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Teacher Education Courses In Victoria: Perceptions Of Their Effectiveness And Factors Affecting Their Impact

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VICTORIAN INSTITUTE OF TEACHING

FUTURE TEACHERS PROJECT

**TEACHER EDUCATION COURSES IN VICTORIA:
PERCEPTIONS OF THEIR EFFECTIVENESS AND FACTORS
AFFECTING THEIR IMPACT**

Lawrence Ingvarson

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August 2004



PREFACE

This report was prepared by the Australian Council for Educational Research (ACER) for the Victorian Institute of Teaching (VIT). The authors wish to acknowledge the assistance given to the project by officers at the VIT, especially Ms Ruth Newton, Manager Accreditation and Ms Kathy Liley, Manager Special Projects.

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1. INTRODUCTION

Investment in teacher education is a major strategy to enhance the quality of teaching and learning in our schools. Agencies, such as the Victorian Institute of Teaching (VIT), with responsibility for the accreditation of teacher education, can use feedback about the effectiveness of different modes of teacher preparation to support providers. It is vital that data for this purpose be valid and reliable.

The *Future Teachers Project* (FTP) was designed to collect such data. Two questionnaires were administered to collect these data: one to teachers who completed their pre-service training between 31 March 2002 and 31 March 2003, and one to their employers. (For the purposes of this study, the ‘employer’ was defined as the school principal.)

Main research questions

The study was designed to address two major questions:

1. What are the perceptions of stakeholders (beginning teachers and their employers) about the effectiveness of current teacher education models in Victoria?
2. What changes do stakeholders believe should be made to teacher education programs to better prepare future teachers?

The answers to these questions would help to describe the practical steps that could be taken to ensure that future teaching graduates would have the knowledge and skills to be effective teachers.

Some assumptions made by the study

The following assumptions were made concerning the likely influences of pre-service teacher education courses in Victoria on stakeholder perceptions:

1. Some characteristics of beginning teachers will influence their perceptions of pre-service teacher education courses. These characteristics include their gender, their ability and their previous educational and work experiences.
2. Perceptions of pre-service courses will be shaped by the structure of the course – whether it is an undergraduate degree, postgraduate qualification or a double degree.

3. The components of the pre-service education program will influence perceptions. Examples of such components include: the length and nature of the practicum, the nature and the depth of subject matter learning and the alignment of performance expectations and the VIT professional teaching standards for fully registered teachers.
4. The process associated with learning to teach will also influence perceptions of pre-service teacher education. Examples of these processes are: opportunities to learn about how students learn the content they are taught, training in diagnosing student learning needs and opportunities to learn how to reflect on teaching practice.
5. The study asked teachers to reflect on their pre-service teacher education a year after starting to teach. It is likely therefore that this experience shaped their perceptions. Aspects of the first year teaching experience that are likely to be important include: the background of the students they teach, whether there was an induction program at the school, whether there was a mentor program in the school, the quality of the professional community in the school and the workload of the teacher.

Some of the analyses reported upon below, investigate the extent to which these factors influence perceptions of pre-service courses, and hence the extent to which it is necessary to consider them in making conclusions about teacher education courses in Victoria.

Measuring the effectiveness of pre-service teacher education courses

The brief for this study asked that data collection instruments be designed so that the perceived effectiveness of various elements and sub-elements of pre-service teacher education programs could be identified. This required two main components to be built into the study's conceptual framework:

1. A set of indicators of perceived effectiveness (outcomes).
2. A set of key elements of pre-service teacher education programs or 'models' (learning processes or strategies).

Valid indicators of effectiveness need to reflect what the profession believes beginning teachers need to know and be able to do in order to provide quality opportunities for students to learn.

Outcomes

Key sources of indicators of effectiveness are the current version of the VIT professional standards for fully registered teachers, and the *Guidelines for the Evaluation of Teacher Education Courses* (SCTP, 1998). The VIT standards aim to reflect the cutting edge of what the profession regards as best practice. The survey instrument, therefore, asked beginning teachers how well they think their teacher education programs prepared them to meet the VIT standards. Questions sought information on:

1. Professional knowledge, which includes:
 - a. knowledge of students
 - b. subject content knowledge
 - c. pedagogical knowledge.
2. Professional practice, which includes the following aspects:
 - a. planning and assessment
 - b. learning environments
 - c. teaching strategies and resources.
3. Professional engagement, which includes the extent to which the teacher was able to engage in:
 - a. reflection on and evaluation of their knowledge and practice
 - b. professional activities with other teachers.

Other outcome indicators, known to be relevant to policy, were also asked about in the teacher questionnaire, including:

4. Whether teachers would enrol in their teacher education course again.
5. Whether their teacher education course provided adequate opportunities to learn how to teach.

Elements of teaching education programs

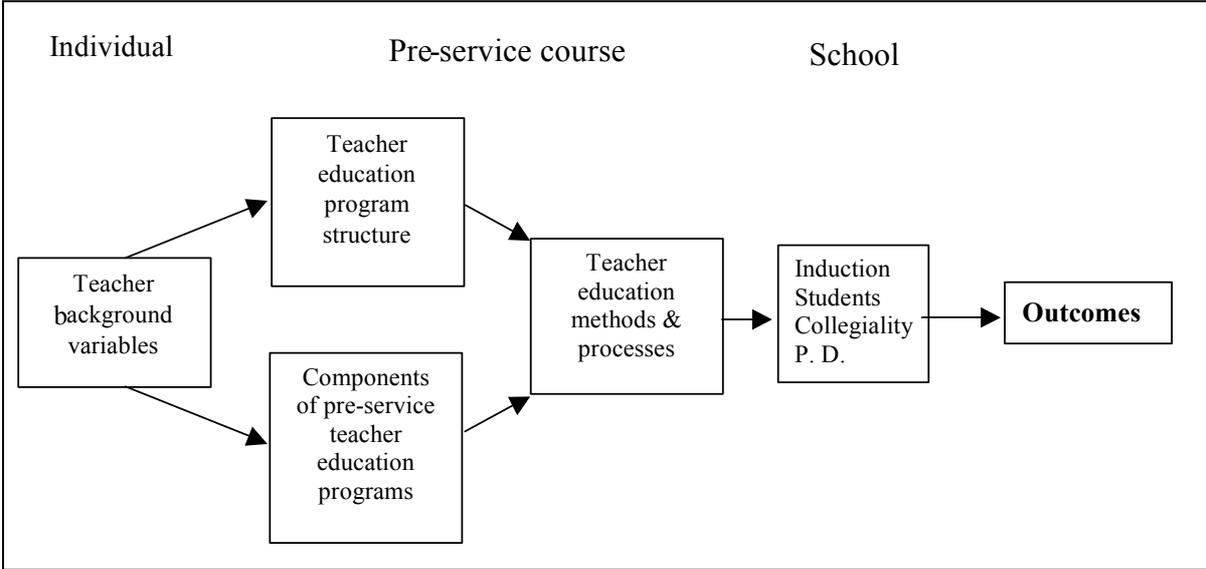
The study also aimed to identify elements that could explain the variation in reported effectiveness of teacher education programs. Part of this variation might be explained in terms of teacher education models (undergraduate, postgraduate, double degree programs), but other elements of programs may contribute, such as the nature of the opportunities that programs provide to learn how to teach. These elements included:

1. Aspects of the practicum (its length and nature).
2. The nature and depth of subject matter learning.
3. Linkages between subject matter and pedagogical training.
4. Modelling and feedback on practice.
5. Opportunities for active learning and training in reflective practice.
6. Opportunities to learn about how students learn the content to be taught.
7. Training in diagnosing student learning needs.
8. Characteristics of teacher educators.

Graphical depiction of relations between key concepts

Figure 1 shows the causal sequence proposed to produce the outcomes of pre-service teacher education as perceived by first-year teachers. This approach allows the study to identify which factors – teacher, pre-service course or school characteristics – are associated with outcomes. Further, the statistical procedures used, identified what proportion of this association is unique, and how much of it is mediated by other variables.

Figure 1 Graphical depiction of the relations between the key concepts predicting perceived outcomes of pre-service teacher education courses



The first set of variables relate to the characteristics of the individual, the second set to the characteristics of the pre-service course and the third set to the characteristics of the school. These factors, it is theorised, will account for most of the variance in the perceived outcomes of the courses.

Employer’s questionnaire

Principals were seen to be the main group representing the employer perspective for this study. The instrument that was designed to survey principal perceptions of teacher education program effectiveness was a shorter version of that developed for beginning teachers. It parallels the set of effectiveness indicators in the beginning teacher survey but it did not contain questions related to structural and process elements of teacher education programs.

2. BACKGROUND

This section of the report describes how the data were collected, the response rates and some preliminary descriptive statistics.

Data collection

Teacher questionnaires

A total of 2667 questionnaires were mailed out to beginning teachers who were registered with the VIT. The questionnaires were mailed to their home address. In order to protect the confidentiality of teachers' addresses, the VIT organised the mail out of the questionnaires. Accompanying the mailed out questionnaire was a covering letter from the VIT explaining the study and a reply-paid pre-addressed envelope for the return of the questionnaire. A reminder was sent to teachers who had not replied three weeks after the initial mail-out.

A copy of the teacher questionnaire is attached as part of the Appendix.

Principal's questionnaire

A total of 2364 questionnaires were sent to school principals. The questionnaires were mailed to their schools. As the VIT organised the mail-out of the questionnaires for teachers, it was decided that it would be more efficient if they also mailed-out to the schools. Accompanying the questionnaire was a covering letter from the VIT explaining the study and a reply-paid pre-addressed envelope for the return of the questionnaire. A reminder was sent to principals who had not replied three weeks after the initial mail-out.

A copy of the principal's questionnaire is attached as part of the Appendix.

Response Rates

Teacher's questionnaire

The teachers surveyed were those who had graduated from Victorian Universities between 31 March 2002 and 31 March 2003 and who commenced work in 2003. Of the 2667 teachers surveyed, 1147 returned completed questionnaires. Of these 1147 teachers, 23 returned questionnaires indicating they had completed their studies at another time and were hence out of scope. One questionnaire was returned without this information. (It was included in the final sample as the respondent went on to complete the questionnaire implying that they were within scope.) Table 1 summarises this information. It shows that 1123 respondents were

within scope, plus the one who did not provide data for this question, which gave a final total of 1124 respondents.

A further 78 questionnaires were returned indicating that the teachers were no longer at the address to which they were sent (most being overseas). By not including those who were out of scope and those overseas, a total of 2566 teachers were available to the study. This means that a response rate of 44.2% was obtained. This is a moderately satisfactory response rate.

Table 1 Course completion dates of teachers who responded to the questionnaire

	Frequency	Percent	Valid Percent
Before 31 March '02	8	.7	.7
Between 31 March '02 & 31 March '03	1123	97.9	98.0
After 31 March '03	15	1.3	1.3
Total	1146	99.9	100.0
Missing	1	.1	
Total	1147	100.0	

Principal's questionnaire

Principals in all Victorian primary and secondary schools were surveyed. A total of 2364 questionnaires were mailed-out. Of these questionnaires, 1663 (70.3%) returned questionnaires. Of this number, 749 returned questionnaires indicating that they had a beginning teacher who taught at their school during the period of time specified. It was not possible to calculate a response rate for principals because it was not known how many schools had employed a 'within scope' teacher. (As any one teacher could have worked at more than one school, or a school employed more than one beginning teacher, simple subtraction of graduates from schools would not have provided the numerator for calculating a response rate.)

Preliminary descriptive statistics

Teachers

As Table 2 shows, just under 80% of teachers who responded to the questionnaire were female.

Table 2 Distribution of teachers by gender

		Frequency	Percent	Valid Percent
Valid	Female	885	78.7	78.9
	Male	236	21.0	21.1
	Total	1121	99.7	100.0
Missing		3	.4	
Total		1124	100.0	

Just over half of the teacher respondents were aged over 25 years of age. Table 3 shows these data.

Table 3 Distribution of teachers by age

		Frequency	Percent	Valid Percent
Valid	25 or younger	511	45.5	45.5
	Over 25	613	54.5	54.5
	Total	1124	100.0	100.0
Missing		0	0	
Total		1124	100.0	

Table 4 shows that a greater proportion of males (72.6%) were aged over 25 compared with females (49.6%).

Table 4 The distribution of teachers by age and gender

		Age			
		25 or younger	Over 25	Total	
Gender	Female	Count	446	439	885
		<i>% within Gender</i>	50.4%	49.6%	100.0%
	Male	Count	64	172	236
		<i>% within Gender</i>	27.1%	72.9%	100.0%
Total		Count	510	611	1121
		<i>% within Gender</i>	45.5%	54.5%	100.0%

Table 5 shows the distribution of teachers according to whether they had a career prior to commencing their pre-service teacher education course. It shows that 45% had a prior career.

Table 5 Distribution of teachers by career prior to their pre-service teaching course

		Frequency	Percent	Valid Percent
Valid	Career	504	44.8	45.0
	No career	615	54.7	55.0
	Total	1119	99.6	100.0
Missing		5	.5	
Total		1124	100.0	

Given the proportion of males over 25 years of age, it might be expected that they were more likely to have had a career before taking up teaching than females. This was found to be the case, with 60% reporting a prior career, compared with around 40% of females.

