

Research and Thesis writing

3. Thesis structure guidelines 3d. Sample Results section from Biology & Education

Sample Results section from Biology



1. Research models and methods



2. Developing a research proposal



3. Thesis Structure guidelines



3a. Sample Abstract from Engineering & Biology



3b. Sample Introduction from Engineering, Biology & Education



3c. Sample Methods section from Biology, Engineering & Education



3d. Sample Results section from Biology & Education



3e. Sample Discussion section from Biology



3f. Sample Conclusion from Engineering & Education



4. Thesis writing and persuasion

Learning objectives

This module will help you to:

- learn about various research models.
- prepare a research proposal.
- structure your thesis and its chapters.
- write convincingly of your research outcomes and implications



2.3. RESULTS

2.3.1. Eucalypt Sap

Two species of eucalypt were frequently incised by yellow-bellied gliders at Bombala to obtain sap. The sap of *E. viminalis* accounted for 94% of the feeding observation time (FOT) during January 1984, 1% in February 1985, 83% in April 1985 and 3% in January 1986 and 14% in July 1986 (Fig. 2-2).

Eucalyptus fastigata sap accounted for 44% of the FOT during May and 58% in June and 48% in January 1986. Fresh incisions were observed on *E. viminalis* during the Oct./Nov. 1984 field trip, suggesting that sap had been harvested prior to this time. One glider group, consisting of 4-6 individuals, made almost continual use of *E. fastigata* sap (suggested by relatively fresh incisions) from May through to December 1984 (pers. obs., Kavanagh, 1987a). However, frequent checks on these sap-site trees (4 individual trees) during the last three field trips in 1984 did not reveal gliders feeding. Within the home range of a group of gliders, only a small number (3-6) of each of these two eucalypt species was incised for sap, although each species was very abundant. This aspect of their feeding behaviour is treated in greater detail in Chapter 3.

2.3.2. Honeydew

(...)

2.3.3. Arthropods

(...)

2.3.4. Manna

(...)

2.3.5. Nectar

(...)

2.3.6. Overall Diet

The diet of the yellow-bellied glider at Bombala consisted at times almost exclusively of plant and insect exudates (Fig. 2-2). Exudates (sap, honeydew,

In this results chapter, results are given for each foodtype surveyed as part of the research, and then for foodtype availability. Refer to the sample methods section to see how this results section follows logically from its methods section.

sap

These sections detail the methods used to observe feeding behaviour related to each of the foodtypes.

This sub-section summarises the results of the research on foodtypes.

manna and nectar) accounted for 63.1% of the feeding observation time (FOT) during the whole study (122.4h) while arthropods alone made up 14% of FOT. However, a further 22.9% of the FOT was of gliders peeling back loose shedding bark during which they harvested arthropods and honeydew together but the proportion of each could not be determined (see above). If it is assumed that each was harvested in equal proportion then exudates account for 74.6% of FOT and arthropods 25.4%. Only during April 1984 and July 1985 did arthropods feature as a main item in the diet. At other times it formed a consistent but minor portion of the diet.

Feeding Observation Time percentages are given for exudates and arthropods.

2.3.7. Food Availability Indices

This sub-section summarises the results of the research on the availability of each foodtype.

Kavanagh (1984, 1987a) provided details of flowering and bark shed at this site for November 1981-January 1985. During this time nectar was usually seasonally abundant at Bombala and relatively evenly dispersed but during the 18 months when its abundance was quantified in this study (February 1985-July 1986), only seven of the 150 marked trees were observed to possess flowers. All of these were in February 1985 and averaged approximately 500 flowers each. Observations of nectar feeding were few and apart from 1 min in December 1984, ... were made only during June/July 1986 (Fig. 2-2) when one *E. viminalis*, heavily laden with flowers (ca. 16,000 flowers), was visited regularly by one pair of gliders. This was the only flowering tree seen in the study area.

results of previous research

flowers

bark shedding

...

(Results section continues)

Sample Results section from Education

Results and Discussion

In this thesis, the results and discussion sections appear in the same chapter.

5.1 Modelling and joint negotiation of texts

This study set out to investigate the effects of extending the negotiation of text phase of the DSP teaching/learning cycle with English for Further Study students to incorporate student/teacher joint negotiation and construction of a marking instrument. The following discussion will focus on the application, appropriateness and usefulness of the curriculum innovation from both the students' as well as the teacher/researcher's perspective.

- introduction to this chapter by recapping main thesis aim outlined in chapters one and two.

