioning and feedback. In recent times it builds on the work of Dewey (1933) who viewed reflection as an acute observer who interpreted observations from an educational perspective, whilst Habermas (1971) saw the role of reflection as a tool in the development of different forms of knowledge. Schon (1983) in his work instigated the term ‘reflective practitioner’ and Kolb (1984)
approached the issue from the traditions of experiential learning and identified reflection as a stage of learning as part of his experiential learning cycle, whilst Boud (1985) identified the key to reflection as turning experience into learning. Schon and Kolb (1984) have arguably been most influential in having their ideas of reflective learning finding resonance in education.

In essence developing a student’s capacity for reflective learning is part of developing their ability to learn how to learn. Reflection is the process of turning experience into learning and that learning is emergent rather than planned. In order to interrogate some past experience searching questions will need to be posed and by posing these searching questions we are engaging in a process of reflective thinking. Therefore there is a process of reflection or reflective thinking, as opposed to the content of that thinking which is largely subjective. We may pose the question of whether we should engage students in reflective thinking. In other words encourage the development of a repertoire of reflective questions and allow the students to practice them. In essence moving students from surface learning to the deep learning associated with reflective thinking which may enable students to move from passive to active learners.

As teachers we are presented with the challenge of encouraging and enabling students to engage in the learning process. The key question is ‘How do we do it?’ and ‘How do we enable them to assume greater responsibility for their own learning?’ - an approach to enabling them to know how they learn as well as what they learn.
Literature

Interest has grown in recent years in what is referred to as the Learning-Centred Paradigm (McManus 2001), because it places students at the centre of their experience by empowering and motivating them to assume responsibility for their own learning. It also encourages staff to adopt teaching and learning strategies that are designed to allow students to see themselves as active thinkers and problem solvers. As Clinchy (1995, p100) remarked in conventional teaching-learning situations we pressure students to ‘defend their knowledge rather than exhibit their thinking’. King (1995) argues that students need to learn how to think critically by continually questioning everything around them.

If the challenge is to encourage students to actively engage in the learning process, a key question is ‘How do we do it?’ How do we adopt an approach to enable students to assume greater responsibility for how they learn as well as what they learn?

It has been claimed that learning journals offer many benefits to both teacher and students. It has been welcomed as a learning tool (Yinger 1985) and of actively engaging students in learning (Connor-Greene, 2000). Among its claims, it is argued that a learning journal offers a way of improving learning (Cantrell et al, 2000), a way of improving knowledge and learning (Dart et al, 1998), a way of developing reflective practice (Morrison, 1996), and a help to developing the course of one’s own learning (Carroll, 1994).

Other writers have emphasised the ways in which a learning journal makes students more aware not only of what they learn, but also how they learn (Voss 1988). Dart (1998) found that students’ insights become more profound as the
journals progressed. In addition the nature and quality of thinking and reflection, as well as their influence on practice, also developed.

Intrigued by the claims that were being made about the benefits of learning journals in enhancing student engagement and learning, I decided to implement the use of the learning journal with my AS level Chemistry students. This was further confirmed after reading Moon (1999) who provided detailed information on the nature and range of uses of learning journals, together with the depth and quality of reflection as well as the assessment of learning journals and reflective writing.

**Implementation**

The action research project was carried out with one group of Chemistry AS students. The group comprised 18 students (8 boys and 10 girls) the majority of whom had entered the Sixth Form from neighbouring schools (4 boys, 8 girls), whilst the remainder had continued internally. The spread of ability, based on prior attainment at GCSE, reflected that in the Sixth Form generally.

An initial questionnaire comprising structured questions, based on a 5-point Likert scale and an open ended question, was given to the students (Appendix 1) to illicit student responses to reflection and their reflective practices, their understanding of learning journals, together with a self assessment with regard to their perceived ability in certain chemistry topics.