Principals

Note that there was no linkage between the data supplied by the principal and the teachers, so it is not possible to match teacher's self-assessments with the principals' assessments.

Table 6 shows the distribution of principals in each type of school. It shows that around 60% were primary school principals.

Table 6 Distribution of principals by school type

		Frequency	Percent	Valid Percent
Valid	Primary (P-6)	449	59.9	60.3
	Secondary (7-12)	189	25.2	25.4
	P-10	5	.7	.7
	P-12	66	8.8	8.9
	Other	36	4.8	4.8
	Total	745	99.5	100.0
Missing		4	.5	
Total		749	100.0	

Table 7 shows the distribution of principals who replied to the questionnaire by sector. It reveals that around 70% were a principal of a school in the government sector.

Table 7 Distribution of principals by school sector

		Frequency	Percent	Valid Percent
Valid	Government	519	69.3	69.5
	Catholic	145	19.4	19.4
	Independent	83	11.1	11.1
	Total	747	99.7	100.0
Missing		2	.3	
Total		749	100.0	

Universities and Courses

Table 8 shows the distribution of universities from which respondents graduated. All Victorian universities offering teacher education courses are represented in this table. Less than one percent graduated from a university outside of Victoria. The largest number of graduates was from the University of Melbourne and Monash University.

Table 8 University from which first year teachers graduated as reported by teachers

		Frequency	Percent	Valid Percent
Valid	Australian Catholic University	132	11.7	11.8
	Charles Sturt-Albury	6	.5	.5
	Deakin University	154	13.7	13.8
	La Trobe University	146	13.0	13.1
	Monash University	210	18.7	18.8
	RMIT	93	8.3	8.3
	University of Ballarat	63	5.6	5.6
	University of Melbourne	249	22.2	22.3
	Victoria University of Technology	62	5.5	5.5
	Teacher pre-service outside Victoria	3	.3	.3
Total		1118	99.5	100.0
Missing		6	.5	
Total		1124	100.0	

Table 9 shows the distribution of universities from which teachers graduated as reported by the school principals. All Victorian universities offering teacher education courses are represented in this table.

Table 9 University from which first year teachers graduated as reported by principals

		Frequency	Percent	Valid Percent
Valid	Australian Catholic University	108	14.4	16.0
	Charles Sturt-Albury	9	1.2	1.3
	Deakin University	114	15.2	16.9
	La Trobe University	78	10.4	11.6
	Monash University	97	13.0	14.4
	RMIT	46	6.1	6.8
	University of Ballarat	50	6.7	7.4
	University of Melbourne	108	14.4	16.0
	Victoria University of Technology	45	6.0	6.7
	Teacher pre-service outside Victoria	20	2.7	3.0
Total		675	90.1	100.0
Missing		74	9.9	
Total		749	100.0	

Table 10 shows the number of respondents who graduated from each course at each university. The largest group of teachers graduated with a Graduate Diploma of Education (Secondary) from the University of Melbourne and Monash University.

Table 10 Number of respondent teachers graduating from each course

		Frequency	Percent	Valid Percent
Valid	ACU - BA/B of Teach	35	3.1	3.1
	ACU - B Ed. (Primary)	17	1.5	1.5
	ACU - Postgrad B Ed. (Primary)	15	1.3	1.3
	ACU - Grad Dip. Ed. (Secondary)	65	5.8	5.8
	Charles Sturt - B Ed. (Early Childhood)	6	.5	.5
	Deakin - B Teach (Prim) & other degree	65	5.8	5.8
	Deakin - B Teach (Sec) & other degree	30	2.7	2.7
	Deakin - B Teach (Prim/Sec) - Post grad.	58	5.2	5.2
	Deakin - Other	1	.1	.1
	La Trobe - B Teach another year of study	18	1.6	1.6
	La Trobe - Grad Dip. Ed. (Prim)	41	3.6	3.7
	La Trobe - Grad Dip. Ed. (Sec)	56	5.0	5.0
	La Trobe - Grad Dip. Ed (P-12)	13	1.2	1.2
	La Trobe - Grad Dip. Technology Ed.	18	1.6	1.6
	Monash - B Ed. (Prim with other degree)	9	.8	.8
	Monash - B Ed. (Sec with other degree)	23	2.0	2.1
	Monash - B Primary Ed.	35	3.1	3.1
	Monash - B Early Childhood Ed.	12	1.1	1.1
	Monash - Grad Dip. Ed. (Sec)	108	9.6	9.7
	Monash - Grad Dip. Ed. (Primary)	22	2.0	2.0
	Monash - Other	1	.1	.1
	RMIT - B Ed.	38	3.4	3.4
	RMIT - B Applied Sci. (PE)	12	1.1	1.1
	RMIT - Grad Dip. Ed. (Sec)	23	2.0	2.1
	RMIT - Grad Dip. Ed. (Prim)	20	1.8	1.8
	Uni of Ballarat - BA/B Teach	28	2.5	2.5
	Uni of Ballarat - B Ed.	1	.1	.1
	Uni of Ballarat - B Teach (Post grad)	2	.2	.2
	Uni of Ballarat - B Ed. (PE)	20	1.8	1.8
	Uni of Ballarat - Grad Dip. Ed. (Sec)	12	1.1	1.1
	Uni of Melbourne - B Ed. (Prim)	36	3.2	3.2
	Uni of Melbourne - B Teach (Prim)	32	2.8	2.9
	Uni of Melbourne - B Teach (Sec)	21	1.9	1.9
	Uni of Melbourne - Grad Dip. Ed. (Sec)	156	13.9	14.0
Uni of Melbourne - Other	4	.4	.4	
VUT - B Ed.	36	3.2	3.2	
VUT - Grad Dip. Sec. Ed.	26	2.3	2.3	
Pre-service outside Vic - in Australia	2	.2	.2	
Pre-service outside Vic - overseas	1	.1	.1	
	Total	1118	99.5	100.0
Missing		6	.5	
Total		1124	100.0	

Table 11 shows the distribution of teachers who graduated from each course at each university as reported by the respondent principals.

Table 11 Number of teachers graduating from each course as reported by principals

		Frequency	Percent	Valid Percent
Valid	ACU - BA/B of Teach	30	4.0	4.4
	ACU - B Ed. (Primary)	51	6.8	7.6
	ACU - Postgrad B Ed. (Primary)	2	.3	.3
	ACU - Grad Dip. Ed. (Secondary)	25	3.3	3.7
	Charles Sturt - B Ed. (Early Childhood)	9	1.2	1.3
	Deakin - B Teach (Prim) & other degree	71	9.5	10.5
	Deakin - B Teach (Sec) & other degree	15	2.0	2.2
	Deakin - B Teach (Prim/Sec) - Post grad.	26	3.5	3.9
	Deakin - Other	2	.3	.3
	La Trobe - B Teach another year of study	24	3.2	3.6
	La Trobe - Grad Dip. Ed. (Prim)	26	3.5	3.9
	La Trobe - Grad Dip. Ed. (Sec)	12	1.6	1.8
	La Trobe - Grad Dip. Ed (P-12)	9	1.2	1.3
	La Trobe - Grad Dip. Technology Ed.	7	.9	1.0
	Monash - B Ed. (Prim with other degree)	14	1.9	2.1
	Monash - B Ed. (Sec with other degree)	18	2.4	2.7
	Monash - B Primary Ed.	20	2.7	3.0
	Monash - B Early Childhood Ed.	4	.5	.6
	Monash - Grad Dip. Ed. (Sec)	32	4.3	4.7
	Monash - Grad Dip. Ed. (Primary)	9	1.2	1.3
	Monash - Other	-	-	-
	RMIT - B Ed.	22	2.9	3.3
	RMIT - B Applied Sci. (PE)	8	1.1	1.2
	RMIT - Grad Dip. Ed. (Sec)	6	.8	.9
	RMIT - Grad Dip. Ed. (Prim)	10	1.3	1.5
	Uni of Ballarat - BA/B Teach	14	1.9	2.1
	Uni of Ballarat - B Ed.	15	2.0	2.2
	Uni of Ballarat - B Teach (Post grad)	2	.3	.3
	Uni of Ballarat - B Ed. (PE)	14	1.9	2.1
	Uni of Ballarat - Grad Dip. Ed. (Sec)	5	.7	.7
	Uni of Melbourne - B Ed. (Prim)	34	4.5	5.0
	Uni of Melbourne - B Teach (Prim)	18	2.4	2.7
	Uni of Melbourne - B Teach (Sec)	9	1.2	1.3
	Uni of Melbourne - Grad Dip. Ed. (Sec)	46	6.1	6.8
Uni of Melbourne - Other	1	.1	.1	
VUT - B Ed.	34	4.5	5.0	
VUT - Grad Dip. Sec. Ed.	11	1.5	1.6	
Pre-service outside Vic - in Australia	19	2.5	2.8	
Pre-service outside Vic - overseas	1	.1	.1	
Total		675	90.1	100.0
Missing		74	9.9	
Total		749	100.0	

The differences in frequencies of courses reported by teachers (Table 10) and principals (Table 11) means that some caution needs to be exercised when comparing differences

between the teachers and principals on other variables. This caution is needed because the data from the two groups are not based upon an identical mix of courses and universities. The impact of this on the research, however, is likely to be minor as the study is not concerned with comparisons between universities or courses within universities, but patterns across broad categories of course types. Any fine-grained differences between the principals and the teachers are unlikely to change findings based upon these broad categories.

In schools and classrooms

This section of the report considers those factors thought likely to influence the perceptions of teachers when they were describing their pre-service teacher education. The reasons for selecting these factors is described more fully in Section 1, but they cover aspects of the school, the classroom and the students which might influence how the respondents felt about their pre-service course.

Of the 1124 respondents, 1056 (94%) taught at a school in 2003. Thus, just over 5% did not teach in their first year after graduation. Of those teaching, 27.9% indicated that they were in an on-going position, 58.5% indicated that they were on a contract and 21.6% indicated that they had worked as casual relief teachers. (Note that as a teacher could have worked under a combination of these conditions during 2003, the categories are not mutually exclusive.)

Table 12 shows the number of schools at which the teacher respondents worked in 2003. It reveals that around 85% worked in only one school.

Table 12 Number of schools at which teachers worked in 2003

		Frequency	Percent	Valid Percent
Valid	0	64	5.7	5.7
	1	962	85.6	85.6
	2	78	6.9	6.9
	3	15	1.3	1.3
	4	3	.3	.3
	5	2	.2	.2
Total		1124	100.0	100.0

Table 13 shows in which types of schools the respondents were teaching in 2003. It is possible that a respondent taught in more than one type of school so there is some double counting in Table 13. This can be seen in the Table because it sums to 1185 when there were 1124 teachers who responded. The percentages are thus based not upon the number of teachers, but the number of different schools at which these teachers taught.

Table 13 Distribution of teachers by school type

		Frequency	Percent
Valid	Primary (P-6)	506	42.7
	Secondary (7-12)	474	40.0
	P-10	21	1.8
	P-12	128	10.8
	Other	56	4.7
Total		1185	100.0

** Note that there is doubling counting in this table.*

Table 14 shows the distribution of teachers by sector. Note that as some teachers taught in more than one school, this table contains double counting. Just over two-thirds of teachers taught at a government sector school.

Table 14 Distribution of teachers by school sector

		Frequency	Percent
Valid	Government	802	67.4
	Catholic	218	18.3
	Independent	170	14.3
Total		1190	100.0

** Note that there is doubling counting in this table.*

Table 15 shows the number of respondents who taught at each year level. (This can be seen in the column headed 'Total'.)

In Table 15, roughly equal proportions were distributed across each of the year levels in primary schools. Somewhat fewer taught at Year 12 than other year levels in secondary schools. Respondents were also asked to indicate if they were qualified to teach the year level(s) they had taught in 2003.

Between 13 to 20% of primary teachers reported that in 2003 (their first year of teaching), they felt they were not qualified to teach at the year level at which they were working.. In contrast, only 2 to 3% of respondents in secondary schools reported that they were not qualified to teach at any given year level. This finding is somewhat puzzling. It may be that generalist primary teachers do not feel that they have received specialised training for the various stages of development (early childhood, middle years and so on), and that this is less of a concern to secondary teachers.

