Literacy Matters

EVALUATION ANALYSIS CURRICULUM TEACHING ASSESSMENT

Strategies for teaching communication skills to university students

THE UNIVERSITY OF ADELAIDE

Acknowledgments

Foreword

This booklet provides a very interesting and challenging account of what happened in a University of Adelaide project as departments sought to integrate literacy matters into their normal curriculum expectations. It contains arguments of interest to all who are concerned with improving the effectiveness of tertiary education and I commend it to you. The Literacy Matters project was developed by the ACUE with staff and students from Commerce, Labour Studies, Pure Mathematics and the Faculty of Agricultural and Natural Resource Sciences. It responded to a need to monitor student literacy, the requirements of students, the expectation of academics, and the requirements of employers.

DOUG MCEACHERN
Acting Deputy Vice-Chancellor/Convener, Academic Board
The University of Adelaide

"I hate it when the lecturer reads out notes that are already in the course workbook, it doesn't add anything to my understanding... I prefer it when concepts are illustrated and issues are discussed and argued about, it encourages thinking and helps understanding..."
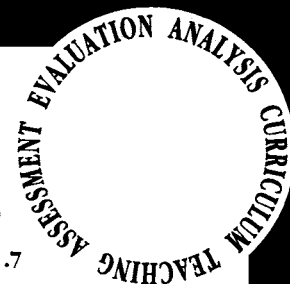
"Tutorials should give an opportunity for students to develop their arguments and defend them..."

"In exams there should be less emphasis on parrot learning and more on critical thinking and evaluation..."

3rd year university students.
(Evaluation interviews with Project Officer, September 1996)

Contents

Introduction

This booklet is a guide for academics in departments confronting the issue of preparing students to graduate with literacy and communication skills appropriate to the university and the professions. It is not a 'how-to' booklet. Rather, the differing approaches taken in four faculties to improve students' skills are outlined. These include a whole degree approach (Commerce), an accredited subject for students whose first language is not English (Mathematical and Computer Sciences), a core first year subject (Labour Studies) and a collaborative approach with teachers of all first year subjects in a faculty (Agricultural and Natural Resource Sciences).

Section 1 discusses the findings of a two year Literacy Project in The University of Adelaide in which high school teachers, academic staff, university students and employers were involved. Section 2 describes the actual approaches adopted in the four faculties, illustrating differing strategies for each context.

Teaching university students communication skills within their fields of study

Continued criticisms by professional organisations, teachers and the media about the poor literacy and communication skills of university graduates pose important questions for tertiary education. While research (see Bibliography) increasingly confirms that students need to be taught discipline specific communication skills, the differing expectations of students, staff and employers of what it is to be 'literate' indicate the teaching and learning of literacy skills is a complex issue.

For university teachers, the implications of *how* to teach skills are immense. The strategies illustrated in Section 2 are intended to provide tertiary teachers, and others, with ideas for integrating the teaching of literacy and communication skills into their subjects. These strategies are based on the work of a Literacy Project conducted at The University of Adelaide between 1994 and 1996. They demonstrate, by the use of authentic examples, how students did indeed improve the way they communicated their understanding in the targeted subjects.

The approaches undertaken in each discipline proceeded from three fundamental assumptions:

- **the need to identify how logic and knowledge are constructed in the discipline**

- **the need for students to learn explicitly and precisely how to communicate that logic and knowledge**

- **that communication skills need to be integrated into the assessable work of students**

The selected teaching strategies demonstrate that teaching communication skills within the context of a subject requires different approaches according to the different features of the discourse. However, each subject involved in the Literacy Project shared the following objectives and processes:

- **the development of students' language and intellectual skills**

- **the analysis of students' communication problems by investigating examination and diagnostic texts**

- **staff development to ensure teachers were aware of how to teach and assess communication skills**

- **the development of assessment criteria that recognised students' communication skills**

- **the evaluation of the program by both students and staff**

Section 1 The Literacy Project

The terms 'literacy' and 'communication skills'

The guiding definition of 'literacy' for the project recognises the relationship between language and context. 'Contexts' in tertiary education can be taken to be the subject disciplines within the university.

'Literacy is the ability to read and use written information and to write appropriately in a range of contexts. Literacy involves the integration of speaking, listening, and critical thinking with reading and writing.'
(DEET 1991:19)

The terms 'literacy' and 'communication skills' were used within the project to refer to students' abilities to read, write, speak, listen, and use a range of intellectual skills. While there are generic literacy and intellectual skills that can be expected of tertiary students, each discipline requires a specific understanding of the ways for communicating knowledge according to the epistemology of the subject.

A significant part of the project, therefore, was the analysis of the essential features within the discourse of each subject involved in the project.

Major concerns of university teachers about student literacy

The work of the Literacy Project in a number of faculties came about as a result of teachers' concerns about students' inabilities to communicate effectively. The four most enduring concerns expressed were:

- students are frequently unable to interpret critically and evaluate subject content

- they are often unable to write according to the logic of the subject

- they are often unable to give an oral presentation based on their own analysis of the content

- as a result, many students resort to plagiarising information

Differing expectations about student literacy

Discussions with Year 12 teachers, university teachers, 1st year university students (see Table 1) and employers (see Table 3) revealed not only different expectations about student literacy, but that the responsibility for teaching these skills lay elsewhere. Several university teachers complained that the literacy skills learned by students prior to university were inadequate - a notion often coupled with the perception that accurate spelling and use of grammar are a sound basis for successfully completing university assignments.

In contrast, many Year 12 teachers reported that their desire to develop their students' critical literacy skills was limited by a public examination system which requires students to reproduce factual information.

Professional organisations, such as the Business Higher Education Round Table and the Institute of Chartered Accountants of Australia (see Appendices A & B), have published clear statements about the skills students are expected to have learned at university (see Table 4). Similarly, employers of accounting graduates, interviewed as part of the project (see Table 3), place greater value on employees' abilities to communicate their understanding of complex issues than on technical accounting knowledge.

Expectations of student literacy

	Perceived skills needed at university	
Year 12 teachers of Commerce-related subjects (n=16)	**First year lecturers Commerce (n=14)**	**First year students Commerce (n=269)**
critical thinking	critical thinking	time management, organisational skills
exam preparation	think for themselves	communication skills - reading, listening, verbal and written
following instructions	use initiative	work independently
independent learning	learn independently	motivation, discipline, responsibility
communicating information clearly, using formal English	communication skills - written and spoken	understand lecture and tutorial system
stress management	motivation, discipline	assignments: structure and practice
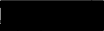
Table 1.   Data from group interviews with Commerce teachers and students, in order of priority. The lecturers and students had taken part in the Literacy Project during Semester 1, 1995.