Following this questionnaire, and towards the end of the Autumn Term when I felt that a relationship of trust and respect had been established, students were invited to keep a journal to reflect on their learning experiences. Entries were to be written at the end of each lesson and to include reflections on the lesson and their understanding of the subject material. Students were asked to
review their entries on a weekly basis to see how their understanding and reflections changed throughout the course. The students were also asked not to change or amend entries once they had been written. It was important to note their initial thoughts as well as their reflections as time elapsed.

Anonymity was attempted as the entry was made online, with each student devising their own coded folder, so that students could not be identified by their handwriting to allow free expression about their feelings and thoughts. Issues arose as entry after the lesson had to be made on paper and then transposed online, as there were no computers in the teaching room. Consequently students forgot to make their entries and I decided to produce a learning journal in which students could directly write their initial thoughts and feelings into the journal at the end of the lesson and on a weekly basis, which worked much better. However, I was conscious that anonymity would be lost with a potential impact on their true feelings and thoughts being recorded as they could now be identified.

Students were given guidelines about what a learning journal should include and how they might set about writing it. They were asked to write an entry in the journal after each lesson and at least every week in a style and format of their choice. To encourage participation the journals were collected in at regular intervals for constructive feedback and not assessment. No template structure was suggested for the journals, and students made their own decisions within the guidelines given.

Towards the end of the Spring term I conducted a semi-structured interview with the students in groups of three to elicit their views on the process of using a learning journal as a means of reflecting on their learning experiences. The groups for the interview were allocated as ‘internal’ and ‘external’ students with mixed
genders, which reflected the working groups and seating patterns that had occurred during the lessons.

**Analysis/Evaluation**

The initial questionnaire revealed that writing a learning journal was a new experience for all the students with the common response being ‘I don’t know what one is’, although students attempted to define what one might be with ‘a documentation in which progress of my academic learning is recorded’ and ‘something you use to reflect over what you have learnt’ being examples. It was apparent that students had no previous experience of writing a learning journal, and most were unsure what it was or how to set about writing one. One interesting feature of the questionnaire was the students’ response to feedback and being reflective in their learning. Many indicated that they reacted to feedback by ‘doing more revision’ or ‘going over their notes’, essentially an understanding of what they have to learn rather than a self awareness of how they learn.

No template structure was suggested for the learning journal, and students made their own decisions from the guideline sheet provided. Reassuring students that the journal would be anonymous was an attempt to ensure that their personal thoughts and feelings would be recorded in the journal. However the online mechanism for the anonymous student entries was problematical in that there were no computers in the classroom for the students to record their initial reflections. Hence they noted them down on paper to transcribe later but often forgot, and the response rate was very poor (3 out of 18). In addition, even though the journals were anonymous, with the students devising their own coded online folder, I had access to their entries to provide constructive feedback to them on
their learning journal and in time may have identified the individual students by the style and format of their entries. The students may also perceive that ‘constructive feedback’ was a form of assessment and, although I had assured the students that they would not be assessed or any marks go towards their grades, there is the possibility that this would influence the extent to which they recorded their reflections in the journal. Also as they were not being assessed, and their participation in the project was voluntary, the poor response rate may also be due to students simply not putting the amount of time and energy to the project without the assessment incentive. If the learning journal was to be assessed the students would need to be notified in advance what criteria would be used to evaluate the journals and hence potentially losing the open response and opportunity for personal thoughts and feelings being a part of their reflections.

As the online response rate was poor I decided to produce a hard copy of the learning journal with a guidance sheet and sections for entries after each lesson, as well as weekly and monthly reflections. Therefore anonymity was lost and the students were aware that I would be reading their comments and hence this could potentially affect what they wrote and how much this was a true account of their thoughts and feelings. However, it was the format of the learning journal and the extent of student participation that was initially being addressed by the move to a hard copy rather than an online version.