Table 15 Number teaching at each year level and whether they felt they were qualified to teach at this level

	Qualified to Teach		
	No	Yes	Total
Number teaching Prep	38	195	233
<i>% qualified to teach Prep</i>	16.3%	83.7%	100.0%
Number teaching Year 1	42	254	296
<i>% qualified to teach Year 1</i>	14.2%	85.8%	100.0%
Number teaching Year 2	38	241	279
<i>% qualified to teach Year 2</i>	13.6%	86.4%	100.0%
Number teaching Year 3	40	221	261
<i>% qualified to teach Year 3</i>	15.3%	84.7%	100.0%
Number teaching Year 4	45	211	256
<i>% qualified to teach Year 4</i>	17.6%	82.4%	100.0%
Number teaching Year 5	53	190	243
<i>% qualified to teach Year 5</i>	21.8%	78.2%	100.0%
Number teaching Year 6	50	180	230
<i>% qualified to teach Year 6</i>	21.7%	78.3%	100.0%
Number teaching Year 7	12	404	416
<i>% qualified to teach Year 7</i>	2.9%	97.1%	100.0%
Number teaching Year 8	13	422	435
<i>% qualified to teach Year 8</i>	3.0%	97.0%	100.0%
Number teaching Year 9	13	419	432
<i>% qualified to teach Year 9</i>	3.0%	97.0%	100.0%
Number teaching Year 10	12	411	423
<i>% qualified to teach Year 10</i>	2.8%	97.2%	100.0%
Number teaching Year 11	7	293	300
<i>% qualified to teach Year 11</i>	2.3%	97.7%	100.0%
Number teaching Year 12	4	174	178
<i>% qualified to teach Year 12</i>	2.2%	97.8%	100.0%
Number teaching 'other'	11	9	20
<i>% qualified to teach 'other'</i>	-	-	-

Table 16 shows the number of respondents who taught in each key learning area at a secondary school. (This can be seen in the column headed 'Total'.) English, Mathematics and Science were the key learning areas which were most commonly taught. Respondents were also asked to indicate if they were qualified to teach the key learning area(s) they had taught in 2003. Figure 2 shows this more clearly. It can be seen that for SOSE and Science, relatively few teachers (about 15%) reported that they were unqualified to teach in these areas. However, for all other key learning areas from 25 to 30% of teachers reported teaching in an area for which they were not qualified.

Table 16 Number teaching each key learning area and whether they felt they were qualified to teach at this level

	Qualified to Teach		
	No	Yes	Total
Number teaching Arts	49	128	177
%	27.7%	72.3%	100.0%
Number teaching English	86	193	279
%	30.8%	69.2%	100.0%
Number teaching Health & PE	66	164	230
%	28.7%	71.3%	100.0%
Number teaching LOTE	39	71	110
%	35.5%	64.5%	100.0%
Number teaching Mathematics	90	158	248
%	36.3%	63.7%	100.0%
Number teaching Science	38	210	248
%	15.3%	84.7%	100.0%
Number teaching SOSE	39	244	283
%	13.8%	86.2%	100.0%
Number teaching Technology	53	119	172
%	30.8%	69.2%	100.0%
Number teaching 'Other'	46	55	101
%	45.5%	54.5%	100.0%

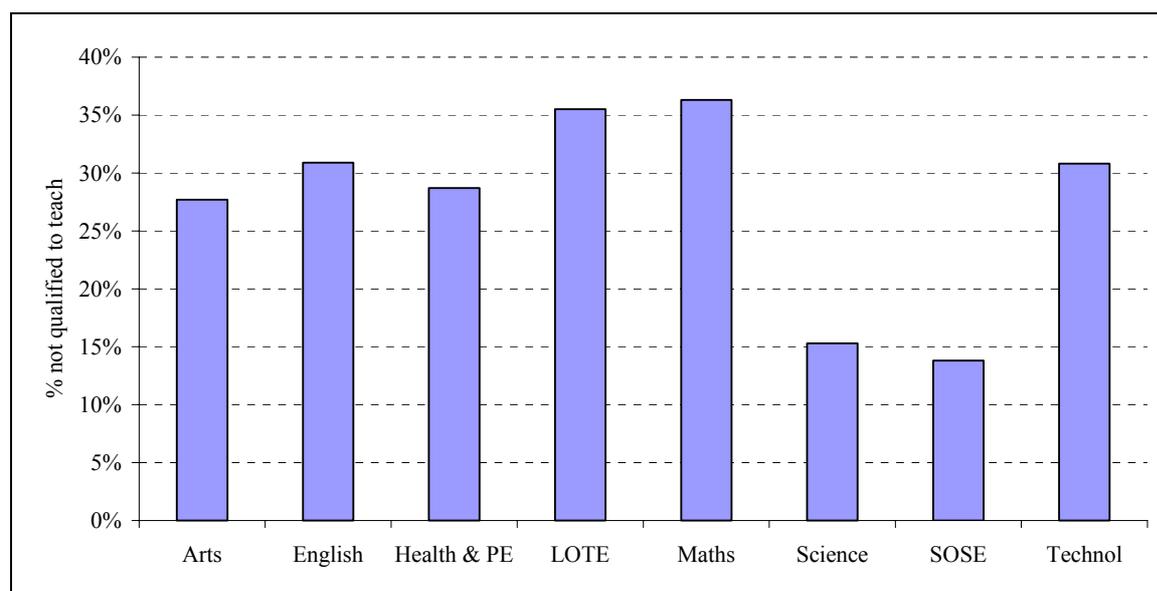


Figure 2 Percentage of teachers who taught in a key learning area for which they felt they were not qualified.

Respondents were asked how many class contact hours per week they had in their first year of teaching. They averaged 19 hours 35 minutes (standard deviation 4 hours 35 minutes). Figure 3 shows the distribution of hours taught.

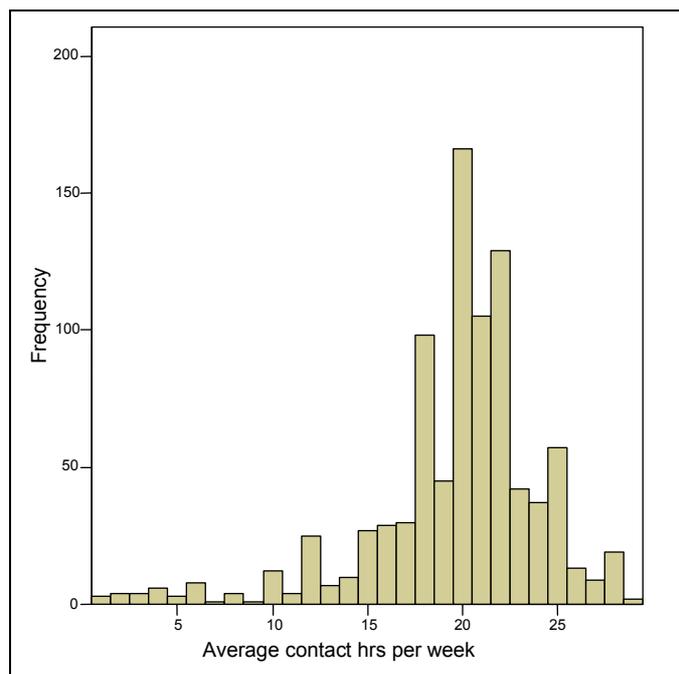


Figure 3 Distribution of the average contact hours taught per week

Some 64% of respondents indicated that their school provided an induction program for them. Of these, just under 60% indicated that it had supported them to a moderate or major extent in the development of their teaching practice. Nearly 80% of respondents indicated that their colleagues had supported them in the development of their teaching practice to a moderate or major extent.

Respondents were also asked about mentoring in their school. (If they worked at more than one school, they were asked to think of the school in which they spent most time in 2003.) Just over 60% indicated that they had been formally allocated a mentor in their school. Of these, 40% met with their mentor once a week and 20% met twice a week. Around 25% met three or more times per week. A little over 60% of respondents indicated that these meetings were either helpful or very helpful.

The language background and the literacy levels of the students in the school where the respondent worked were also investigated. A wide range of cultural backgrounds, or low levels of literacy achievement or a combination of both factors could impose significant demands upon a new teacher, and also test the adequacy of their pre-service education. Table 17 shows that around 20% had nearly all their students with English as a second language. Just over half reported that they had hardly any students with English as a second language.

Table 17 Proportion of teachers reporting numbers of students taught who have English as a second language

		Frequency	Percent	Valid Percent
Valid	Nearly 100%	205	18.2	19.5
	About 75%	55	4.9	5.2
	About half	81	7.2	7.7
	About 25%	156	13.9	14.8
	Hardly any	555	49.4	52.8
	Total	1052	93.6	100.0
Missing		72	6.4	
Total		1124	100.0	

Table 18 shows that around 20% had half or more of their students' with literacy problems. Just on 80% had 25% or fewer of their students with literacy problems.

Table 18 Proportion of teachers reporting numbers of students taught who have English literacy problems

		Frequency	Percent	Valid Percent
Valid	Nearly 100%	17	1.5	1.6
	About 75%	59	5.2	5.6
	About half	131	11.7	12.5
	About 25%	428	38.1	41.0
	Hardly any	410	36.5	39.2
	Total	1045	93.0	100.0
Missing		79	7.0	
Total		1124	100.0	

Evidence of bias in the set of returned questionnaires

It is important to be confident that the sample of data used in the analyses is representative of the population of beginning teachers. For this study, a census of all first-year teachers was taken, however not all responded. Some evidence is needed to show that these respondents are typical of the population. Only two characteristics of the population were known: their age and their gender. The population surveyed consisted of 26.7% who were male and 62.3% who were aged 25 years and over. Of those responding, 21.1% were males and 54.5% were aged over 25 years. Thus, there was a slight over-representation of females in the achieved sample, and a somewhat greater under-representation of over 25s. This may bias the results – views associated with females and younger persons are heard a little more often – but it is unlikely that this effect will be large given the relatively small differences in the distribution of gender and ages between the sample and the population.

Summary

This section of the report provided a description of some of the characteristics of teachers who replied to the survey, the kinds of schools in which they worked, the support they received at the school, and challenges that they may have faced in the school and in the classroom. Specifically, it showed that:

- Most of the teachers who responded were female, over 50% were older than 25 years, and 45% had had previous careers before entering teaching;
- About one-fifth of teacher respondents graduated from the University of Melbourne and another one-fifth graduated from Monash. All Victorian institutions providing pre-service teacher education courses were represented in the data.
- About 85% of respondents had worked in only one school during 2003, with just over 40% working in a primary school and around 10% in a P-12 school. The rest worked in a secondary school. Two-thirds worked in the government sector.
- There was a fairly even distribution of teachers across year levels taught except for Year 12 where fewer reported teaching.
- English, Mathematics and Science were the key learning areas most commonly taught by the new teachers. For SOSE and Science around 15% who had taught in these areas reported that they were not qualified to teach them, compared with around 25% to 30% in other key learning areas.
- On average the teachers had 19 hours and 35 minutes class contact per week.
- Most teachers reported that they few students with literacy problems or students from a non-English speaking background.

In this way, the data provided a good coverage of pre-service teacher education courses and providers, across a wide cross section of the new teaching population of 2003.

3. SCALES

The study proposes that a number of factors will shape the perceptions first-year teachers will have of their pre-service education courses. These include:

1. The opportunity to learn what teachers do and need to know in order to be effective.
2. The extent to which they understood the professional knowledge needed by teachers.
3. The extent to which they were prepared by their courses for professional practice as teachers.

To measure these factors a set of scales were constructed. This section of the report describes the content of these scales. See the technical report for a description of their psychometric properties.

The use of scales

In this study a number of constructs are measured, for example, professional knowledge. These constructs are not directly observable so to assign scores to them two approaches can be used. The first approach asks respondents to provide a measure on a single item. For example, ‘To what extent did you acquire professional knowledge in your pre-service course?’ This approach is limited in value. The key concept – professional knowledge – is open to a wide range of interpretations. Different respondents may also weight its various aspects in different ways. The second approach seeks to overcome these problems by using multiple-item scales. In this approach a theory is employed to develop a range of indicators for the underlying concept. The respondent is then asked to respond to questions about these indicators. This helps to constrain the range of interpretations about the construct by covering as many aspects of it as possible, with weightings determined by the researcher. If responses to these items are highly correlated then the resulting scale is said to be uni-dimensional. However, in some instances the construct is so complex that it is not possible to capture it with just one dimension. This was found in this study, for example, where two dimensions to professional knowledge were identified – content knowledge, and knowledge of students. Because of the advantages of multi-item scales, these were used for the key constructs in this study. (For a clear discussion of scaling see Kidder & Judd, 1987, pp. 192 and following.)

Reliability

The reliability of the scales is reported using Cronbach's alpha. This measures how well the items making up the scale 'go together'; how consistent they are with each other. Cronbach's alpha provides a measure of the extent to which the scale is tapping a uni-dimensional latent construct. When data have a uni-dimensional structure, Cronbach's alpha will be high. A value of 0.8 or greater is widely regarded as 'high' in the social science. (Alpha ranges in value from 0 to 1.) Where alpha is low, it is likely that the data are multi-dimensional and the scale is therefore not tapping one construct. When this occurs, one solution is to conduct a factor analysis which is designed to identify how many dimensions there may be in the data, and which items contribute to each of these dimensions.

Opportunity to Learn scales

To describe what opportunities to learn there had been in their pre-service teacher education course, respondents were asked the following question:

Q22 To what extent did your pre-service teacher education program (including the practicum) gave you the opportunity to ...

(If you completed a degree plus graduate diploma (Dip. Ed.) or other post graduate pre-service teacher education program, please consider your undergraduate degree as part of your preparation.)