Students' perceptions of skills needed in a Commerce degree

Below are responses from third year Commerce students who had not been involved in the Literacy Project.

These students consider oral and written skills to be important, but the associated academic skills of application of theory to practice, evaluation and analysis have little value.

■	Question 1	If you were preparing students for a career in Commerce, what skills would you develop?
▨	Question 2	What skills does the B. Comm course develop?
▨	Question 3	As you finish your degree, are there skills you feel you should be better prepared in?
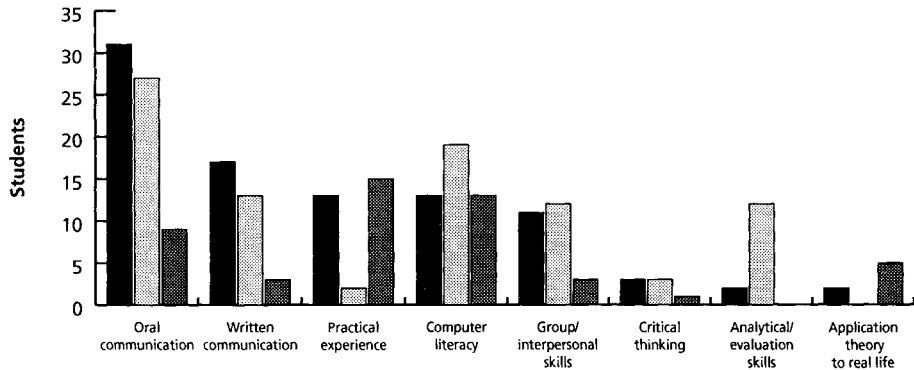
Table 2 Small group interviews, Semester 2, 1996. n=48

Skills employers are looking for

Communication Skills
• High level of oral and written skills to manage increasing complexity and internationalism in business.
• Articulate; excellent oral presentation skills; ability to present arguments, and defend views.
• Ability to write for different purposes and audiences. Experience in writing business letters, management reports.
• High level of grammar, spelling and punctuation; proof reading and editing of work.
• Ability to work in teams is critical; people-related skills.

Table 3   Data from individual interviews with 5 employers of Commerce graduates in Adelaide, 1995

Core generic skills

Guidelines of the Professional Accounting Bodies		
1 Adaptation skills Particularly the ability to: • apply accounting knowledge to solve real-world problems • receive, evaluate and react to new ideas • adapt to new situations and • act strategically	**2 Communication skills** Particularly the ability to: • transfer and receive knowledge • present, discuss and defend views • read and write effectively and • negotiate with people from different backgrounds and with different value systems	**3 Intellectual skills** Particularly the ability to: • identify, find, evaluate, organise and manage information and evidence • analyse, reason logically, conceptualise issues, construct and solve problems and construct arguments • think critically and • engage in ethical reasoning

Table 4   The first three of six core generic skills areas set out in Appendix B of the Joint Accreditation Review Task Force Guidelines for Accreditation of Tertiary Courses by the Professional Accounting Bodies: Oct 1995.

Implications for teaching

The differing perceptions of 'literacy' have meant teachers of vocationally oriented subjects, in particular, need to take greater account of the professions' expectations. Teachers, for example, of core subjects in the Commerce degree program recognised the need to integrate communication skills across the three years of the program to enhance graduates' skills.

Importantly, students also needed to be made aware of the reasons underlying the explicit approaches taken regarding the development and assessment of their literacy and communication skills.

Regardless of how minimal or extensive the curriculum changes undertaken, in both professional and non-professional disciplines, the integration of communication skills into each subject requires a comprehensive approach involving all stages of the teaching and learning cycle.

A cycle of change

Introducing literacy and communication skills

consultation

with head of department
with subject coordinators
with subject teachers
with students
with language adviser

analysis

of problems in students' communication
of how logic and knowledge are communicated within subject discourse

curriculum

define assessment criteria
develop course objectives and desired communication skills
develop teaching materials

EVALUATION ANALYSIS CURRICULUM TEACHING ASSESSMENT

teaching

provide diagnostic writing tasks to evaluate communication skills
provide staff development for teaching and assessing communication skills
assess and evaluate sequential development of skills through tutorial tasks and assignments
introduce active problem solving and discussion in tutorials

assessment

make assessment criteria explicit to students
provide feedback on development of communication skills
include marks for communication skills in final assessment

evaluation

evaluate student texts before and after introduction of communication skills
enable qualitative and quantitative evaluation of program by students and staff

Resource implications

As with any curriculum initiative, resource implications are significant. A cost-benefit analysis should include both short and long term outcomes. The initial expense of attempting to integrate communication skills into the curriculum is high in terms of staff time taken in consultations, curriculum change, setting new assessment criteria and tasks, providing resources for students, and maintaining the momentum for raising literacy standards. The broader the scale of integration - from part of a subject to across the curriculum - the heavier the initial commitment.

Resources allocated to the teaching of communication skills in the project depended on the extent to which each department or subject co-ordinator decided to integrate each process within the curriculum. For example,

- in Commerce, communications skills will be integrated into the whole degree program

- in Maths and Computer Science, the teaching of communication skills is the focus of an accredited one semester subject for students for whom English is a second language

- in Labour Studies, communication skills have been integrated into a core first year subject, Union Studies 1

- in Agricultural and Natural Resource Sciences (ANRS), consultations have been faculty-wide, over two campuses

Major aspects of each of the initiatives described in this booklet have been funded by The University of Adelaide Teaching Development Grants, faculties and the Advisory Centre for University Education (ACUE).

The benefits are being reaped gradually, and there will be some lead time before graduates demonstrate their skills and employers see a difference.