It was also evident that time at the end of the lesson needed to be given for students to make their entries. In addition collecting in the journals at regular intervals to provide constructive feedback on their entries not only supported the students but also encouraged their active participation in recording their reflections. This increased the number of students participating (some perhaps
rather grudgingly) and the student entries concentrated on what they had done, their reaction to the lesson and level of understanding of the topic. In some cases the students were rather candid about the lesson or their understanding of a particular topic. One student commented ‘I would like it if the work was explained slower so I could understand it more’ whilst another wrote ‘I feel that I understand the simple things on the equation side but the harder things I don’t know what to do’. This departmental quality assurance dimension from the learning journal was unexpected and an interesting aspect of this project.

At times it was difficult to provide the students with time at the end of the lesson for their entries, although some students made them later, and there was no student entry to the weekly and monthly reflections. In future this could perhaps be incorporated in a more general self-reflection exercise as part of the homework/pastoral structure/tutorial time in the school.

The interviews with the students provided interesting feedback on their engagement with the process and there was no difference in the comments from internal or external students. They had all shown initial apprehension and some tolerated having to do it. However, for others they thought it had been a useful exercise and had made them think about their learning more than previously. Having to hand in the journal for feedback had encouraged greater participation, although as it was not anonymous this may well have compromised what they wrote in the journal or said at the interview.

Generally there were more positive aspects than negative ones with the comment ‘a worthwhile exercise’ encouraging. Clearly on such a small scale we cannot draw any firm conclusions. However as a pilot study it has informed a way forward in terms of how the learning journal could be introduced to students; how
we can ‘encourage’ greater participation over a longer period; how feedback can be given to the students so that we can explore in greater detail the possible potential of the learning journal as a reflective tool with A Level students.

Findings

Most of the students found the idea of writing a learning journal and keeping it up to date rather daunting. They had no previous experience of writing a journal, and all the students were very unsure of what it was or how to set about writing one. Early entries were rather tentative and discussions with the group about learning journals and the provision of a guidance sheet helped to alleviate initial fears and anxieties.

Attempts at online entries to try and ensure anonymity were not successful with the process rather cumbersome and technically impractical in that the statements had to be made in a word document which students then had to transfer to the school’s computer shared departmental area.

The written journal was more user friendly, although the student anonymity aspect was lost. This may have detracted from the personal or emotional statements the students made but they were still open in their comments both about the lessons and their understanding of the material covered. However if the journal is being ‘judged’ by being assessed then we may be uncertain that the student is being ‘honest’ and ‘personal’ in their statements. Constructive feedback on the student’s reflective engagement rather than any graded assessment of the journal was well received by the students. It would appear that the students have a
possible distinction between feedback and a graded assessment that is perceived as judgemental.

The students articulated positive aspects, particularly during the interviews. Students stated that it made them think more clearly than normal about what they were learning and helped them reflect on their learning. They all felt that if the process was to be an integral part of the course then the journal had to be seen and commented upon regularly in order to encourage participation. One surprising aspect was the insight it provided into the student’s view of the lessons and teaching and learning material, as well as the student’s understanding of the topic or concepts delivered in the lesson.

There were some negative aspects expressed by the students. The most common were a lack of sustained commitment to making the entries, uncertainty about what to write and doubts about the impact on their learning. It was also not a compulsory part of the course and this led some students to be reluctant to fully participate in making entries in their learning journal.

Although this was a very small project it did reveal that the use of a learning journal could have value for some students in helping them to be more reflective in their learning. It also has the potential to encourage them to take responsibility for their learning. However, students will need to be guided and supported through the process if it is to have an impact on helping students take greater responsibility for how they learn rather than for just what they learn.

Future

‘If I knew then what I know now’ is often said in hindsight. In this case it is rather apt, as I would undertake the project differently now, by utilising the knowledge
and understanding I have gained, if I was just starting with a group of sixth form students.

Learning journals are an unfamiliar feature of secondary education and hence it is important to recognise that students need guiding through the process of reflecting not just on what they learn but more importantly on how they learn - essentially learning by learning. The journal also helps to reveal the ways in which student’s learn which would otherwise perhaps lay hidden otherwise. In addition one of the important added dimensions of this reflective process by the students is the feedback staff receive on how the lesson structure, format and activities encourage and deepen learning, together with the level of student understanding (or misunderstanding) of specific topics or concepts. This aspect of quality assurance was an unexpected outcome from this project.