A factor analysis (a technical report is available on request) suggested that there were four dimensions underlying these data:

1. Opportunity to learn content knowledge and how it is taught. The following items tapped this dimension:

- a) gain a deep understanding of the content knowledge you were expected to teach
- b) make clear links between content or subject matter units and units about how to teach the content
- c) make clear links between theoretical and practical aspects of teaching
- d) develop a sound understanding of how students learn the specific content that you were expected to teach
- e) learn how to probe students' prior understandings of content you were about to teach
- f) learn how to present content in ways that build on students' existing understanding
- g) learn methods of teaching specific to the content you were expected to teach

This scale had good reliability as indexed by Cronbach's alpha (0.88).

2. Opportunity to learn the practice of teaching. The following items tapped this dimension:

- h) see models of expert teachers in action
- i) observe models illustrating new teaching practices
- j) learn methods for reflecting on your teaching
- k) practise analysing and reflecting on examples of your practice
- l) use teaching standards to identify specific areas of your practice that you needed to develop
- m) develop and test new teaching practices
- q) analyse your teaching practice in relation to standards for good teaching practice

This scale had good reliability (Cronbach's alpha = 0.88).

3. Opportunity to learn via feedback from university staff. The following items tapped this dimension:

- n) practise new teaching skills, with feedback from your tutor/lecturer
- o) receive useful feedback about your teaching from your university tutor/lecturer

This scale has adequate reliability (Cronbach's alpha = 0.78).

4. Opportunity to learn assessment and planning. The following items tapped this dimension:

- r) examine student work in relation to standards for student learning
- s) learn how to diagnose students' achievement in relation to expected learning outcomes
- t) plan and prepare units of work collaboratively
- u) assess and monitor collaboratively, students' progress against standards for student learning
- v) plan and assess in accordance with the CSF/VCE

This scale had good reliability (Cronbach's alpha = 0.88).

Professional knowledge scales

To describe to what extent their pre-service teacher education course had provided them with an understanding of professional knowledge, respondents were asked the following question:

Q 23 Keeping in mind your teaching experiences in 2003, please indicate the extent to which *your pre-service teacher education program* gave you a good understanding of ...

(If you completed a degree plus graduate diploma (Dip. Ed.), or other post graduate pre-service teacher education program, please consider your undergraduate degree as part of your preparation.)

A factor analysis (see the technical report) suggested that there were two dimensions underlying these data:

1. Professional knowledge about content. The following items tapped this dimension:

- a) the content areas you were qualified to teach
- b) how to analyse students' existing understanding of topics you are about to teach
- c) how to build on students' existing knowledge and experience
- e) current developments in your field of teaching
- h) resources to support your students' learning in the areas you are qualified to teach
- i) the CSF and/or VCE in the areas you are qualified to teach

This scale had good reliability (Cronbach's alpha 0.84).

2. Professional knowledge about students. The following items tapped this dimension:

- d) individual differences in student approaches to learning
- f) the effects of the social, cultural, religious and ethnic backgrounds of students on their learning
- g) how individual students learn and develop
- j) how to use findings from research to improve your knowledge and practice
- l) how cultural and gender differences can affect communication in the classroom
- m) ethical standards and codes of conduct expected of teachers

This scale had good reliability (Cronbach's alpha = 0.87).

Professional practice scales

To describe the extent to which their pre-service teacher education course provided them with an understanding of professional practice, respondents were asked the following question:

Q 24 Keeping in mind the requirements of your first teaching position, please indicate the extent to which *your pre-service teacher education program* prepared you to ...

A factor analysis (see The technical report) suggested that there were four dimensions underlying these data:

1. Professional practice to do with the curriculum. The following items tapped this dimension:

- a) design teaching and learning units/ programs relevant to your students
- b) communicate ideas and information clearly to your students
- c) use effectively the principles of curriculum documents (e.g. CSF)
- f) develop questions to challenge students and promote higher order thinking
- g) locate suitable curriculum materials and teaching resources

This scale had good reliability (Cronbach's alpha 0.84).

2. Professional practice to do with classroom management. The following items tapped this dimension:

- q) enhance student confidence and self-esteem
- r) use motivational strategies effectively
- s) encourage appropriate student behaviour
- u) provide flexible learning pathways
- v) incorporate effective classroom management strategies into your teaching
- w) make your teaching relevant to your students' experience

This scale had good reliability (Cronbach's alpha = 0.90).

3. Professional practice to do with assessment. The following items tapped this dimension:

- n) assess and monitor the progress of your students
- o) use assessment to give effective feedback to your students
- p) keep useful records of your students' progress

This scale had good reliability (Cronbach's alpha = 0.89).

4. Professional practice to do with cross-curriculum teaching. The following items tapped this dimension:

- i) incorporate opportunities for teaching literacy skills across the curriculum
- j) incorporate opportunities for teaching numeracy skills across the curriculum

This scale had good reliability (Cronbach's alpha = 0.82).

Other professional practice scales

To describe to what extent their pre-service teacher education course had provided them with an understanding of aspects of teaching not previously covered by professional knowledge or practice, respondents were asked the following question:

Q 25 Keeping in mind the requirements of your first teaching position, please indicate the extent to which *your pre-service teacher education program prepared you to ...*

A factor analysis (see The technical report) suggested that there were two dimensions underlying these data:

1. Reflection on own teaching. The following items tapped this dimension:

- f) reflect upon the effectiveness of your teaching
- g) reflect upon your professional knowledge
- h) identify your learning needs

This scale had good reliability (Cronbach's alpha 0.89).

2. Work with parents and others. The following items tapped this dimension:

- a) work with parents or guardians
- e) use assessment to give effective feedback to parents or guardians

This scale had good reliability (Cronbach's alpha = 0.81).

Quality of teaching at university during teacher education course scale

To describe the quality of teaching that respondents received during their teacher education course, respondents were asked the following question:

Q 29 How often did your university lecturers and tutors in your pre-service teacher education program ...

A factor analysis (see The technical report) suggested that there was one dimension underlying these data. This dimension was interpreted as the quality of university teaching. The items making up this scale were:

- a) model good teaching practices in their teaching
- b) draw on and use research relevant to the content of their courses
- c) model evaluation and reflection on their own teaching

- d) have recent experience in primary or secondary schools
(If you do not know, please do not tick a box for this row.)
- e) value the learning and experiences I had prior to starting the program
- f) link their university units to the school experience component of the program
- g) value the learning and experiences you had in your practicum

This scale had good reliability (Cronbach's alpha 0.83).

Quality of practicum scale

To describe the quality of the practicum during their teacher education course, respondents were asked the following question:

Q 35 Thinking about your practicum during your final year of your pre-service teacher education program, to what extent do you agree with the following statements?

A factor analysis (see The technical report) suggested that there was one dimension underlying these data. This dimension was interpreted as the quality of the practicum. The items making up this scale were:

- a) My supervising teacher(s) had a clear idea of what my university required me to do as part of my practicum
- b) I had a clear understanding of what was expected of me as a teacher in order to pass the practicum
- c) I used teaching standards as a guide to evaluating and reflecting on my teaching
- d) My supervising teacher(s) used clear and explicit standards when reviewing my lessons with me
- e) Overall, the feedback I received from my supervising teacher(s) helped me to improve my teaching
- f) The methods used to assess my ability to teach were valid
- g) My university lecturer(s) and my school-based supervising teachers had similar views on good teaching methods
- h) My supervising teacher(s) generally valued the ideas and approaches I brought from my university teacher education program
- i) Overall, my practicum experience was a valuable part of my preparation to become a teacher
- j) My supervising teacher(s) used criteria/standards provided by my university for evaluating my teaching

This scale had good reliability (Cronbach's alpha 0.87).

Summary

The following scales were developed for the study:

- Opportunity to learn scales, including:
 - Opportunity to learn content knowledge and how it is taught, which had good reliability
 - Opportunity to learn the practice of teaching , which had good reliability
 - Opportunity to learn via feedback from university staff, which had adequate reliability
 - Opportunity to learn assessment and planning, which had good reliability
- Professional knowledge scales, including:
 - Professional knowledge about content, which had good reliability
 - Professional knowledge about students, which had good reliability
- Professional practice scales, including:
 - Professional practice to do with the curriculum, which had good reliability
 - Professional practice to do with classroom management, which had good reliability
 - Professional practice to do with assessment, which had good reliability
 - Professional practice to do with cross-curriculum teaching, which had good reliability
 - Professional practice to do reflection on the teacher's own teaching, which had good reliability
 - Professional practice to do with parents and others in the school community, which had good reliability

- The quality of teaching at university during the teacher education course, which had good reliability
- Quality of the practicum scale which had good reliability

The set of scaled developed for use in this study all had good reliability.

4. PERCEPTIONS OF THE EFFECTIVENESS OF CURRENT TEACHER EDUCATION PROGRAMS

This section of the report describes the perceptions of the general level of effectiveness of current teacher education programs in Victoria. It does this by examining the average scores on the scales measuring:

1. Opportunity to learn during the pre-service program as perceived by new teachers
2. How well the pre-service program was perceived to prepare new teachers with adequate professional knowledge as perceived by the new teachers and the principals.
3. How well the pre-service program was perceived to prepare new teachers using professional practice as perceived by the new teachers and the principals.
4. The reported quality of teaching at the university during the pre-service teacher education program, the quality of the practicum as perceived by the new teachers.

It also considers the overall effectiveness of the pre-service program as perceived by new teachers.

Opportunity to learn during the pre-service program as perceived by new teachers

Figure 4 shows the mean score for each of the *Opportunity to learn* scales, namely:

- Opportunity to learn *content knowledge* and how it is taught.
- Opportunity to learn the *practice* of teaching
- Opportunity to learn via *feedback* from university staff
- Opportunity to learn *assessment and planning*

Only teachers provided data for these scales.

The data are summarised and presented as a graph which depicts the mean score on a scale and the 95% confidence intervals around the mean. These confidence intervals indicate the range within which the mean can be expected to be drawn 95% of the time if repeated samples of this size were drawn from the population. These confidence intervals are useful for they allow us to see where statistically significant differences are to be found; where they do not overlap with another category, the differences are statistically significant. For example, an examination of Figure 4 shows that for the *Opportunity to learn via feedback from university staff* scale had an average score of 2.55. In comparison, the average score on the

opportunity to learn to assessment and planning scale is just under 2.75. The vertical bars denoting the confidence intervals for these two variables do not overlap, so it can be concluded that the difference is statistically significant (that is, it is probable that the observed difference will be found in the population).

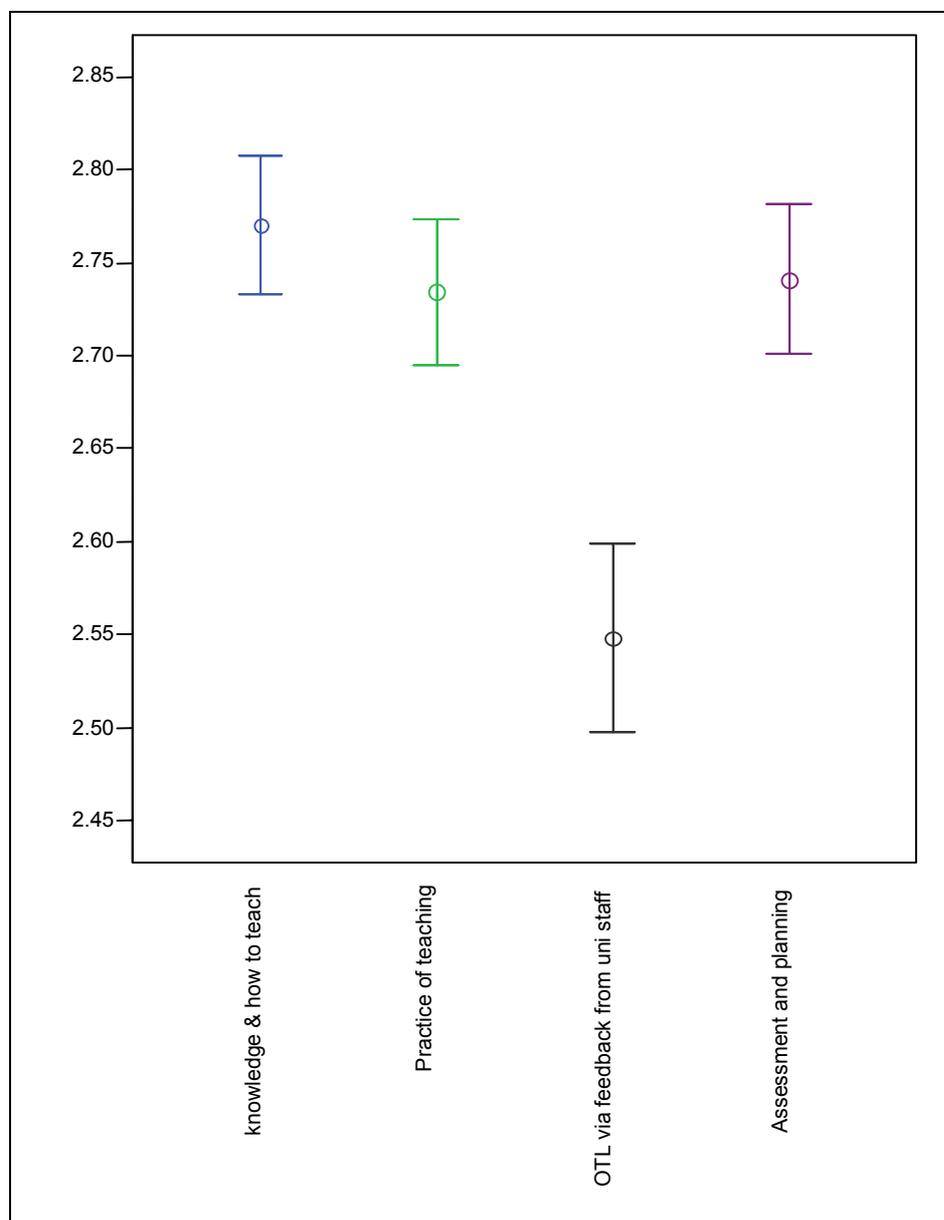


Figure 4 Mean scores on each *Opportunity to learn* scale (showing 95% confidence intervals)

Further examination of the opportunity to learn scale scores shows that there is no statistically significant difference between them except for the opportunity to learn via *feedback* scale, which is lower than the other three scales. These differences are all statistically significant.