Costs to departments

- **curriculum development: staff time**

  meetings and consultations for the purpose of defining literacy and communication objectives, and setting assessment criteria

  devising assessments consistent with both content and communication objectives

  review of content to include communication processes

  writing model texts to demonstrate requirements to tutors and students

  evaluation of success of strategies after assessment

- **attendance by tutors at training sessions**

  using materials on writing appropriate texts and promoting group interaction in tutorials

- **increased marking time for tutors**

  feedback required from tutors to students in terms of newly established assessment criteria

Costs to ACUE

- **staff development**

  sessions to establish literacy and communication objectives in subjects and courses

- **tutor training**

  techniques in small group interaction in tutorials to encourage students to develop communication and conceptual understanding
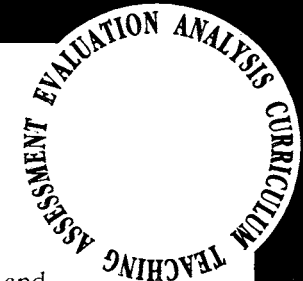
Costs funded by Teaching Development Grants

- consultations between language adviser and staff

- materials development

- teaching tutors to assess for communication skills and to give feedback to students

- development of Faculty, departmental and subject study guides for students relating to oral and written formats

- surveys of staff, school teachers, students and employers

- literature search; search of University of Adelaide documentation in relation to literacy

Evaluation of communication programs by teaching staff

At the end of 1995, the first year of the project in Commerce, the department's Literacy and Communications Committee met to evaluate the strengths and weaknesses of the project to date. They commented that:

"There has been a change in philosophy among teaching staff...staff have accepted responsibility rather than blaming high schools"

"Talking to employers was most enlightening"

"The program has worked well... staff have been accepting... training of staff has been good fun"

"It's very good that more links within the university have been established" (i.e. between Literacy Project staff and faculty staff)

"There is an improvement in how tutors take tutorials"

"It's been necessary to have an effective Head of Department to encourage and coerce ... it has improved our teaching, how we conduct tutorials, how we ask exam questions"

In the Department of Labour Studies, Union Studies 1 staff reported to a Departmental meeting that:

"Students questioned us more about our essay questions, our assessment, assessment in other courses..."

"Showed that we can teach writing skills; and students definitely improved"

"It's a good idea to teach in small steps using the course materials"

"The assessment criteria were more transparent and that helped us explain the assessment outcomes, and the clearer assessment criteria helped 'drive' better work"

Issues for staff:

"Use of part-time teaching staff militates against effectiveness, the high turnover is not cost effective"

"It seemed worth reducing content to concentrate on building students skills"

"Resources? We needed to train ourselves and other tutors to teach it, cross check marked work (to establish rater reliability); do extra assessment, prepare extra course materials"

The integration of communication skills (or Information Literacy, for example) requires reconstruction of the curriculum to ensure students can graduate with the relevant skills. Introducing new skills and knowledge means changing priorities in the content area. Curriculum change takes time, effort, commitment, and above all, negotiation. It is not easy to agree on assessment criteria! The support of departmental heads is essential.

Section 2: Strategies for teaching

Strategies for teaching literacy and communication skills

This section sets out examples of some of the teaching approaches adopted in four different programs at The University of Adelaide. They demonstrate the successful integration of literacy and communication skills into the curriculum. In each instance different models were implemented to develop students' skills, yet each approach involved common processes of analysis, implementation and evaluation.

A Faculty of Economics and Commerce Department of Commerce	**Financial Accounting 1A:** a core first year first semester subject
B **Faculty of Mathematical and Computer Sciences**	**English as a Second Language - Mathematical and Computer Sciences (ESL-MCS):** a credit bearing first semester subject for non-English speaking background students
C **Faculty of Arts** Department of Labour Studies	**Union Studies 1:** a core first year first semester subject
D **Faculty of Agricultural and Natural Resource Sciences**	Team teaching for literacy development in targeted assignments throughout the first year of all courses

A. Department of Commerce

Literacy and communication skills developed by Financial Accounting 1A students

The strategies to introduce communication skills into this course in 1995 provided a pattern for the subsequent integration of skills into several subjects in the three year degree program in Commerce.

Staff identified the following skills as among the most important to be learned by students in Financial Accounting 1A. They were taught, practised and assessed as part of the main assignment task, **writing short answer questions:**

- **to interpret and apply information**
- **to understand and present the logic and knowledge of the subject discourse**
- **to present, discuss and defend views**
- **to understand and use the assessment criteria as a guide to writing short answers**

Teaching Strategies

analysis

- **identify problems** in short answer assignments and exams
- **determine how logic is constructed** in Financial Accounting 1A (cause - effect - application)

curriculum

- **set course objectives** which recognise the need for students to interpret rather than describe information
- **develop assignment, tutorial and exam questions that require interpretive answers** using 'Why', 'How' and 'Explain' questions and instructions
- **develop course notes and model answers** to explain and demonstrate desired skills

teaching

- **develop appropriate teaching approaches and assessment guidelines with teachers** in staff development workshops
- **set diagnostic writing tasks** to evaluate problems in students' communication and to guide development of skills
- **introduce interactive tutorial exercises** to encourage students to interpret and discuss issues in Financial Accounting 1A

assessment

- **revise assessment tasks and criteria**
- **familiarise students with explicit assessment criteria**

evaluation

- **compare pre-communication project and post-project examination results**
- **conduct surveys** of student and staff responses to various aspects of the communication project

Before...

1994 Short answer exam question and student text

Problems identified in 1994 exam questions and answers	Exam question *When should special journals be used?*	Analysis of 1994 short answer exam question and answers
Students were criticised for not providing interpretive answers, yet textbook, assignment and many exam questions typically asked 'What' questions, i.e. factual questions, rather than 'Why', 'How' or 'Explain' questions and instructions.	**Student answer** Special journals should always be used when there are a large number of the same type of entries such as Sales, Purchases, Cash Receipts and Cash Payments, otherwise it goes in the General Journal. *'Why?'*	• Discrepancy between factual question and assessor's comment:'Why?' Student received only 50% because it was a factual answer. Assessor's comment expects student to provide an interpretive answer.
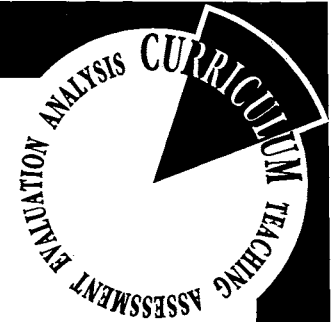
Course notes for Financial Accounting students 1A

Comprehensive notes were provided to explain to students:

* why the communication skills component has been introduced into Commerce subjects
* what assignment and exam questions mean
* the differences between factual and interpretive answers
* what assessors are looking for in student writing, and the assessment criteria
* model answers showing **reason or cause and effect**, and problems with unsuccessful answers
* a checklist for writing short answers

An additional resource, "Number Crunchers or Professional Communicators? A Communication Skills Guide for Commerce Students", was prepared for students by tutor and project officer, Alison Southwick.

