Research project (Report Writing) 2006-07

Developing resources for report writing in Higher Education: an action research approach

"One of the most problematic study-skills areas in which to work out how and what to advise students to do to develop their approaches." (*Race 2001*)[1]

Introduction

This paper is an early progress report on research into best-practice study resources to support the development of effective report writing practices in Higher Education students.

The Study Advice team at the University of Reading are responsible for the learning area of Report Writing within the LearnHigher CETL. LearnHigher's objectives are to use practice led enquiry to produce: a sound evidence base to ground learning development practices; a bank of best practice resources, which relate directly to student needs. The project described here relates specifically to the second aim, but inevitably also has relevance for the first. It was grounded in our everyday experiences as University Study Advisers, advising students on an individual basis, and developing resources such as paper and online study guides, lectures and workshops.

In our research, we adopted an 'action research' methodology. In one of the earliest mentions of 'action research', the social psychologist Kurt Lewin described the process as forming "a spiral of steps, each of which is composed of a circle of planning, action and fact-finding about the result of the action." [2] Action research is conducted by practitioners working from within a field of operations, who observe, evaluate and reflect upon their own practices in order to improve those practices.

This is in opposition to more traditional approaches to social science research which send an academic researcher in to observe and report back on a situation from an external viewpoint.

When developing new resources on study practices, areas that need addressing include:

- **content**, e.g. what kind of advice has proved in practice to be effective;

- **provision**, e.g. what kind of advice is currently unavailable or available but could be improved upon;

- **demand**, e.g. what do students/academics feel is needed;

- **access**, e.g. how to maximise the utility of resources by considering issues like dissemination and preferred formats.

Information about current practice was collated from two sources: anecdotal evidence was gained by speaking to students about their needs and the success or otherwise of suggested strategies; more structured feedback was collected on existing resources on report writing. Following reflection on these data, new resources were developed, which were in turn assessed. Through this 'action research' approach, an iterative cycle of practice, evaluation, reflection and development of best-practice resources has been established which we anticipate playing a central role during and after the life of the CETL. At the same time, the process models the Self-Regulated Learning style we hope to foster in our students. [3]

Supporting good report writing practices in university students

Report writing is a required practice in a diverse range of academic disciplines. It is possible to identify core features which characterise reports as a genre of academic writing. For instance, reports are usually:

- Written to a brief;

- Written for a specific audience;

- Formally structured;

- Involve changes of writing style for different sections;

- Have information as their purpose.

However individual instances vary widely according to discipline, audience and brief. This diversity makes it difficult to produce effective generic resources.

A close consideration of our experiences as learning developers providing support for report writing practices at the University of Reading suggested that there were areas where students frequently sought advice. These included:

- The differences between essays and reports;

- What should be included in each section;

- Writing in different styles for specific sections;

- How and when to reference;

- Improving academic writing and proof-reading.

In addition to individual advice sessions, generic resources to support report writing included a Study Guide to Scientific Report Writing, and a workshop open to all students on the same topic. There were no generic resources available for writers of reports based in the Social Sciences. However, the Library held several books which discussed report writing in particular disciplines.

There is evidence to suggest that advice on study practices is more effective when embedded in subject teaching, rather than delivered as an add-on. [4] This is clearly desirable when teaching report writing, because of the specificity of reports in particular disciplines. However, there is no systematic approach to teaching report writing at Reading. While some departments provide explicit advice (in lectures, in their course handbook or on the local VLE (Blackboard)), in others (around half), students are expected to tackle the writing without much initial guidance and develop their abilities on the basis of feedback received from tutors after their first attempt at the task.

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Original resources and feedback

Working from our current practices, student opinion was canvassed on the following existing resources:

- Scientific Report Writing: detailed Study Guide in A4 booklet format;

- Scientific Report Writing: the same text presented as a webpage;

- Scientific Report Writing: workshop.