Substantively, a mean of around 2.75 indicates that the new teachers perceived that they had a been given an opportunity to learn to *a moderate extent* on three of these scales, and between *a minor* and *moderate extent* on the opportunity to learn via *feedback*.

How well the pre-service program was perceived to prepare new teachers with adequate professional knowledge as perceived by the new teachers and the principals.

Figure 5 shows the average score on the two professional knowledge scales. It can be seen that the average score for professional knowledge of *Content* was a little lower than for professional knowledge of students but that these differences are not statistically significant. Both of these averages can be substantively interpreted as meaning that the new teachers perceived that they were provided with professional knowledge to a *moderate* extent.

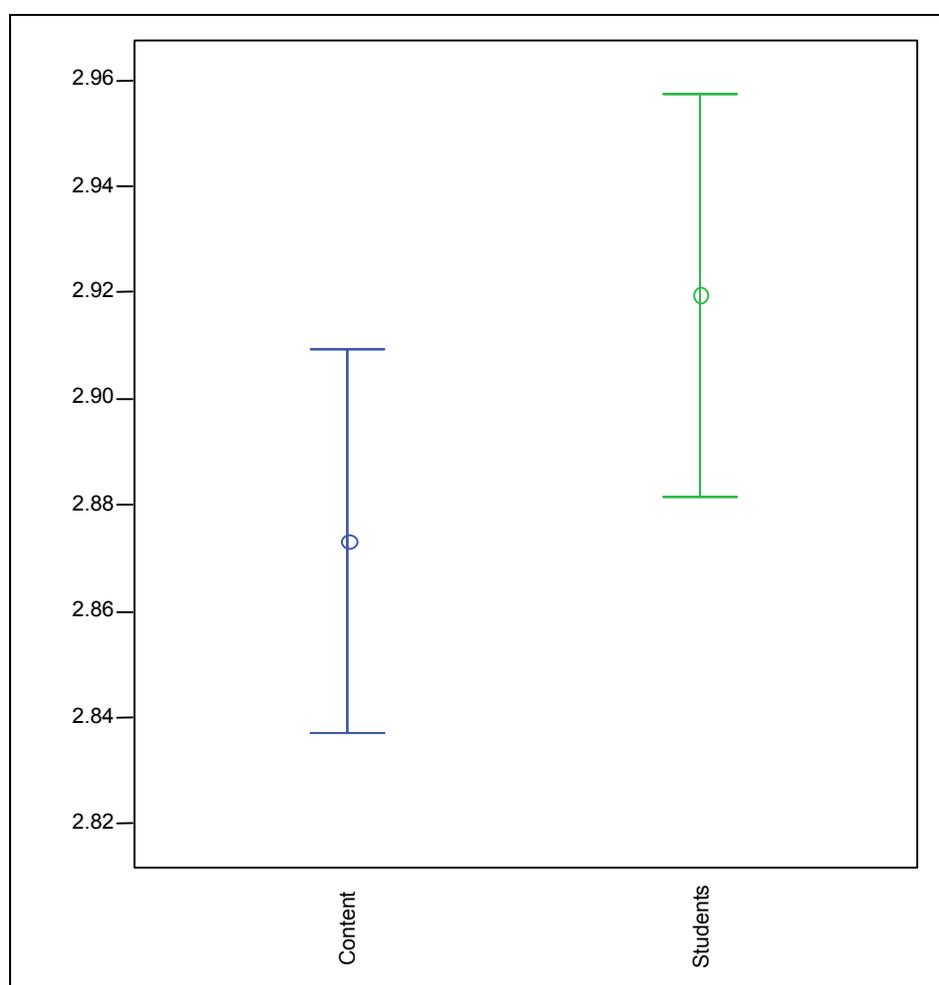


Figure 5 Mean scores of teachers on each *Professional knowledge* scales (showing 95% confidence intervals)

Figure 6 shows the average scores of the principals on each of the professional knowledge scales. It can be seen that there is a statistically significant difference between the two scales with knowledge of *Content* being higher than knowledge of *Students*. Substantively, the

principal's average scores can be interpreted as meaning that they perceived the new graduates as having a good understanding of professional knowledge to a *moderate extent*. This is similar to the average ratings given by the new teachers. By comparing Figure 4 and Figure 5, it can be seen that principals appear to be less harsh in their judgement of the professional knowledge of the new teachers than the teachers on the *Content* scale, but there is not a statistically significant difference between them and the new teachers on the *Student* scale (as the confidence limits overlap).

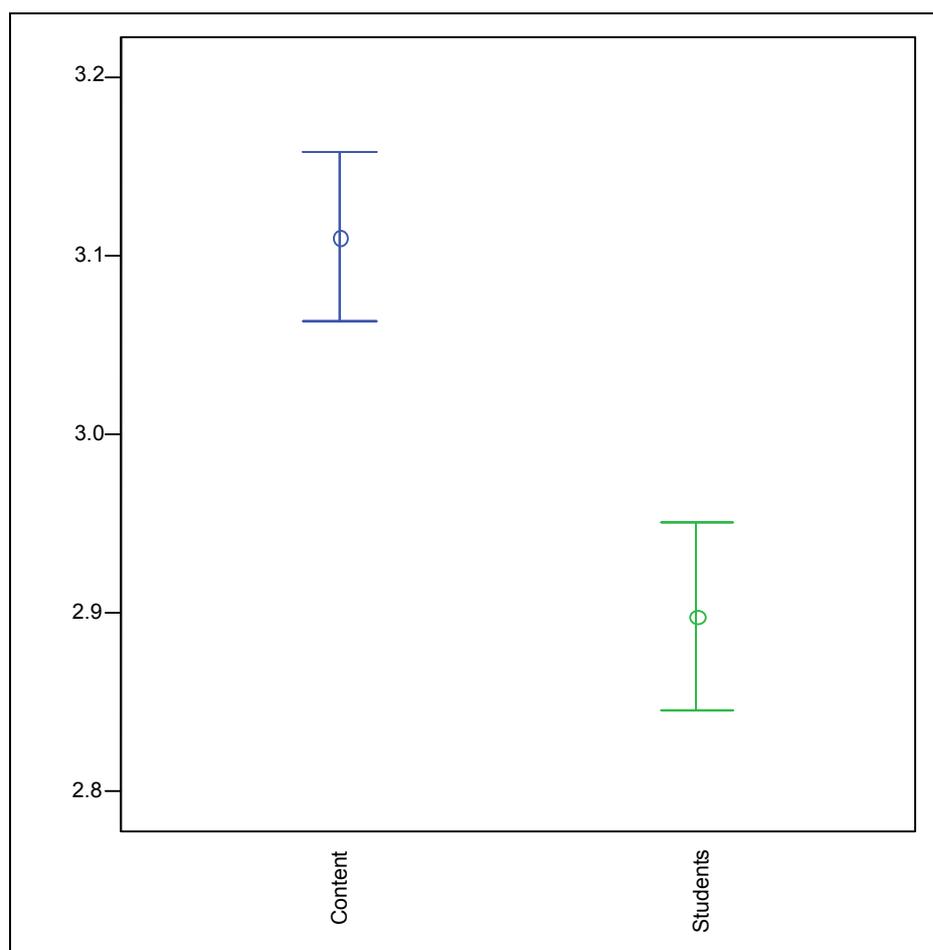


Figure 6 Mean scores of principals on each *Professional knowledge* scales (showing 95% confidence intervals)

How well the pre-service program was perceived to prepare new teachers using professional practice as perceived by the new teachers and the principals.

Figure 7 shows the average score on the six professional practice scales, as rated by the new teachers. These scales are:

1. Professional practice to do with the *curriculum*.

2. Professional practice to do with *classroom management*.
3. Professional practice to do with *assessment*.
4. Professional practice to do with *cross-curriculum teaching*.
5. *Reflection* on own teaching.
6. *Work with parents* and others.

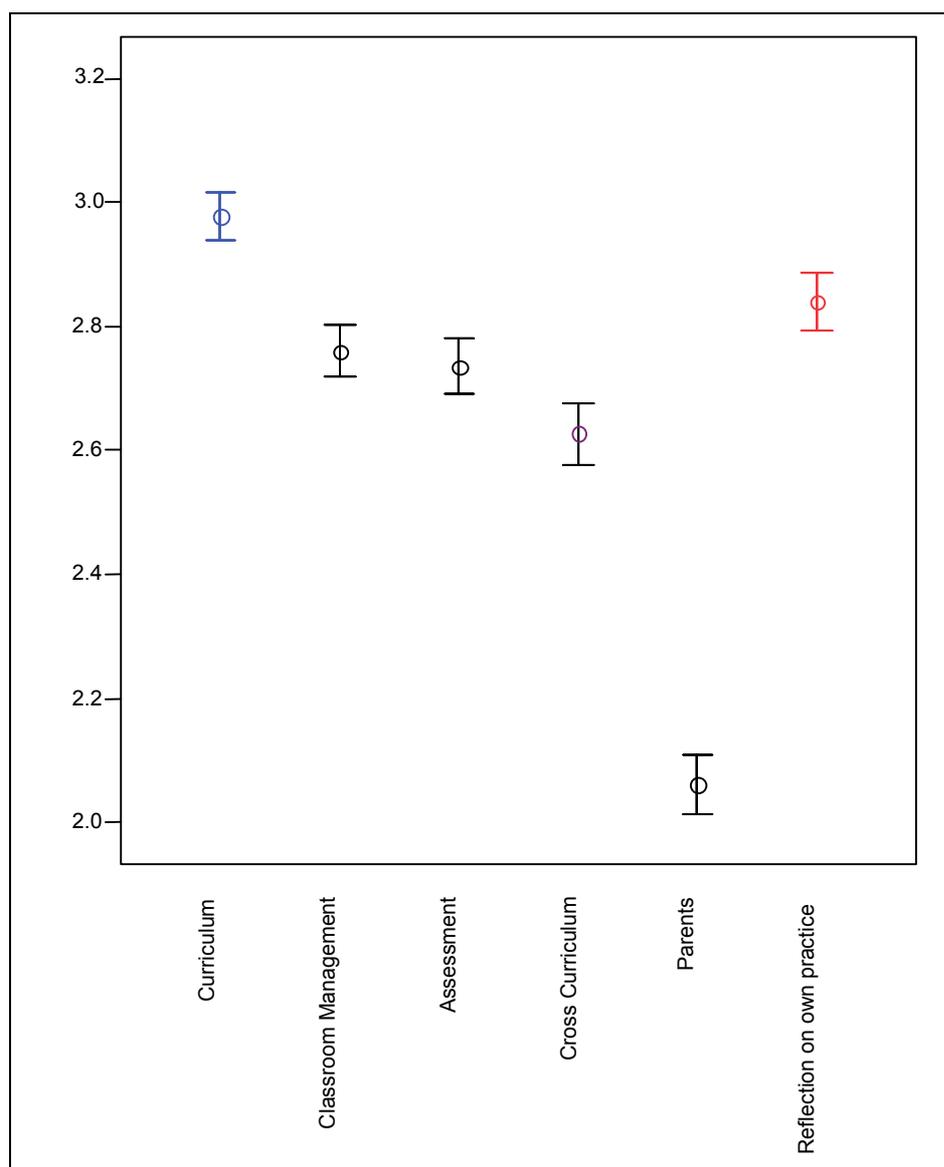


Figure 7 Mean scores of teachers on each *Professional practice* scales (showing 95% confidence intervals)

In Figure 7 it can be seen that:

1. The highest score was on professional practice to do with the *curriculum*, which is statistically significantly higher than any of the other professional practice measures.
2. The scores on professional practice to do with *classroom management* and with *assessment* are similar to each other, but only the assessment measure is statistically different from the measure of *reflection on own teaching*.
3. Professional practice to do with *cross-curriculum teaching* is statistically significantly lower than all other professional practice measures apart from *work with parents*.
4. Professional practice involving *work with parents* and others is much lower than all other professional practice measures. All of these differences are statistically significant.