5.1.1. Classroom text analyses

The first research question was "How do students benefit from analysing model texts?". This involved analysing classroom discourse to determine whether there was a shift from the archetypal classroom discourse of Teacher Initiation, Pupil Response, Teacher Feedback identified by Sinclair and Coulthard (cited in Stubb 1983: 29) to students taking on the role of primary knowers. This research question also involved investigating how students' knowledge about language and texts developed through ongoing modelling and analyses of texts. A related

The subsections of this chapter follow a pattern:

- link aspect of the study to a research question;
- presentation of the results supported by data;
- discussion and interpretation of findings;
- summary of subsection

links findings to findings of other studies

research question was “

Will students adopt and /or develop a metalanguage to talk about language? The main data forming the basis of the following discussion are the transcripts of the recordings of the classroom text analyses.

The first teaching stage of the project focussed on identifying the schematic staging of an exposition genre and how cohesion is achieved in expositions (see Chapter 4 for a description of the curriculum process). The initial analysis of the model text was very teacher directed. The transcript of this segment of the lesson (see Appendix C) shows that most of the input came from the teacher with the pattern of classroom talk being:

- teacher question
- student response
- teacher confirmation

For example when analysing the analytical exposition for schematic structure, one exchange was as follows:

- incorporation of data to support findings
 - findings related to relevant literature

T Now, we've been talking about causes. What happens now in the very short paragraph?

S1 Effects?

T Mmm. Now the writer starts to talk about effects. So we've got a second Thesis.

SS Yeah.

T Which is?

S1 These three.

S2 The whole thing

S3 These three events

T So the second Thesis is the whole sentence. “These three events planted the seeds of a great change in society, and the effects of this change are being felt at all levels...” (Appendix C: Analysis of Analytical Exposition)

The above exchanges correspond to the pattern identified by Sinclair and Coulthard as characteristic of teacher-pupil talk with the underlying exchange structure of Teacher Initiation, Pupil Response, and Teacher Feedback. This exchange structure allows the teacher to retain the conversational initiative (Stubbs 1983: 29). In the above exchange the teacher was the primary “knower” of information and her questions prompted and guided the students onto the next stage.

(follows more presentation of data and discussion of results)

- summary of discussion of findings for this subsection

To sum up this discussion of the data in response to the first research question “How do students benefit from analysing model texts?” there are two main points to be made:

- (i) The students’ ability to analyse texts improved. By the third analysis they were able to examine a number of language features on their own, draw

conclusions on the status of the text on the mode continuum (more factual, or more persuasive) and give examples to support their points. The systemic functional model of language was a valuable teaching resource to make explicit language features of different genres to the class.

- (ii) No “new” classroom metalanguage emerged, and at times “language to talk about language” caused problems for a few members of the group (What’s cohesion again?” and “What’s the difference between Thesis and Introduction?” Appendix C: Transcript of Discussion Genre and Text Analysis). Students took a pragmatic approach to explain a concept in some instances, but also adopted more explicit terms that described the purpose of a textual feature. On the whole their classroom language reflected their extended knowledge about texts: students developed from talking about “friendly” sounding texts to “distanced”, “sophisticated,” and “more abstract” texts.

5.1.2 Development of the writing checklists

My second research question “Do classroom negotiated writing checklists aid the writing process?” will be discussed in three parts. The first part will evaluate the data as to the sub question “Is the process of negotiating writing checklists with students beneficial?” The data for this discussion will be transcripts of the constructions of checklists, and classroom observations. The second part will discuss the writing checklists in light of the classroom joint negotiations, while the third part will evaluate the students’ responses to questionnaires on the drafting and editing process.

(discussion of data)

Data from the investigation of the effects of extending the joint negotiation of texts to include joint negotiation of writing checklists suggest that there is a place for the checklists in the teaching /learning cycle, however these should be included as a teaching resource prior to the joint construction of a text in order to revised and sum up the key language features and stages of the genre in question.

Points 5.2 – 5.3.2 present the results of these aspects of the project as in section 5.1. Each sub-section includes a discussion of these particular findings

5.2 The students’ writing

5.3 Teacher response to student writing

5.3.1 The writing checklists as a marking tool

5.3.2 Improving the writing checklists

5.4 Implications of the project for teaching practice

The project focussed on using writing checklists with one TAFE English of Further Study class. The results suggest that teachers and students can benefit from extending the DSP teaching/learning cycle to include writing checklists. However, the checklists need to be written in a way which is accessible to students. That is, the students and teacher