Excerpt from Course Notes explaining the logic of interpretive answers in Financial Accounting 1A

Interpretive answers

Interpretive answers explain the application of accounting concepts, most commonly their cause and effect, for example:

Q: *Why is a multicolumn journal used for cash receipts and cash payments?*

A: *A multicolumn journal is used for cash receipts and cash payments because there may be repetitive transactions, cash payments and cash receipts from many sources. Therefore for posting efficiency, time saving and cost saving, multicolumns are needed for the many sources of these repetitive transactions involving cash.*

e.g. Cash receipts - payment of accounts receivable, discount allowed on timely payment of account, interest revenue, cash sales, inventory etc. Cash payments - payments of accounts payable, expenses (e.g. wages etc) discount received for timely payment of account, cash purchase of inventory, equipment, etc.
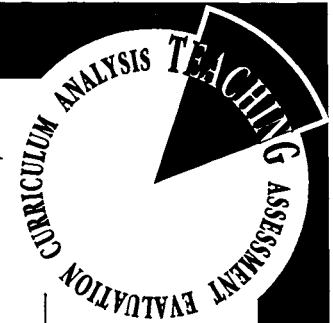
- Establishes topic
- Provides reason
- States effect
- Gives examples

Excerpt from course notes p5

After...

1995 Exam question and student text

1995 exam question explicitly states what is required	Exam question	Text organisation demonstrates logic of discourse
	Explain the relationship between the Accounting Equation and double-entry accounting	
Question asks for an interpretive answer		Student shows understanding and application of knowledge
	Student answer (excerpt):	
	Double-entry accounting is a means of book-keeping where there are at least two entries for every transaction. These two entries must be comprised of an equal debit and an equal credit entry.	• **Establishes topic**
	The Accounting Equation states: $\Delta A = \Delta L + \Delta OE$. *So for every ΔA there must be an equal ΔL or ΔOE.*	
Student received 75%	***This means** whenever one part of the equation changes, there must be another equal change to another component of the equation (ie either ΔA, ΔL or ΔOE), so that the Accounting Equation must always hold. Because double-entry accounting involves an equal debit and equal credit entry*	• **Provides a reason**
	whenever a transaction occurs this produces an equal change.	• **States the effect**
	***An example is,** if you bought $330 worth of...*	• **Gives an example**

Assessment criteria

Students were able to use the assessment criteria to guide their writing

CONTENT ● 60%	Comments

big business
• specialised journals
   • posting efficiency
   • journalising
• efficiency
   • specialised ledgers
   • general ledger uncluttered
   • specialisation of labour
small business
• more efficient
   • one journal
   • one ledger	

STRUCTURE & LANGUAGE 40%	Comments
• topic is clearly established • reasons are clearly stated • clear statement of effect/s • examples provided • clear expression of ideas	
GRAMMAR	
• appropriate tense • correct spelling • subject/verb agreement • correct use of articles	

Students were handed back this detailed **content information** with their assessment sheet

Markers gave both quantitative and written feedback on the students' interpretation of the information and its application

Feedback was given on the grammatical features of students' writing, but this was not assessed quantitatively in this instance

Financial Accounting 1A students were asked to respond to the following question at the end of Semester 1: *"In your writing and communicating of ideas at university, have you learnt new skills that are different from those required in Year 12?"* The majority of students identified new skills, such as:

"Yes, to take a view on an issue and then support that view with facts etc. More argumentative."

"Yes, we have to interpret the questions in a new way."

"Yes, I have better writing skills and comprehension skills. I'm more self motivated in terms of learning."

"What is required in answering questions is entirely different at uni than it was at school - I need to prove statements at uni, whereas I only need to state facts at school."

(Student Survey: Financial Accounting 1A - Question 2, end of semester 1, 1995.   n=235)

Interactive tutorials

Many of the younger Financial Accounting 1A tutors were recent graduates and were not trained teachers. Staff development workshops were held at the beginning of the semester to encourage tutors to introduce greater interaction in the tutorials. Objectives included enabling students to develop their communication and interpersonal skills.

Students were surveyed at the end of the semester with the question *"Would you like more discussion in your tutorials?"*. While several commented that they only wanted answers, others confirmed that discussion helped them to understand accounting concepts:

"I find if I understand a topic or idea, I can write easily and fluently about it. I feel discussion leads to understanding."

"I think people learn better in discussion more than just doing tute questions."

"I gain a better understanding if I hear other ideas which you may not have considered, and see other ways of learning/approaching problems."

(Student Survey: Financial Accounting 1A - Question 4, end of semester 1, 1995   n=173)

This is a credit bearing one semester subject for non-English speaking background students, both resident and International students, enrolled in a Maths and/or Computer Sciences degree program. The aim of the course is to provide students with a theoretical understanding and practical application of English language skills required within the study of mathematics and computer science. Both language specialists and subject tutors teach in the course, which was introduced in 1995 in lieu of a compulsory first year Philosophy subject, Argument and Critical Thinking.

The course comprises three units. Each unit focuses on the development of students' language and communication skills using discourse features of the three core subjects: mathematics, statistics and computer science.

Key components are:

- **mathematics** 'translating' between the formal symbolism of mathematics and spoken and written English, recognising the generic features of written mathematical problems to assist students' comprehension and understanding how to logically transcribe a mathematical equation

- **statistics** collecting and interpreting data, knowing how to answer interpretive assignment questions using the data, both orally and in writing, and understanding and using the technical language of statistics

- **computer science** reading and interpreting newspaper articles on Information Technology, in particular the Internet, to develop summary writing skills. Examples follow.