Substantively, teachers are indicating that, broadly, they feel that they have been prepared for professional practice to *a moderate extent* by their pre-service program except for *work with parents* where they have been prepared to *a minor extent*. They see themselves as best prepared for professional practice to do with the *curriculum*.

There is a similar pattern of responses from the principals, although again, they appear somewhat less harsh in their judgements than the teachers. This can be seen in Figure 8. The main features are:

1. The highest score was on professional practice to do with the *curriculum*, which is statistically significantly higher than any of the other professional practice measures. This finding is the same as for the teachers.
2. The scores on professional practice to do with *classroom management*, with *assessment* and with *reflection on practice* are similar to each other. They are not statistically different from each other. This differs a little from the teachers where there was a difference between *assessment* and *reflection on own teaching*.
3. Professional practice to do with *cross-curriculum teaching* is statistically significantly lower than all other professional practice measures apart from *work with parents*. This is the same as for the teachers.

4. Professional practice involving *work with parents* and others is much lower than all other professional practice measures. All of these differences are statistically significant. This, too, is the same as for the teachers.

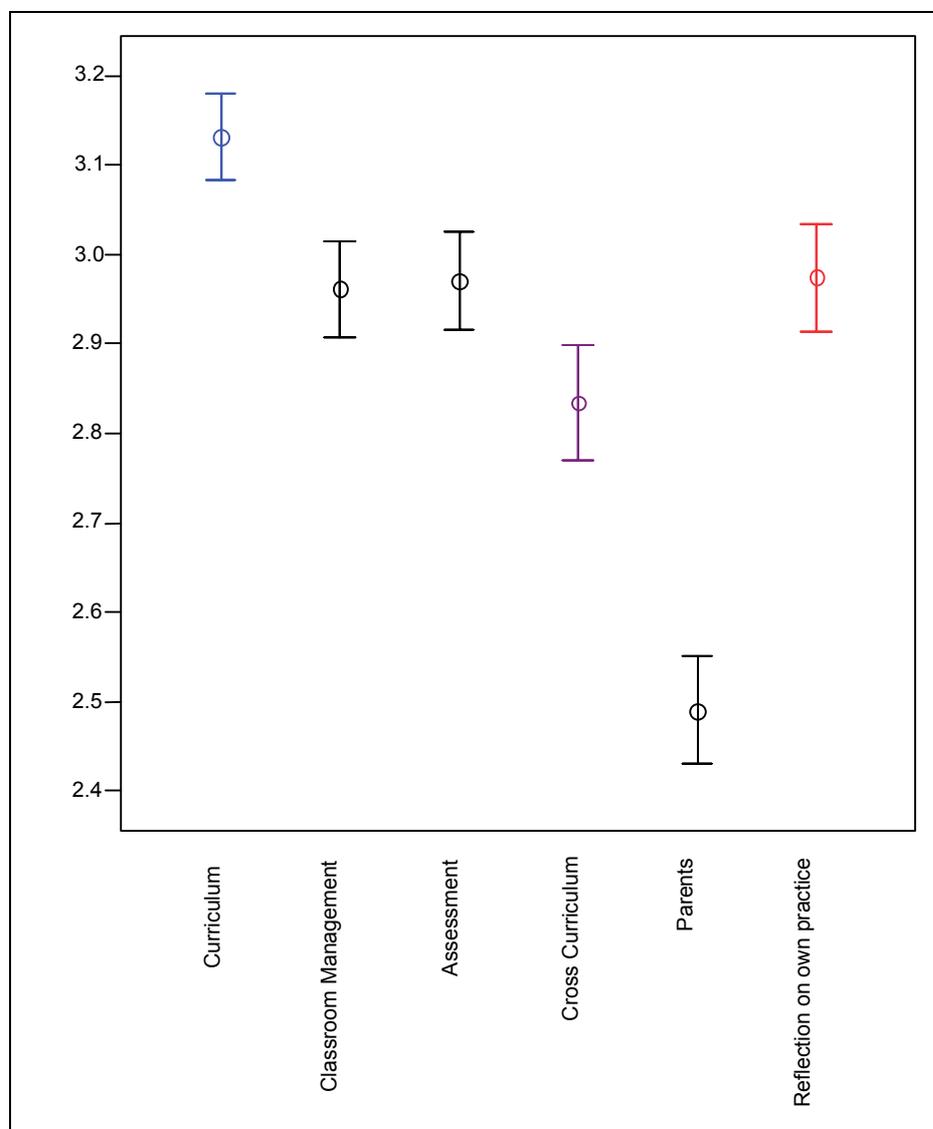


Figure 8 Mean scores of principals on each *Professional practice* scales (showing 95% confidence intervals)

Substantively, principals are indicating that, broadly, they feel that new teachers have been prepared for professional practice to *a moderate extent* by their pre-service program except for *work with parents* where they have been prepared to *a minor extent*. They see the teachers as best prepared for professional practice to do with the *curriculum*. This is the same pattern as for the teachers.

The differences between the principals and the teachers are all statistically significant, with the principals being less harsh in their judgements than the new teachers.

The reported quality of teaching at the university during the pre-service teacher education program, the quality of the practicum as perceived by new teachers.

Figure 9 shows the average score teachers gave for the quality of the teaching they received during their pre-service university course, and the quality of the practicum. Substantively, the teachers, on average, saw quality teaching being shown *sometimes* and the practicum as being *helpful*. Their response to the practicum appears to be more positive than to the quality of the teaching they received.

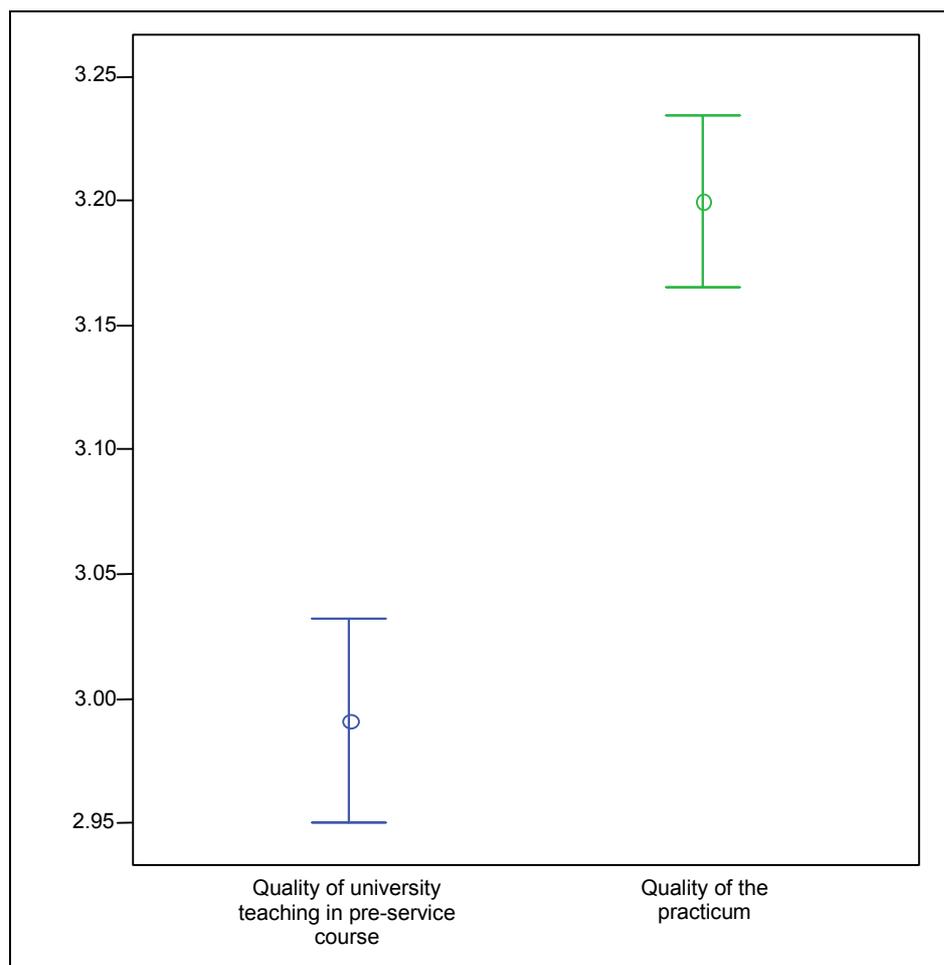


Figure 9 Mean scores of teachers on the quality of teaching in their pre-service course and quality of the practicum during this course (showing 95% confidence intervals)

The overall effectiveness of the pre-service program as perceived by new teachers.

Figure 10 shows the perceived effectiveness of the pre-service education course. The average rating was 3.1 (SD 0.78), which points to the teachers, on average seeing their pre-service program as being *effective*.

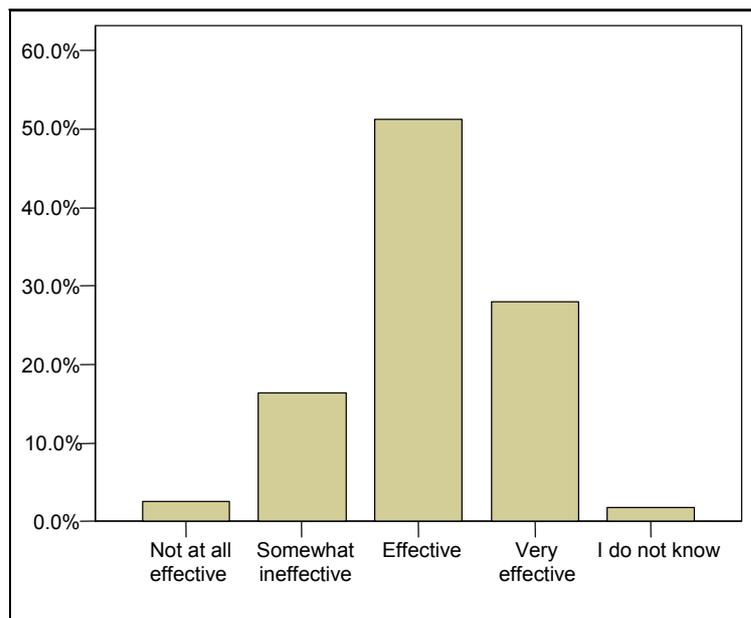


Figure 10 The perceived effectiveness of the pre-service education course

Figure 11 shows the proportion of teachers who would or would not recommend the pre-service course that they completed to a person interested in becoming a teacher. It shows that around 80% would recommend their course, indicating a high level of satisfaction with pre-service teaching education amongst new teachers.

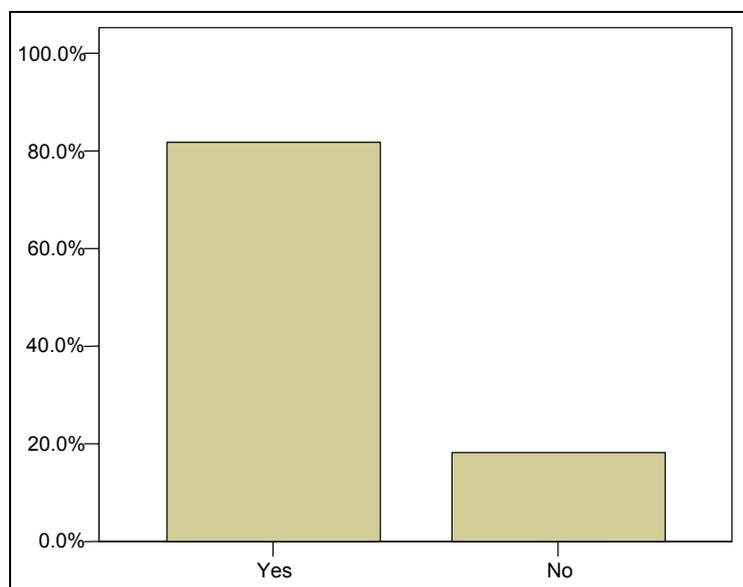


Figure 11 Whether the teacher would recommend their pre-service education course

Summary

These analyses indicate that:

1. Teachers perceived that they had been given an opportunity to learn during the pre-service program to *a moderate extent* except for learning via feedback from university staff where, on average it was between *a minor and moderate extent*.
2. Teachers perceived that their pre-service program provided them with professional knowledge to a moderate extent. This was a similar judgement to that made by principals, although they were somewhat less harsh in their judgement than the teachers.
3. Teachers perceived that their pre-service program prepared them to *a moderate extent*, except for *work with parents* where they felt they had been prepared to *a minor extent*. This was similar to the principals who were, again, less harsh in their judgement than the teachers.
4. The teachers reported that quality teaching at the university during the pre-service teacher education program was *sometimes* demonstrated and that the practicum was *helpful*.
5. Most teachers reported that their pre-service program was effective and nearly 80% would recommend the course to others wanting to become a teacher.

Overall principals and teachers view pre-service teacher education positively, although having room for improvement, especially in preparing for work with parents, and in the quality of teaching at universities.

5. DIFFERENCES BETWEEN COURSE TYPES – UNDERGRADUATE, DOUBLE DEGREE AND POSTGRADUATE

This section of the report examines differences between different types of pre-service teacher education courses. Courses were classified as:

1. Undergraduate (primary or secondary)
2. Undergraduate double-degree (primary or secondary)
3. Postgraduate (primary or secondary)

A number of courses that did not fit this classification were omitted from the analyses reported in this section. These included combined primary and secondary course – both undergraduate and postgraduate – and courses completed outside of Victoria or outside of Australia. Table 19 shows the number of responding teachers who completed each type of degree.