There was an existing practice of collecting feedback forms at the end of workshops to refine material for the next delivery. This evaluative practice was expanded with focus groups on paper resources and online surveys on web-based and other resources. Participants were selected in various ways, with selection appearing to affect the tone of responses. Voluntary attendance at the workshop produced a self-selected group, and feedback was correspondingly more positive. An online survey of students who had attended one-to-one advice sessions were generally positive about these sessions (perhaps because of the relationship established between adviser and student), but gave more varied responses to questions about other resources. Focus groups (48 students) were recruited partly by advertising on the University online noticeboard, and partly by approaching passing students on the day. They produced the most varied set of responses from students who had not yet developed a relationship with the Study Advice service.

The main points arising from these evaluations were:

1. Study Guide had too much text – it was difficult to find information about a particular aspect, and there was simply too much to read especially if you were to pick it up when you were in a situation of crisis. Online guide lacked navigation.

2. Advice felt very prescriptive – comments that "not everyone works the same way" were typical. In particular, the extensive use of bullet points was felt to encourage this impression.

3. Resources were felt to be "too academic" in style - not attractive and engaging. It was felt that the addition of illustrations and humour would help to address this.

4. The paper Study Guide's A4 booklet format made it feel too much like lecture notes – it was felt that it might easily get lost amongst other pieces of paper.

5. There were concerns about ease of access, for instance taking time to attend a workshop at a specified time, knowing about the availability of Study Advice resources, and how to contact or even physically find the service itself, despite its central location on the main university campus. It was felt that those who needed help most wouldn't find it.

However, the content of advice was generally felt to be appropriate, at the right level and clearly explained, and 84% of students would recommend the guides to friends.

These points were responded to in the development of our next group of resources:

1. New leaflet with ten headings on cover as brief aide-memoire, expanded inside to one paragraph per point. Special attention paid to improving navigation in online resources.

2. More reflective exercises in workshop to encourage self-knowledge of learning preferences and practices.

3. Added pictures and adopted more light-hearted tone of writing in paper and online resources.

4. Used single-sheet tri-folded leaflet with ten brief tips on front, suitable for pinning-up on noticeboard and differentiated from A4 format of lecture notes.

5. Online interactive version of workshop with links to downloadable workbook for exercises and external websites. Complete re-design of Study Advice website and wider dissemination of information about Study Advice at targeted periods (i.e. academic writing advice when students started working on formative assignments in middle of Autumn term), and through other services that students access (Library, Student Union, dept secretaries and administrators).

New resources and feedback

The following new resources were produced:

- Ten Top Tips for Writing Better Reports: brief single page tri-folded leaflet; the same text presented as a fully navigable webpage;

- Writing Better Reports: a workshop with dedicated workbook containing a series of exercises designed to promote reflection on study practices; the same workshop as an online interactive study guide with links to downloadable workbook for reflective exercises plus links to external websites.

The process of gaining student feedback on these resources commenced in Spring 2007, with workshops scheduled to first run in Autumn term 2008. As with the earlier resources, evaluations will be sought through online and paper questionnaires and individual interviews.

Other new resources which linked to report writing practices but were not evaluated as part of this project included:

- Ten Top Tips for Better Proof-Reading: brief single page tri-folded leaflet; the same text presented as a fully navigable webpage;

- Sentences, Paragraphs and Punctuation: an A4 paper study guide also presented as a webpage.

With the Ten Top Tips resource, it was planned to broaden the evaluative cohort and gain data on student preferences for different formats by presenting the resource to a 'captive' or at least non-voluntary audience as part of core module lectures. Students were to be given access to the information in three formats: a brief oral presentation given at the end of a core module lecture (aiming to get maximum attendance); paper copies of the leaflet; a web-based version of the same text made accessible through the VLE (Blackboard) for the subject module. To maximise useful feedback, timing was felt to be significant; previous experience suggested that students tend to discard such information if given at the wrong time in the course (i.e. before the need for it has become apparent). As a development level resource, it was planned to target groups of Year 2 students at the beginning of the Spring term, when they would have recently received their first marked assignment of the course. It was planned to follow up at the end of term (i.e. after the next set of assignments had been submitted) with an email invitation to complete an online survey, with the incentive of a prize draw for a £20 book token. Students would also be asked to volunteer for more detailed interviews.

