Facilitating Student Writing during Project Supervision
A practical approach

Summary Many undergraduate and postgraduate students are required to write a project report, dissertation or thesis, which will be the largest piece of academic work they undertake. Because the writing is not produced in sequential order, it presents new difficulties for them. It may also be the first time they interact with academics acting as supervisors. This paper aims to give both students and supervisors a method for approaching what is often a daunting writing task. The process of visualising the structure of the project report has proved helpful in early discussions with students. In addition, group discussions of project reports can both enable students to address their concerns and save supervisors valuable time. The supervisor acts as facilitator, introducing a structured approach to writing and enabling students to adapt it to their projects. Integrating the dimensions of projects, including time, writing and conceptualisation, helps students to develop an understanding of the type of writing that will be involved throughout the project process. It enables them to begin writing at an early stage in the project.

Introduction: Student projects
Undergraduates undertaking a project may have no previous experience of writing such a large and complex text. From an early stage they often have concerns about how to proceed. Institutions usually provide some form of induction and/or written guidance for such projects, yet these often fail to demystify the writing process. In addition, with large student numbers, and with each supervisor having many students to supervise, there is a limit to the number of meetings and discussions with a supervisor that students can access in order to progress their writing.

Background: Discussing and visualising writing
One form of intervention which can overcome these problems is group discussion of projects, facilitated by the supervisor. The theoretical basis for this approach lies in the work of Brookfield and Preskill (1999), where it has been established that group discussion can have an important impact on student learning. Applying this framework to project writing, students are encouraged to address the various dimensions of the writing process in a structured discussion. This discussion helps students to see the project as a whole, while sharing in the group can develop confidence. Since not all students see the project, or writing, as processes, such discussions can enable students to adapt their approach at an early stage.

This approach to tutoring at the start of a research project can help students to develop an understanding of the whole task; it can improve their understanding of the writing process. In addition, the discussion allows time for them to individualise their tutor’s general advice on writing, while completed projects are used to provide specific examples of writing and presentation techniques. Graphical representation of sections of the project report is used to give students a clear image, literally, of each element. Equally importantly, discussion allows students’ understanding of the meaning of each section of the project to be checked by their tutor.

This approach can be useful to students looking for a way to make sense of the multi-dimensional project process. It involves defining not only the sections of the project but also the stages in the process. For supervisors, it offers an agenda for structured discussions with students about their projects. It may save
both students and supervisors time and effort.

Many textbooks provide guidance for students on writing projects, dissertations and theses (Bolker, 1998; Glatthorn, 1998; Hampson, 1994; Fitzpatrick et al, 1998). There are textbooks on writing in scientific disciplines (O’Connor, 1991). The group dynamic can provide writing support and development (Murray and MacKay, 1998a, b). The approach is contextualised in physiotherapy, having been adapted for and used with physiotherapy students. What is innovative about this approach is the use of pictorial representations of each section of a project during the discussion.

Facilitating Structured Discussion of Writing

This section describes a tutor-led discussion of student projects. The timing of this discussion is the start of the projects, ie before students begin their research. The session lasts one hour. The supervisor therefore spends one hour with all the students rather than an hour with each student. After this initial group session the students can proceed to meet supervisors on an individual basis (in accordance with institutional guidelines).

Although discussions are tutor-led they are dynamic in the sense that student interaction is part of the process. Using a black or white board, or another form of graphical representation, the tutor draws the ‘shapes’ of different sections of the project. The tutor works through each section, building up the project step by step, outlining what writing is required at each stage, how each section has a different purpose, where there is overlap, etc (fig 1). While the purpose of this session is to provide information for students, it is the discussion which provides opportunities for clarification and variation, so that each student can contextualise the information for his or her project.

The following description is written in the first person for three reasons:

- In order not to create the illusion that there is one standard process, since each tutor will adapt the workshop for each group of students.
- In order to convey how the supervisor responds to students’ questions.
- In order to encourage others to develop their own personal process for facilitating discussion of writing by keeping it ‘personal’ (since tutors sometimes lack confidence in talking about writing).