Table 19 Number of new teachers completing each type of teacher education degree

	Frequency	Percent	Valid Percent
Undergraduate	358	31.9	32.3
Double degree	116	10.3	10.5
Postgraduate	635	56.5	57.3
Total	1109	98.7	100.0
Missing	15	1.3	
Total	1124	100	

Table 20 shows the number of principals who reported a new teacher within their school for each type of degree.

Table 20 Number of principals reporting on type of teacher education degree

	Frequency	Percent	Valid Percent
Undergraduate	353	47.1	54.1
Double degree	71	9.5	10.9
Postgraduate	228	30.4	35.0
Total	652	87.0	100.0
Missing	97	13.0	
Total	749	100.0	

This section of the report looks at differences in (1) opportunities to learn, (2) professional knowledge and (3) professional practice, (4) the quality of the teaching in the teacher education course at the university, (5) the quality of the practicum and (6) some assessments

of the quality of their course made by the teacher respondents. It also looks at differences in professional (1) knowledge and (2) practice as reported by the principals.

The data are summarised and presented as a graph which depicts the mean score on a scale and the 95% confidence intervals around the mean. These confidence intervals indicate the range within which the mean can be expected to be drawn 95% of the time if repeated samples of this size were drawn from the population. These confidence intervals are useful for they allow us to see where statistically significant differences are to be found; where they do not overlap with another category, the differences are statistically significant. For example, an examination of Figure 12 shows that for opportunity to learn the practice of teaching, respondents who completed an undergraduate degree on average scored around 2.83 on this scale. In comparison, respondents who completed a postgraduate degree on average scored around 2.67. The lower confidence interval for the undergraduate degree does not overlap with the upper confidence interval for the postgraduate degree and so it can be concluded that it is probable that respondents with undergraduate degrees feel they had more opportunity to learn about the practice of teaching than those completing a postgraduate degree.

Opportunity to Learn professional knowledge

There were four aspects of opportunity to learn for which data were collected from the teachers:

1. Opportunity to learn content knowledge and how it is taught.
2. Opportunity to learn the practice of teaching.
3. Opportunity to learn via feedback from university staff.
4. Opportunity to learn assessment and planning.

Opportunity to learn content knowledge and how it is taught

There were no statistically significant differences between the undergraduate degree, double degree or postgraduate degree in terms of the average level of opportunity to learn content knowledge and how it is taught.

Opportunity to learn the practice of teaching

Figure 12 shows that there is a statistically significant difference between undergraduate and postgraduate courses, with postgraduates reporting that, on average, they had fewer opportunities to learn the practice of teaching than respondents from undergraduate courses.

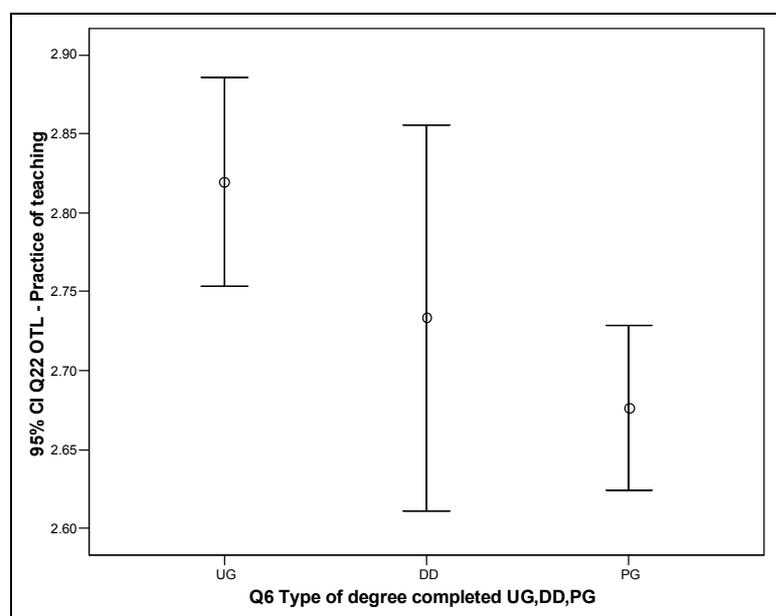


Figure 12 Mean scores for each type of pre-service course on the *opportunity to learn the practice of teaching* scale (showing 95% confidence intervals)

Opportunity to learn via feedback from university staff

There were no statistically significant differences between the undergraduate degree, double degree or postgraduate degree in terms of the average level of opportunity to learn via feedback from university staff.

Opportunity to learn assessment and planning

Figure 13 shows that there is a statistically significant difference between undergraduate and postgraduate courses, with postgraduates reporting that, on average, they had fewer opportunities to learn assessment and planning than respondents from undergraduate courses.

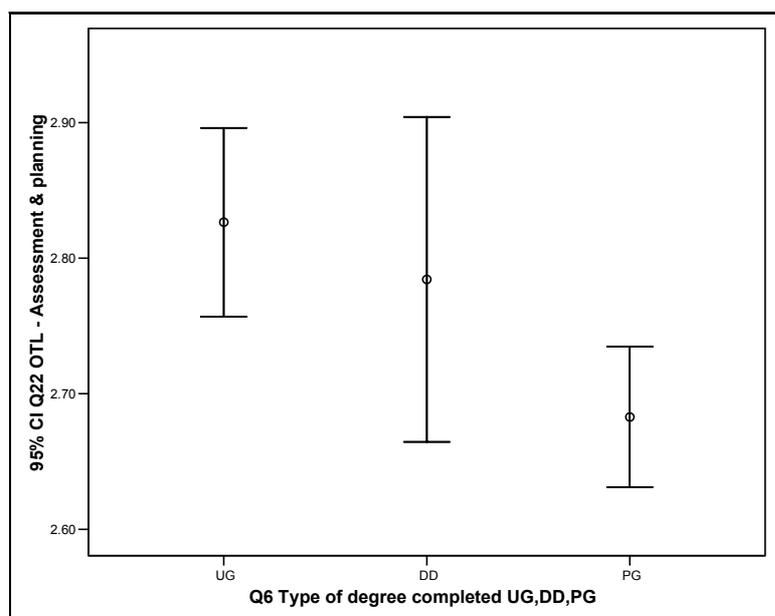


Figure 13 Mean scores for each type of pre-service course on the *opportunity to learn assessment and planning* scale (showing 95% confidence intervals)

The provision of professional knowledge

There were two aspects of the provision of professional knowledge for which data were collected:

1. Professional knowledge about content.
2. Professional knowledge about students.

For the teachers there were no statistically significant differences found between the types of courses on these two aspects of professional knowledge. For the principals there were differences with teachers who had a postgraduate diploma scoring higher on both aspects of professional knowledge as compared with teachers with undergraduate qualifications. This can be seen in Figure 14 and Figure 15. There are no statistically significant differences between double degrees and other course types.

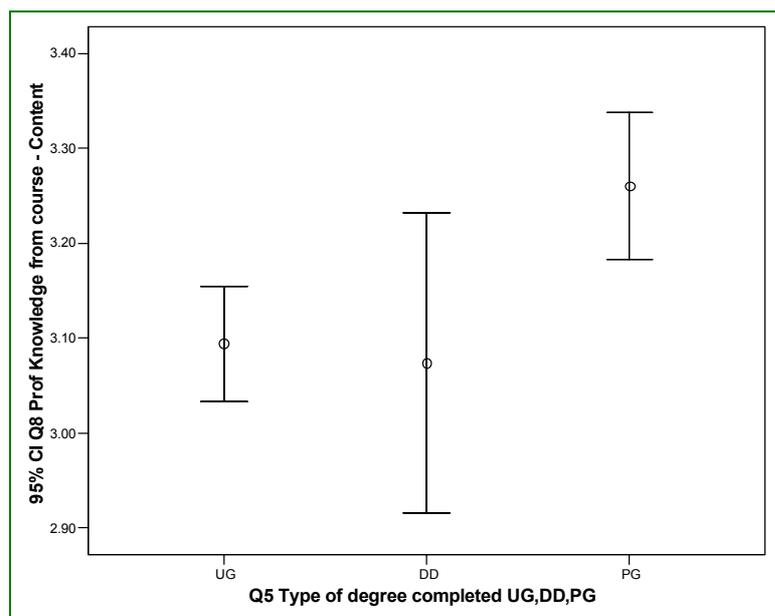


Figure 14 Mean scores for each type of pre-service course on the *professional knowledge - content* scale (showing 95% confidence intervals) – school principal data

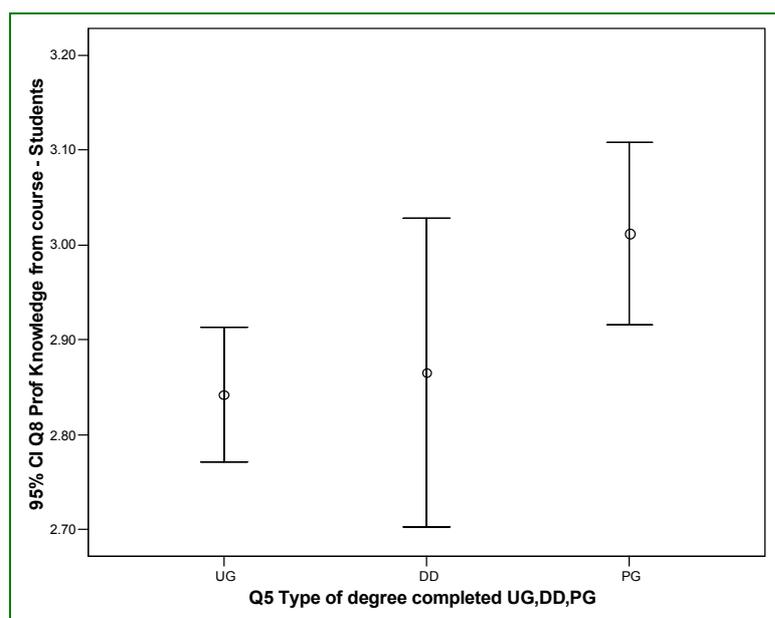


Figure 15 Mean scores for each type of pre-service course on the *professional knowledge - students* scale (showing 95% confidence intervals) – school principal data

The provision of professional practice

There were six aspects tapping the extent to which respondents felt they were prepared for professional practice for which data were collected:

1. Professional practice to do with the curriculum.

2. Professional practice to do with classroom management.
3. Professional practice to do with assessment.
4. Professional practice to do with cross-curriculum teaching.
5. Reflection on own teaching.
6. Work with parents and others.

There were no statistically significant differences found between course types on five of these dimensions in the teacher data. There was a statistically significant difference found for professional practice to do with cross-curriculum teaching. There were no statistically significant differences found between course types on four of these dimensions in the principal data. There was a statistically significant difference found for professional practice to do with assessment and to do with reflection on own teaching.

Professional practice to do with cross-curriculum teaching

Figure 16 shows that there is a statistically significant difference between undergraduate and postgraduate courses. Postgraduates reported that, on average, they had lower levels of preparation in professional practice for cross-curriculum teaching than respondents from undergraduate courses.

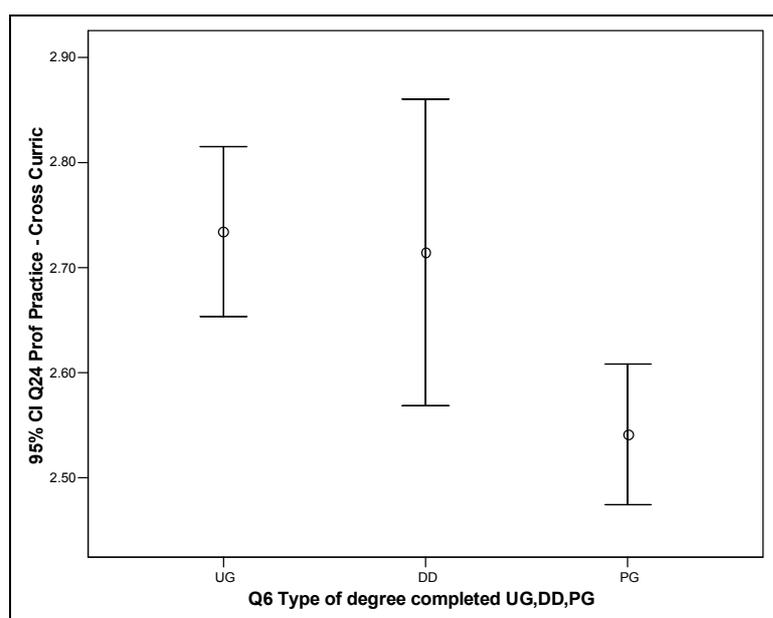


Figure 16 Mean scores for each type of pre-service course on the *professional practice – cross-curriculum teaching* scale (showing 95% confidence intervals)

Professional practice to do with assessment

Figure 17 shows that there is a statistically significant difference between undergraduate and postgraduate courses, with principals reporting that those with postgraduate qualifications having, on average, higher levels of professional practice to do with assessment than those with undergraduate qualifications.