The plan with this project was to conduct evaluations across three Faculties to test the usefulness of a generic resource which gave tips on making report writing effective, rather than a straightforward 'how to do it' guide, which we felt would have been difficult to translate across disciplines. However, there were difficulties in engaging both students and academics in the project. In terms of the academics, this may have been due to unfortunate timing (academics were not approached until the middle of the busy Autumn term), or a failure to build relationships before proposing an intervention into a subject-specialist module, or inadequate explanation of the purpose of the project. Although several depts were contacted with a view to taking part, there was only one positive response. Consequently the evaluation was run in a single department (Archaeology) with a group of *21 students*. Though well-received at the time, only four students responded to the later online evaluation survey and only one agreed to an individual interview. The very limited extent of feedback made it unusable for research purposes.

It is possible to speculate that reasons for lack of engagement on the part of the other students may have been because:

- feedback was requested at an unusually busy time for assignment deadlines;
- they felt the level or content of advice was mismatched with their academic level;
- they felt adequate advice was already provided by the dept.

However members of academic staff involved in teaching the subject felt that it was a worthwhile project to attempt.

Future plans

The failure of the Ten Top Tips project to engage students and academics in the evaluation and development of new resources prompted a rethink of our current approach to report writing resources. Timing was felt to be a major factor in getting responses from both academics and students. It was felt that, because report writing is often highly discipline-specific, and because it is often vocationally-linked, there was a need to spend more time developing relationships of trust with academic staff, canvassing their opinions more fully, and working on ways of providing resources suitable for embedded teaching. At the same time, the continuing popularity of Study Advice workshops and online and paper guides, and the number of students who come for advice on report writing suggests that there is a demand for advice situated outside depts. Consequently we are now using a two-pronged approach:

1. investigating ways of maximising effectiveness in generic resources and advice;
2. investigating ways of producing materials and delivery suggestions for teaching staff to embed advice on effective report writing practices in subject modules.

A 'kit' for teaching staff containing resources for embedding advice on effective exam preparation practices in subject revision sessions was piloted in 2006-07. The success of this pilot has already prompted the support of our University Sub-Committee on the Enhancement of Teaching and Learning, who have proposed that the kits are extended to cover other topics including report writing, and that every member of academic staff across the university should be automatically enrolled on the VLE course.

Research directions for 2007-08 will see us:

- Adopting a building block approach to resource provision;

- Focusing on aspects rather than overall process;

- Building in adaptability for different disciplines;

- Providing suggestions for embedding in subject modules.

In addition to a widespread consultation with academics across the range of academic disciplines that require reports, we plan to continue to canvass the opinions of students with regard to preferences for content, formats and delivery of report writing resources. As a means of avoiding previous problems with getting the timing right to get responses from students, a permanent group of Student Reviewers is being established, with the co-operation of the Student Union. A standing list of those interested in reviewing resources will be maintained with new recruits each year. A random selection of these will be invited to twice termly lunches which will be run as focus groups. The rest of the group will be regularly contacted for their views, possibly using a social networking site such as Facebook.

New resources currently in development which will be evaluated by this group and others include:

- A detailed guide to the functions of different sections of reports

- Writing for specific audiences

- Using writing styles in reports

- Writing introductions and conclusions

- From reports to research papers (development level resource for postgraduates)

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References

1. Phil Race, *The Lecturer's Toolkit: A Practical Guide to Learning, Teaching and Assessment* 2nd ed (London: RoutledgeFalmer, 2001), 62.

2. Kurt Lewin, 'Action research and minority problems', *Journal of Social Issues* 2 (1946), 34-46. Reprinted in B. Cooke & J.W. Cox (eds)(*Fundamentals of Action Research Vol. 1* (London: Sage, 2005) from which this quote is taken (23).

3. On Self-Regulated Learning, see for instance B. J. Zimmerman & D. H. Schunk (eds.), *Self-regulated learning and academic achievement: Theory, research, and practice* (New York: Springer-Verlag, 1989).

4. See, for instance, Ursula Wingate, 'Doing away with 'study skills', *Teaching in Higher Education*, 11.4 (October 2006), 457-469.

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