Although the approach is intended to be student-centred, the account is from the tutors’ point of view, in order to clarify how they can facilitate the discussion.

Fig 1: Group discussion of projects
I start by giving each student a completed student project to look at. These examples serve as points of reference throughout the discussion. I think it is important for students to see what a project physically looks like; it is part of the process of understanding the scale of the project. Students often have the impression that the project is an enormous piece of work, a misconception that can be corrected by scrutiny of completed projects. It may also be important, for the students, that these projects were written by students in the year ahead of them, adding to their growing sense that the task is achievable.

I begin discussion of their own projects by drawing the standard sections on the board (fig 2). Since projects follow a non-linear construction, I introduce the parts of the writing in the order that they will occur as the project is being carried out. Each section of the project report then becomes a trigger for group discussion.

**Agenda for Discussion**
- Literature review
- References
- Methods
- Results
- Discussion, conclusion and recommendations
- Introduction
- Abstract
- Appendices
- Formatting: ‘Sewing it all together’.

While these are the sections of the project report, to be discussed in this order, there is an element of unpredictability to the flow of the discussion, if the tutor is to be genuinely responsive to students’ questions and comments.

Students report that they find the required word length of the project report daunting, but once we have started to break it down into sections, they begin to see it as a collection of smaller writing tasks. This is a theme for the rest of the discussion, as I reinforce that the project is within their capabilities and that it is carried out as a series of smaller tasks.

**Literature Review**
This is the first graphic I draw, as a large box, as it represents the first part of the writing when the students are exploring the chosen area for their project. This can become the focus for the group to discuss where the literature may be found. The tutor’s role is to highlight that this is the section where they are ‘critical’ about the literature. The aim is to prompt the students to think of this section as many small ‘chunks’ that will form the storyline of the background to their project.

Clarification of assessment criteria includes discussion of the relative weight of this section in the marking scheme. (In some institutions the literature review carries a high proportion of marks.) Students are encouraged to summarise our discussion.

I often ask them to consider the purpose of the literature review in their particular projects, encouraging them to verbalise their understanding of its relevance and contribution to their project. The discussion then moves on to variations on the conventional sections.

The students begin to ask questions. They often ask about using references and quotes, for example how many references they should use. They also ask what being ‘critical’ of the literature means. It helps to make explicit links with previous work they have done on, for example, critical appraisal of literature. Students appear to perceive the project as a completely new task; however, making links with academic skills they learned in earlier years is important in building their confidence and clarifying the nature of the work that is required. It may take...
some prompting from the tutor for students to see these links, but progressively the students’ questions direct the discussion.

References
I then draw the references graphic. I suggest that the students start to construct this in the format in which they will submit their project reports, for example using the Harvard style. We clarify that they will be referring to articles, books and chapters in books, checking that they understand the correct format for referencing each. The students can add to the references section as they are reading and constructing their literature review; however, this section can be added to and revised throughout the project. I also suggest that there is no definitive length to the references section, as it depends on the topic area chosen and on the available literature. We discuss how the students have already used references in other course work; it is not a new experience.

If the subject is the tutor’s specialism, there is a temptation to give extensive and detailed advice. However, tutors have to allow gaps in their train of thought in order to allow students to develop their own frame of reference. Short pauses can prevent tutors from going into ‘full flow’ on their own topics.

Methods
I then draw the methods section. This often includes a section on a pilot study. I highlight here the role of supervisors in helping students to refine and narrow down the project, including deciding on the appropriate statistics to use for analysing their data. Once the project methods have been piloted the students can write them up and give them to the supervisor. I describe the style of writing for this section: very descriptive, defining exactly what they did.

We discuss types of method, qualitative and quantitative, and the different ways of describing them. The students look at completed projects for more specific discussion points. They are prompted to find one or two examples from published papers to help them decide on the appropriate style and structure for their methods sections. The tutor may at this stage, or at a later discussion, depending on how the discussion is going, prompt discussion of both published papers and research in completed student projects. At this early stage, students’ confidence as researchers can be low.