Teaching strategies

analysis
- **set diagnostic writing task**
- **analyse problems in students' diagnostic texts** to determine focus of reading and writing program
- **provide students with varieties of instruction to model appropriate writing** of academic summaries

teaching
- **explain and apply assessment criteria** to model texts
- **introduce interactive tutorial tasks** to discuss articles under review
- **introduce graduated exercises** to develop students' reading and writing skills

assessment
- **students self assess various writing tasks** using assessment criteria
- **students compare self assessment and lecturer's assessment** to gain more comprehensive understanding of assessor's expectations

evaluation
- **compare students' diagnostic writing with final assignment and exam summaries**
- **students' journal writing** provides constant feedback on responses to ESL-MCS program
- **students surveyed** at the beginning, mid and end of semester on perceived language and academic needs, and responses to the course
- **Student Evaluation of Teaching (SET)**

Before... Diagnostic summary writing

Kim's 1st summary

Writing task	Kim's text	Problems with Kim's text were typical of problems in most ESL-MCS students' texts
1. Students wrote 2-3 paragraph summary of an article on the history of the Internet. 2. Problems diagnosed in the student texts determined the focus of the summary writing program. 3 Students later self-assessed these texts, using assessment criteria, following intensive tuition in summary writing (8 hours of lectures and tutorials) 4. Students compared their self assessments and the lecturers' assessments of their texts 5. Students completed a practice summary for non-assessed feedback before attempting summary writing assignment	• *Summary* - *Internet is a system to be used* *by computer* •. *It bring* • *information, message* •*to* *anywhere in the world* *You* *just type a message, it appears* *on your screen and* (complete text)	Text organisation • Student was unable to write a complete summary • Inaccurate interpretation of article's discussion about the *history* of the Internet Language features: • Inaccurate use of singular verb • Inconsistent use of pronominal reference - 'It' and 'you' • Inaccurate form of generic nouns • Inaccurate relationship between verb '*bring*' and preposition '*to*'

Models

A model summary was discussed with students to guide their understanding of the structure and function of summaries.

Introduction (excerpt)	Function
*In the article "Computer Age 'Might Pull Plug on Women'" by Carolyn Collins in The Australian on 28th September, 1993, Dale Spender argues that men are dominating the field of computers because women lack confidence in using computers... **Two main points are made to support Ms. Spender's argument. The first** is that throughout history women have been left behind in the use of new technology and this is happening with women and their use of computers. **The second point** is based on research that Dale Spender quotes which shows that boys are more confident in using computers than girls...*	• **Title, author's name, newspaper, date, topic of article** • **Outline of main points/opinions covered in the article**

Middle or Body (excerpt)	
***The first point made** by Dale Spender is that while computers are being used more now than ever before, there are fewer women enrolled in computer courses than in 1976. In this way she claims history is repeating itself...* ***The second point** Dale Spender uses to support her argument is that results of research were interpreted by teachers to mean that boys have greater confidence than girls when it comes to using computers. Two sets of results were presented to teachers. The first states...*	**Main points in greater detail** • **1st main point** • **2nd main point**

After...
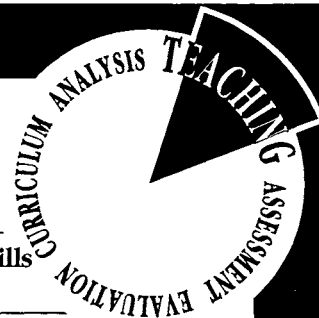
Kim's assignment summary

Assignment: to write a 250-300 word summary of an article of the student's choice selected from a corpus of newspaper articles about the Internet.

Excerpt from Kim's text	Evaluation of skills developed
In the article "'Dust problem' delays Vietnam's commercial link" by Kathy Wilhelm in <u>The Australian</u> on 9th January, 1996, the article argues that Vietnamese Government is afraid of Internet and tries to find a way to prevent Internet's development in Vietnam. Two main points are made, the first is, Vietnamese Government sets the high degree of control of the media, the second point is about Mr. Pham Dao's argument that to control Internet there is just his company to give authority to connect to the Internet, he wants "to keep fresh air and prevent the dust".	**Text organisation** • Student develops a logically structured summary taking into account the writer's key points • More accurate interpretation of article's discussion • More accurate control of register (formality of language) of summary writing
The Vietnamese Government sets the high degree of control on media, mostly on Internet because it is instantaneous transmission. Although government controls the media such as monitoring telephone calls, fax transmissions, television, foreign magazines and newspapers, Internet is harder to control ... The second point of the article argues about the control of Internet by Mr. Pham Dao (director of the State run Vietnam Postal Communications). His company will install a "firewall" to know where information come from and what it is. He showed some reasons why he thought it would be an advantage for the Government, such as...	**Language features** Continued inaccurate use of some language features, such as: • verb forms • absence of definite article (the)
This article stresses some ideas if the Vietnamese Government doesn't put pressure on Internet, investment in modern communication will develop very fast and modernise Vietnam too quickly for the Government...	

Assessment criteria

Assessment of Kim's assignment Summary

Structure	Excellent	Good	Needs work = 0
• topic is clearly stated in introduction =1 • title, author, name of article etc is clearly stated in introduction =1 • outline of main points is made in introduction =1 • each main point is discussed in separate paragraph =1 • word length is between 250-300 words =1	1 1 1 1 1		
Content			
• student has accurately identified main topic =3 • student has accurately identified main points of article =2 • student has summarised each main point accurately =2 • student has summarised information, not quoted extensively or plagiarised =3		2 1 1 2	
Total **11/15**			

Journal Writing
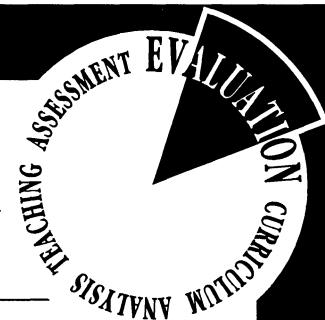
Students' journal writing provided continuous feedback about individual progress and responses to the course

| Excerpt from student journal: mid semester	Aim of journal writing
Over the past few lessons we practise more of the problem solvings in maths. The main issue was how to interpret the problem. *We have some work done on graphs and we practise now to analyse the graphs and how to read them. Although for the first two weeks of my course I was thinking that how easy Esl subject is but then when we worked on it I realise there is more to it I guess I never really paid any attention to how to explain the graph and write down the meaning of symbols.* *Now I use what I learnt in Esl in my other subjects and its very helpful.*	Students are required to regularly submit journal entries for written feedback from language lecturers. The aim is to encourage students, many of whom have high level numerical skills but low level English language skills, to write regularly. The journal entries, which discuss some aspect of the class and course, provide lecturers with feedback on how individual students are coping and their responses to the program • One aim of the program is for students to be able to understand and *transfer* skills to their other academic fields.