In future I will produce a student learning journal that has the following components:

- Guidance sheet on how to use the journal and reflective learning
- Criteria for constructive feedback which would centre on:
  1. Presentation
  2. Format and language
  3. Content - blend of description and reflections
  4. Reflections
  5. Extended reading/literature around the subject and reflections
  6. Overall comment and suggestions to consider for future entries
- Pages for entries after the lesson, weekly and monthly reflections, as well as spaces for constructive feedback
• Pages to record assessment marks on homework/end of unit tests/examinations as well as reflections on the performance and actions to be taken following production of the results and the return of the scripts.

Time at the end of each lesson would be provided for reflection entries, together with setting a weekly homework on entering reflections and preparation for a monthly review. Regular collection of the journals will enable feedback to be given and help encourage student participation in completing the journal. Monthly reviews of the journal and the provision of written reflections on their approach and entries may encourage the students to think more clearly about the process of learning, not simply the topics they are studying.

The limited evidence in this project suggests that learning journals can help students in the learning process, although not all students will view the experience in a totally positive light. However active engagement in the process has a contribution to make in encouraging students to take more responsibility for their learning and become more active learners.

References

Dewey, J. (1933) How We Think, Boston, MA: D.C. Heath and Co
Habermas, J. (1971) Knowledge and Human Interests, London: Heinemann

**Biographical Note**

Stephen began teaching after a career in postdoctoral research in chemistry. He previously taught at an 11-18 Comprehensive school in rural Oxfordshire, and an HMC 11-18 independent school. He has also taught extensively on F.A football coaching courses. Stephen’s subject specialism is Chemistry with a passion and enthusiasm for the subject and he has managerial responsibility for post-16 education.

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Appendix 1

**Learning Journal Interviews**

- Divided the teaching group into 3 groups
  1. External girls
  2. External boys
  3. Internal
- Semi structured interview. Essentially a number of questions and open question at the end
  1. *Whilst at school had any staff talked to you about reflecting on your learning?*
  Universal response with all the groups was that no member of staff had discussed reflecting on their learning or shown them how to do it
  2. *In what ways do you think you could review how well you understand the subject?*
  Go over my notes
  Attempt summary questions
  Break down the specification into sections and complete a checklist
  Try to work it out for yourself
  Discuss with people you think understands
  Look at homework marks and highlight what was wrong
  Revise more
  3. *In what ways can your teachers help you to review how well you understand the subject?*
  Have a review of the last lesson
  Have more active learning in lessons
  Some teachers give out sheets with examples the answers although I have no idea how to get the answers
  Break down the explanation not just state it
  Outline what the objectives for learning are at the start of the lesson
  Give time at the end of lesson to review what we have learned
  Give homework that makes us look back over our notes to previous topics
  Provide support sessions if you do not understand
  4. *What did you think of the learning journal?*
  Good idea but if I didn’t add entries in the lesson I would forget to do it later
  I was a bit wary at the start but found it helpful as I used it more
  Helped me to look back over my work
  Didn’t really use it that much
  Would have liked more structure on how to complete the journal
  5. *Considering your experience with a learning journal how do you think the approach to reflection could be modified?*
  Have a checklist of questions to follow to reflect on learning
  Break down the specifications into sections and use a self assessment scale on how well you understand
  Have targets for improvement
  Review homework marks
  Review every two weeks
  Have activities for homework to apply your knowledge
  Make entries on the day of the lesson
Have a structure on how to do it

6. **Any other thoughts?**

Not a great deal at this stage so I asked about whether there could be ways in the lesson that could help with reflection.

Outlining success criteria at the start of the lesson to measure yourself against

Have a plenary review at the end to reflect on your progress

Have a variety of lesson activities to self/peer assess your progress/understanding

Relate your learning to what you know already

Ownership of the log

Say it and write it helps refine thoughts

Has to have value in itself rather than mechanistic

Has to have meaning