Results
I then draw the results section. Students often ask about the type of graphs and visual presentations they can use. This is a good time to look at the completed projects for specific examples, for different ways of presenting different types of data, both qualitative and quantitative. They usually ask other questions: how much text is required with the graphs and how should they be labelled? The tutor can deal with these immediately. An important outcome of this stage of the discussion is that students can discuss various presentations for different types of studies.

Much of the students’ discussion at this stage focuses on their misconceptions about what constitutes ‘research’ and ‘results’. The tutor’s role is complex, trying to adjust conceptions while helping students to develop their own views.

Discussion, Conclusion and Recommendations
I then draw the discussion, conclusion and recommendations, which together form an important larger section, representing the students’ original contribution. In some institutions supervisors do not read this section, but it is important in terms of marking. The institutional requirements are an important theme throughout this discussion; I encourage students to continue to ask questions about such issues, in order to help them to develop a better understanding. They may continue to reveal partially formed, even naïve, views of the scale of their projects; it is important to continue with the question-and-answer approach. I run through possible headings for this section, depending on the type of study and the results obtained.

Examples of completed projects are useful for more specific discussion of the ways of writing this section. We discuss the content and logic of the conclusion: suggestions for future work, implementation of findings, and developments of the project.

Introduction
I draw this section later in the discussion because it helps students to focus on one of their first tasks, defining the aims of their projects. These usually appear at the end of the introduction. We discuss the logical function of placing aims at this point and the purpose and nature of the introduction: providing an overview of the area.

Abstract
The last thing the students have to write is the abstract. We discuss its purpose and context: the whole project in miniature, around 250 words (depending on context).

Appendices
We discuss the types of material that can be put in appendices, such as ethics forms, and look at completed projects for specific examples. The timing of this stage is also discussed: it can all be put together at the end.

Formatting: ‘Sewing it all together’
Finalising the format and presentation, including page numbering, tables and figures and acknowledgements, cannot be done until the end, once all the writing has been completed. Completed projects provide illustrations of the standard of presentation expected and the correct format.
**Discussion**

At the end of such sessions, students report informally that this approach makes the project seem less intimidating and more manageable. The tutor observes an increase in student confidence in tackling the project and the writing. Students ask more questions and, interestingly, more follow-up questions. They make more connections between previous written work and the new project. Group relations are established, with some students planning follow-up meetings.

The aim of this approach is to help students to reflect on links between their projects and course work in earlier years, and how new work builds on old. The discussion provides an opportunity for metacognition, as students are prompted to analyse and compare their thinking and writing processes. Figure 3 represents a conceptual framework for the stages in the discussion of writing for undergraduate projects.

The approach described in this paper enables tutors to maintain a student-centred approach in discussions of writing. Tutors can save valuable time and effort in preparing students for the project, thus freeing up more time for individual follow-up discussions.

While some physiotherapy tutors may feel unprepared for running this type of discussion, all will have the appropriate facilitation skills. The physiotherapy tutor’s account in this paper outlines, in her own terms, how she adapted her facilitation skills for discussions of writing.

**Conclusion**

This descriptive account is designed to illustrate an approach to undergraduate writing development that was designed for the physiotherapy context. Principles advocated by Brookfield and Preskill (1999) were adapted for the writing process, using graphical representation in addition to text.

However, there are limitations to the approach:

- While the intention is to run a student-centred session, the tutor steers the discussion.
- While the structure is flexible it is underpinned by clear goals which have to be clear to students.
- Tutors may dominate discussion, particularly if projects are in their specialist areas.
- There may be a dominant student.
- Because there is a need to discuss content there may not be enough time for discussion of the writing process.

Perhaps a next step in developing this approach would be to document tutors’ and students’ experiences in more detail.

---

**Fig 2:** Conceptual framework for facilitating writing
Professional articles

References


Key Messages

- The writing of undergraduate projects not only builds on previous course work but also makes new demands on students.

- Visualising the writing task can improve students’ understanding of the process and build their confidence for tackling it.

- Students demonstrate increased understanding of the research process and correct their misconceptions.

- Discussion can help students to take control of their projects and understand the roles and interactions of students and supervisors.

- Group discussion of writing can be a better use of tutors’ time, avoiding repetition and providing insights into students’ thinking.