English as a Second Language - Mathematical and Computer Sciences

|				
Student Level:	I	Teaching Started:	27/02/95
No. of classes:	1	Teaching Ended:	08/06/95
Contact per class:	33 hours	Administered by:	Colleague
No. of Students:	16	Administered on:	06/06/95
No. of Responses	16 (100.0%)		

Teacher Evaluation

5. Encouraged students to participate in classes.

Value Label	Count	Percent
1 Strongly Disagree	0	0.0
2 –	0	0.0
3 –	0	0.0
4 Undecided	1	6.2
5 –	0	0.0
6 –	4	25.0
7 –	11	68.8
Total	16	100.0

Graph of Count

Mean: 6.6
Std dev: 0.8
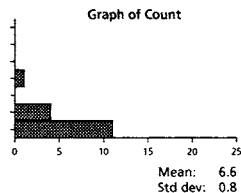
7. Gave clear explanations

Value Label	Count	Percent
1 Strongly Disagree	0	0.0
2 –	0	0.0
3 –	1	6.2
4 Undecided	0	0.0
5 –	1	6.2
6 –	6	37.5
7 –	8	50.0
Total	16	100

Graph of Count

Mean: 6.3
Std dev: 1.0
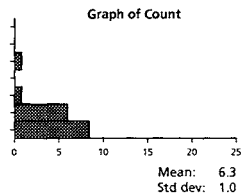
Subject Evaluation

11. My fluency in the technical language of the subject has been increased

Value Label	Count	Percent
1 Strongly Disagree	0	0.0
2 –	0	0.0
3 –	1	5.9
4 Undecided	3	17.6
5 –	5	29.4
6 –	6	35.3
7 –	1	5.9
0 Missing	1	5.9
Total	17	100.0

Graph of Count

Mean: 6.6
Std dev: 0.8
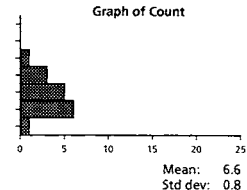
13. I would recommend this subject to other students

Value Label	Count	Percent
1 Strongly Disagree	1	5.9
2 –	0	0.0
3 –	0	0.0
4 Undecided	3	17.6
5 –	1	5.9
6 –	5	29.4
7 –	6	35.3
X Not Applicable	1	5.9
Total	17	100.0

Graph of Count

Mean: 6.6
Std dev: 0.8
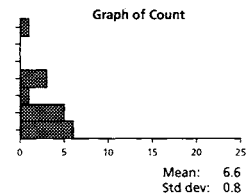
C. Department of Labour Studies

Union Studies 1

Union Studies 1 is a core first semester subject in the first year of the Degree and Associate Diploma in Labour Studies. Many students in the course are mature-aged and are entering university with extensive experience in the workforce, and often with a non-traditional educational background.   Students frequently report that they have little understanding of the expectations of university, particularly in written assignments. The major written assignments in the subject are three **essays**.

First year essays indicated a need for students to learn:
- how to structure their writing logically and clearly
- to analyse not describe content information
- to adopt a position or develop a line of argument
- how or when to use evidence
- how to avoid plagiarism
- to be aware of lecturers' expectations

Literacy skills targeted by Union Studies 1 staff were:
- **the critical evaluation of source material**
- **the logical construction of essays based on student's own proposition, supported by source material**
- **referring to source material without plagiarising**

The teaching strategies used:

analysis
- **set diagnostic essay writing task**
- **analyse problems in students' diagnostic texts** to determine further focus of essay writing program
- **develop appropriate teaching approaches and assessment** with teachers in staff development workshops
- **provide students with models of appropriate writing** of academic essays

teaching
- **develop comprehensive course notes** which demonstrate and explain major features of essay writing
- **explain and apply assessment criteria** to model texts
- **introduce graduated assignments** which assist students to develop their writing skills

assessment
- **provide students with extensive written feedback** on assignments to guide the development of their writing skills

evaluation
- **compare students' diagnostic writing with three assignment tasks**
- **survey students** for responses to the essay writing skills component of Union Studies 1

Course notes for Union Studies 1 students

CURRICULUM ANALYSIS · TEACHING · ASSESSMENT · EVALUATION
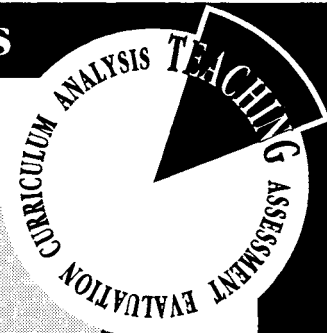
- Course notes demonstrate and explain major features of essay writing

Subject Code 1790
Union Studies 1

Writing Essays at University
In the next three weeks we will be discussing features of effective essay writing at university to help you develop writing skills both for your assignments for this semester and for future academic assignments. In preparation for your next written assignment we are going to focus on developing writing skills in three areas:

- how to structure your essay logically so that it expresses your argument clearly
- how to use evidence to support your argument
- how to avoid plagiarism

These three areas will be the main focus of the assessment for your next assignment. You will have a copy of the assessment criteria so that you are well aware of the features of your writing that will be assessed. The type of essay assignments we are considering is *exposition*, that is, assignments where the writer is required to put forward a point of view as a result of analysing a topic or evidence and then arguing their position on the topic. This type of writing is different from report writing, newspaper articles or even academic textbooks. Each of these types of writing has a different structure and a different style of writing.

Structuring your Essay Logically
Here, we are going to look at some writing from Union and Labour Studies, in particular examples...

Excerpt from course notes p1

Model text

A model essay in Union Studies 1 demonstrates the logical parts of an essay and their functions

Logical parts of essay	Excerpt from model essay	Function
Introduction	*Unions have had to move from an adversarial role to the development of a participatory and consultative role to become objectively involved in the introduction of technology.* *Implications are a) the impact info. tech. has on industrial democracy b) the union's role within technological advancement*	**Thesis Statement** • **(proposition)** **Outline of Topics** •
Body of essay	*a) proposed technical change determined through joint negotiation* *b) Aust is a recipient of new technology. Unions need to adapt skills to introduce new technology and maintain a competitiveness.*	**1st Topic** • **2nd Topic** •
Conclusion	*Therefore, unions need to develop new skills to be able to participate, negotiate and to be competitive.*	•

Excerpt from course notes

Assessment criteria

ASSESSMENT FEEDBACK for essay assignments

MARKING CRITERIA		sub-totals
CONTENT	essay is relevant to assignment question (3) essay is partly relevant to assignment question (2)	
STRUCTURE	essay is clearly organised (3) essay has some organisation, but not clear (2)	
INTRODUCTION	writer's thesis is clear (3) writer's thesis is partly clear (2) outline of topics is clear (3) outline of topics is partly clear (2)	
CONCLUSION	conclusion restates proposition (3) conclusion partly restates proposition (2)	
TOPICS	discussion of topics is well developed (3) discussion of topics is partly developed (2)	
USE OF EVIDENCE	evidence is used to support argument (3) evidence is partly used to support argument (2)	
REFERENCING	referencing is used correctly (3) referencing is partly used correctly (2)	

Student essay

Student essay: 1st assignment applying essay writing strategies

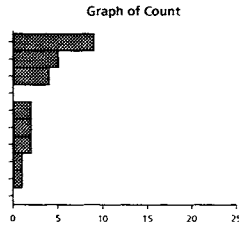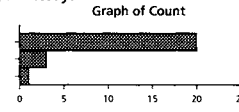| Logical parts of essay	Excerpt from student essay	Function
Student has been able to: analyse source materials and develop a proposition in response to the question	Question: What are the main purposes of unions? *Unions are institutional organisations which serve to collectively represent the interests of their members, namely those who sell their labour. The main purposes of unions are dependent on the socio-political environment and historical location in which they operate.*	**Thesis Statement (proposition)**
develop a logically structured discussion **Introduction**	*This paper will briefly discuss two perspectives that influence their major roles, followed by an overview of the main union objectives:* **a)** *the dire state of contemporary unionism, especially in relation to economic trends, changing work practice and the threat of the New Right will be presented,* **b)** *and I will argue that the primary objectives of unions in Australia today are adaptation and survival.*	**Outline of Topics**
Body of Essay	a) *The policy of the New Right is to exclude unions from voluntary agreements between employers and employees at an enterprise level. They seek to sanctify these agreements...* b) *Importantly, unions have begun to recognise that the centralised wage fixing system was outmoded and have embraced award restructuring and enterprise bargaining in an attempt to create an equitable and empowering system (Evatt Foundation, 1995:38).*	**1st Topic** **2nd Topic**
Conclusion	*...In order for unions to meet the challenges of the New Right they must be flexible, act strategically in the interests of their members and recruit the new work generation with progressive and resourceful objectives.*	

Union Studies I

1a. Structuring essays logically

Value Label	Count	Percent
1 Very Useful	9	34.7
2 ~	5	19.2
3 ~	4	15.4
4 ~	0	0.0
5 ~	2	7.7
6 ~	2	7.7
7 ~	2	7.7
8 ~	1	3.8
9 ~	1	3.8
10 Not Useful	0	0.0
Total	26	100.0

Graph of Count

1b. Using evidence effectively

Value Label	Count	Percent
1 Very Useful	11	44.0
2 ~	4	16.0
3 ~	4	16.0
4 ~	1	4.0
5 ~	2	8.0
6 ~	2	8.0
7 ~	0	0.0
8 ~	1	4.0
9 ~	0	0.0
10 Not Useful	0	0.0
Total	25	100.0

Graph of Count
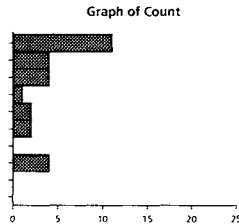
1c. Avoiding plagiarism

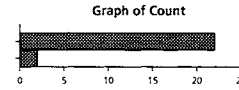| Value Label	Count	Percent
1 Very Useful	14	53.9
2 ~	5	19.2
3 ~	3	11.5
4 ~	3	11.5
5 ~	1	3.9
6 ~	0	0.0
7 ~	0	0.0
8 ~	0	0.0
9 ~	0	0.0
10 Not Useful	0	0.0
Total	26	100.0

Graph of Count

6. Do you think you have a better/worse/unchanged understanding of what your marker is looking for in your essays?

Value Label	Count	Percent
1 Better understanding	20	83.3
2 Unchanged	3	12.5
3 Worse Understanding	1	4.2
Total	24	100.0

Graph of Count

### 10. Do you think sessions on essay writing should be repeated in future years of this subject?

Value Label	Count	Percent
1 Yes	22	91.7
2 No	2	8.3
Total	24	100.0

Graph of Count

EVALUATION ANALYSIS CURRICULUM TEACHING ASSESSMENT

D. Faculty of Agricultural and Natural Resource Sciences

i Background

The approach demonstated here involves a resident Faculty-based language and learning lecturer working collaboratively with Faculty academics. Over the past five years, at the initiative of individual lecturers at the Waite and Roseworthy Campuses, the development of skills such as essay writing, oral presentations and interpersonal communication have been integrated into subject content. Since 1991, a part time Language and Learning lecturer, Ms Margaret Cargill, has been working with Faculty staff to address concerns about language and communication skills at both undergraduate and postgraduate levels.

ii Consultations with staff in departments

In 1995 the Associate Dean for Undergraduate Studies agreed that suitable subjects in the first year of all undergraduate courses would be identified and lecturers approached about the possibility of integrating the development of academic skills with the teaching of subject content.

Towards a Faculty consensus on expectations

To streamline the Faculty's approach in teaching communication skills, the need was recognised for a set of guidelines for students. Funds were provided through a Teaching Development Grant in 1996 to produce a booklet which makes explicit for students what lecturers expect of students' written work.

iii Teaching Strategies

The Language and Learning lecturer worked collaboratively with the teaching staff on specific assignments in each of the identified subjects. The collaborative work done to produce teaching materials specific to a particular assignment and the setting out of lecturer expectations have led to changes, including:

- revision of assignment wording to clarify expectations and emphasise desired learning outcomes

- the revision or creation of cover sheets to incorporate explicit assessment criteria, and

- a commitment to training markers in the assessment of assignments to ensure consistency and to provide feedback which guides the development of students' communication skills.

iv Collaborative teaching

Collaboratively taught classes on targeted assignments emphasise the development of communication skills as a normal part of every student's first year experience. They highlight the different requirements of writing in different subject areas for different audiences and purposes. Processes such as planning and redrafting are modelled, and students are alerted to areas needing further work.

A larger than usual proportion of marks is allotted for language skills in these assignments. The team teaching of the segments validates the focus on communication skills to the students by presenting them as essential, rather than an add-on extra.

Focus beyond first year

Course coordinators focus on the full range of skills graduates need, and identify subjects at each year level where an explicit emphasis on their development is appropriate. Appropriate teaching strategies are developed and implemented collaboratively by lecturers and the Language and Learning lecturer on site who has developed expertise in identifying and teaching the range of genres in the Faculty.

v Guidelines for students and staff

Student Guide

In preparing the 'Written Communication' booklet, extensive research was first undertaken to identify what types of assignments were being set at the various levels in all courses, and what guidance was being provided to students about preparing them. With the help of a reference team including a member from each Department in the Faculty, and input from interested students, drafts of the booklet were prepared, circulated for comment, revised, and trialled with groups of students engaged on specific assignments.

Lecturers' Guide

In response to suggestions received during the research phase, a lecturers' guide was also prepared which highlights how the new booklet can be used to enhance subject and assignment outlines, and presents examples of best practice.

The revised drafts of the booklet were presented to all eight Departmental Committees, explaining the rationale behind the project, and seeking to identify any areas where expectations may differ, so that discipline-specific differences could be highlighted. The booklet was distributed to all lecturers and students early in 1997, and the materials will be made available on-line in the Faculty's computing suites as soon as possible. Formal evaluation after one semester, plus annual revisions incorporating staff and student feedback, will ensure that the booklet continues to reflect lecturers' expectations and meet student needs.

vi Future directions

The development of high level literacy and communication skills now receives attention in the Faculty as a matter of course when curriculum development at course level takes place. As the elements outlined here come together, an integrated, Faculty-wide approach is emerging. It recognises the wide range of student backgrounds, emphasises the need for all students to build on the skills they entered with, and supports the development of high-quality communication skills, enhancing students' chances of success both at University and in their lives beyond.

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Appendix A
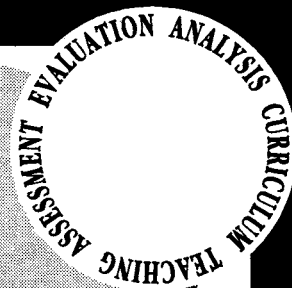
"Postgraduate Skills: A view from Industry", Business Higher Education Round Table, April 1996

The Needs of Industry

Knowledge and skills to be developed

Students that have a PhD should be better prepared to meet the needs of industry than those with lesser degrees, however it appears that they do not fare any better than those without the degree and have to rely on the status of having a PhD to progress. Industry needs to know that when a student gets a PhD that they can perform at a higher level, rather than just a more specialised version of an academically accredited undergraduate.

The skills that students need to develop are related to the weaknesses above.

Firstly, many departments appear to be in the business of training graduates for the theoretical international rather than the concrete local market and often focussed on academic arenas. This is done in ignorance of what industry requires, by using ill founded bench marks and to support the institutions research interests. A major issue for academia is to estimate what proportion of postgraduates are destined for a further sustainable career in academia.

Postgraduates should have:
- Highly developed skills to adapt to new areas of activity
- A reasonably broad practical knowledge
- Familiarity and knowledge of broader literature
- Skills in the scientific method and linkage to the broad context
- Good communication and presentation skills
- Good work practices and collaborative skills

Specific technical knowledge clearly needs to be of international standing. Each industry needs to specify the technical skills that they require whether they are molecular biology, metallurgy, optics, etc. There are also common technical skills required by industry:

- Experimental design, modelling and statistics
- Information technology and computer literacy
- The ability to utilise fundamental and technical knowledge to applied systems
- Occupational health and safety, and hazard analysis
- Good Manufacturing Practice and Good Laboratory Practice
- Intellectual property management

Appendix B

"Guidelines for Joint Administration of Accreditation of Tertiary Courses by the Professional Accounting Bodies: Exposure Draft", ICA, October 1995

Core Curriculum in Generic Skills Areas

The professional bodies expect that the acquisition of generic skills by accounting students will be planned for in the design of your curriculum. Listed below are six generic skills areas valued by the accounting profession and which the accounting bodies expect to see developed in accounting graduates.

1 Adaptation Skills

Particularly the ability to:
- apply accounting knowledge to solve real-world problems;
- receive, evaluate and react to new ideas;
- adapt to new situations; and
- act strategically.

Appendix B (cont.)

2 Communication Skills

Particularly the ability to:

- transfer and receive knowledge;
- present, discuss and defend views;
- read and write effectively; and
- negotiate with people from different backgrounds and with different value systems.

3 Intellectual Skills

Particularly the ability to:

- identify, find, evaluate, organise and manage information and evidence;
- analyse, reason logically, conceptualise issues, construct and solve problems and construct arguments;
- think critically; and
- engage in ethical reasoning.

4 Interpersonal Skills

Particularly the capacity to:

- work in diverse groups;
- listen effectively;
- understand group dynamics; and
- assume leaderships

5 Personal Skills

Particularly the ability to:

- think creatively; and
- exercise judgement based on complete or incomplete sets of information.

6 Professional Skills

Particularly

- a sense of professionalism in relation to work performed;
- a personal commitment to lifelong education; and
- a commitment to think and behave ethically.

These technical skills must be supported by improved personal competencies including:

- Communication skills (oral, written, graphic and listening) to a wide range of audiences including those that do not have the same body of knowledge or depth of knowledge

- Negotiating skills

- Problem solving and decision making skills. Ability to tackle and solve a problem utilising a range of approaches, rather than being limited to a narrow range of techniques.

- Project planning

- Team skills and good interpersonal skills to encourage teamwork and manage conflicts

- Better ability to network with external groups to maximise the outcomes of their research efforts.

Another way of describing these needs is as follows:

Flexibility	willingness and ability to tackle a variety of small and large tasks, perhaps outside the are of initial training.
Clear thinking	able to sort out the minimum path to a solution, not getting diverted by interesting side issues.
Rigorous experimental work	being able to distinguish the significant from the insignificant and to utilise the scientific literature and other people's knowledge effectively.

A high degree of creativity and lateral thinking - being able to think "outside-the-box", to add value to other ideas and to seek for synergy and synthesis.

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