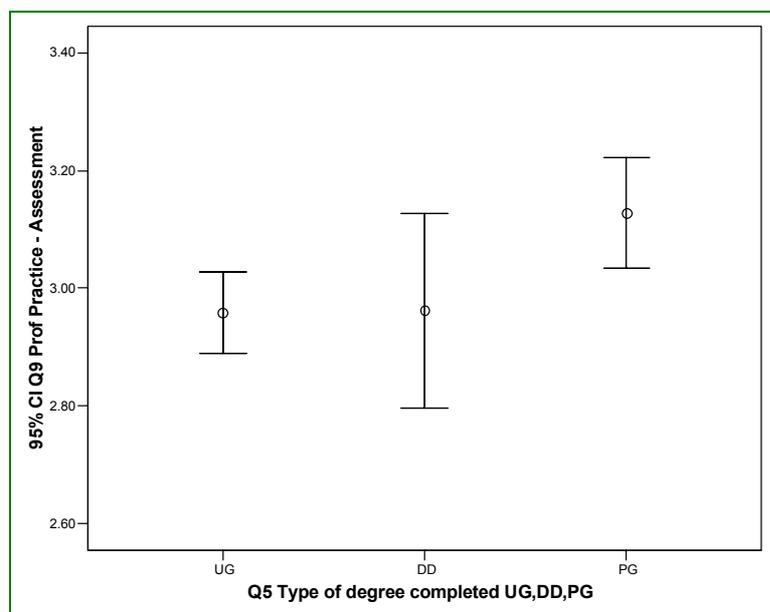


Figure 17 Mean scores for each type of pre-service course on the *professional practice – assessment* scale (showing 95% confidence intervals) – school principal data

Professional practice to do with reflection on own teaching

Figure 18 shows that there is a statistically significant difference between undergraduate and postgraduate courses, with principals reporting that those with postgraduate qualifications having, on average, higher levels of professional practice to do with reflection on their own teaching than those with undergraduate qualifications.

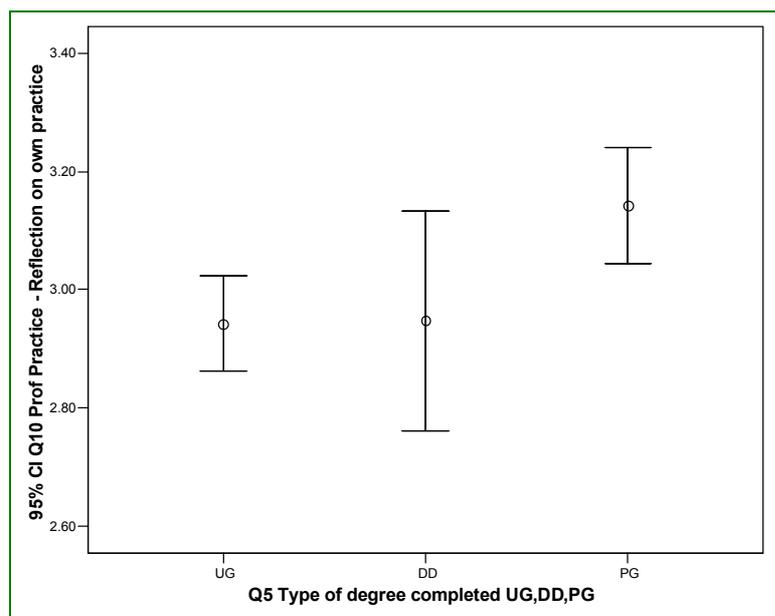


Figure 18 Mean scores for each type of pre-service course on the *professional practice – reflection on own teaching* scale (showing 95% confidence intervals) – school principal data

The quality of university teaching

Respondents were asked to indicate how often the university staff who taught them during their pre-service teaching course engaged in a range of practices known to be associated with effective teaching.

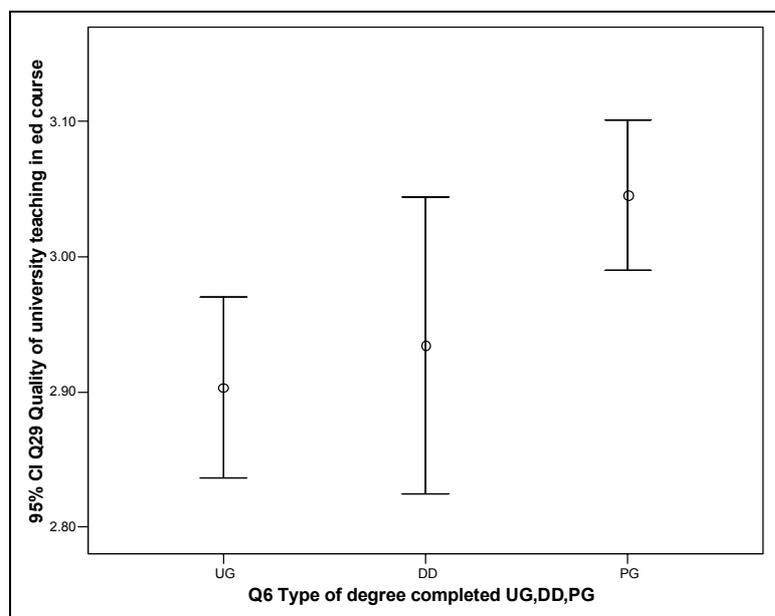


Figure 19 Mean scores for each type of pre-service course on the *quality of university teaching* scale (showing 95% confidence intervals)

As Figure 19 indicates, somewhat surprisingly given the previous results, those who completed a postgraduate degree felt they had experienced, on average, better teaching than those respondents who had completed an undergraduate degree.

The overall effectiveness of the course

Respondents were asked to rate the overall effectiveness of their pre-service teaching education course in preparing them as a teacher. The response categories were: *Not at all effective*, *Somewhat effective*, *Effective* and *Very effective*. These were scored, respectively, 1, 2, 3, and 4.

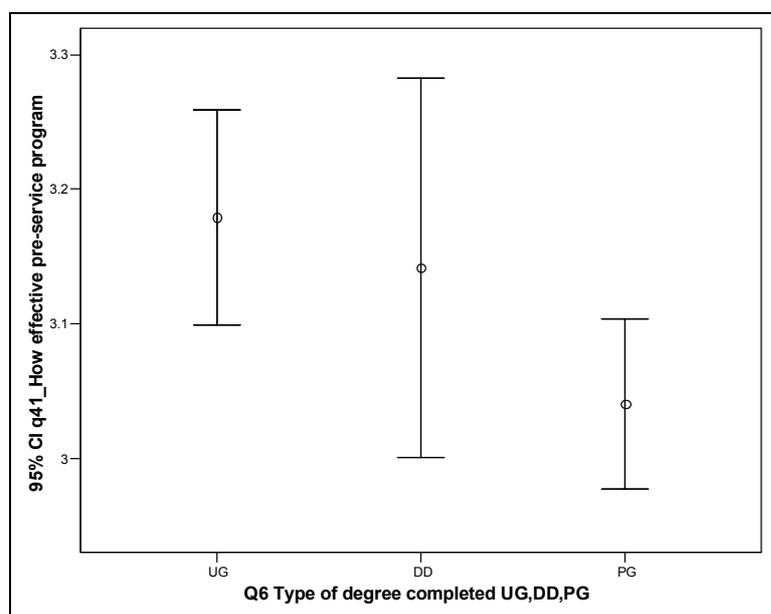


Figure 20 Mean scores for each type of pre-service course on the *overall effectiveness of the course* scale (showing 95% confidence intervals)

Figure 20 shows that respondents with an undergraduate pre-service degree were, on average, more likely to regard their course as effective compared with respondents who had a postgraduate degree.

Summary and discussion

These data show that where differences are found between course types, typically those who have completed an undergraduate degree report more positively on their course than those teachers who completed a postgraduate degree. These differences were found for opportunities to learn during the course and the provision of professional practice. Despite this, postgraduates were more likely to place greater value on the quality of the university teaching they received than undergraduates.

These findings may suggest that the duration of engagement with the world of education – undergraduate courses are typically four years and postgraduate one year – is important for preparing teachers effectively. The teachers who engaged in the four year programs felt that they were better prepared not just in terms of learning the theory of practice of teaching, but also in terms of learning about the complex world of schools, educational policy and practice, values and so on and how these interact with teaching practice.

In contrast, principals tended to see new teachers who had postgraduate qualifications as better prepared on a range of outcomes, for example professional practice, compared with those with undergraduate qualifications.

6. DIFFERENCES BETWEEN LEVEL OF TEACHING – PRIMARY VERSUS OTHERS

This section of the report examines differences between primary and secondary teachers and the principals of these teachers. It begins by describing the frequency of responding teachers and principals from each school type, and then moves on to examine the differences between them.

Table 21 shows the number of new teachers who responded to the survey and who worked only at the primary level versus others.

Table 21 Number of primary and other teachers responding to the survey

	Frequency	Percent	Valid Percent
Primary	408	36.3	39.0
Other	638	56.8	61.0
Total	1046	93.1	100.0
Missing	78	6.9	
Total	1124	100.0	

Table 22 shows the number of teachers who worked at a primary or other level as reported by school principals. It can be seen that proportionally more principals reported on primary teachers than there were primary teachers responding to the survey.

Table 22 Number of principals reporting on whether the teacher being described was a primary or other teacher

	Frequency	Percent	Valid Percent
Primary	441	58.9	61.0
Other	282	37.7	39.0
Total	723	96.5	100.0
Missing	26	3.5	
Total	749	100.0	

This section of the report looks at differences in (1) opportunities to learn, (2) professional knowledge and (3) professional practice, (4) the quality of the teaching in the teacher education course at the university, (5) the quality of the practicum and (6) some assessments of the quality of their course made by the teacher respondents. It looks at differences in professional (1) knowledge and (2) practice as reported by the principals.

Opportunity to Learn professional knowledge

There were four aspects of opportunity to learn for which data were collected from the teachers:

1. Opportunity to learn content knowledge and how it is taught.
2. Opportunity to learn the practice of teaching.
3. Opportunity to learn via feedback from university staff.
4. Opportunity to learn assessment and planning.

Opportunity to learn content knowledge and how it is taught

There was no statistically significant difference between those who taught only as primary teachers and other teachers in terms of the average level of opportunity to learn content knowledge and how it is taught.

Opportunity to learn the practice of teaching

There was no statistically significant difference between those who taught only as primary teachers and other teachers in terms of the average level of opportunity to learn the practice of teaching.

Opportunity to learn via feedback from university staff

There was a statistically significant difference between those who taught only as primary teachers and other teachers in terms of the average level of opportunity to learn via feedback from university staff. As Figure 21 shows, primary teachers, on average, scored their course lower on this aspect than other teachers.

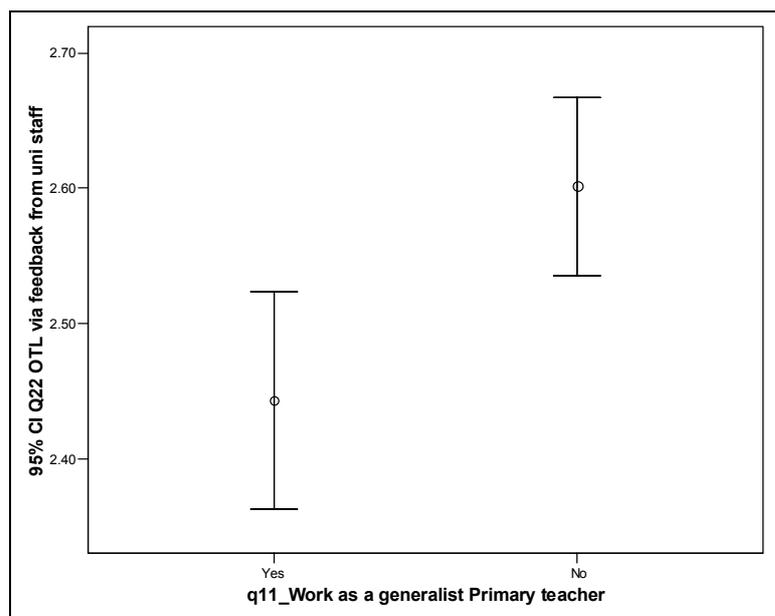


Figure 21 Mean scores for primary versus other teachers on the *opportunity to learn via feedback from university staff* scale (showing 95% confidence intervals)

Opportunity to learn assessment and planning

There was no statistically significant difference between those who taught only as primary teachers and other teachers in terms of the average level of opportunity to learn assessment and planning.

The provision of professional knowledge

There were two aspects of the provision of professional knowledge for which data were collected:

1. Professional knowledge about content.
2. Professional knowledge about students.

For the teachers there were no statistically significant differences found between the types of courses on these two aspects of professional knowledge when contrasting primary with other teachers. For the principals there were statistically significant differences between primary and other teachers, with primary teachers scoring their courses, on average, lower on these aspects than other teachers. This can be seen in Figure 22 and Figure 23.

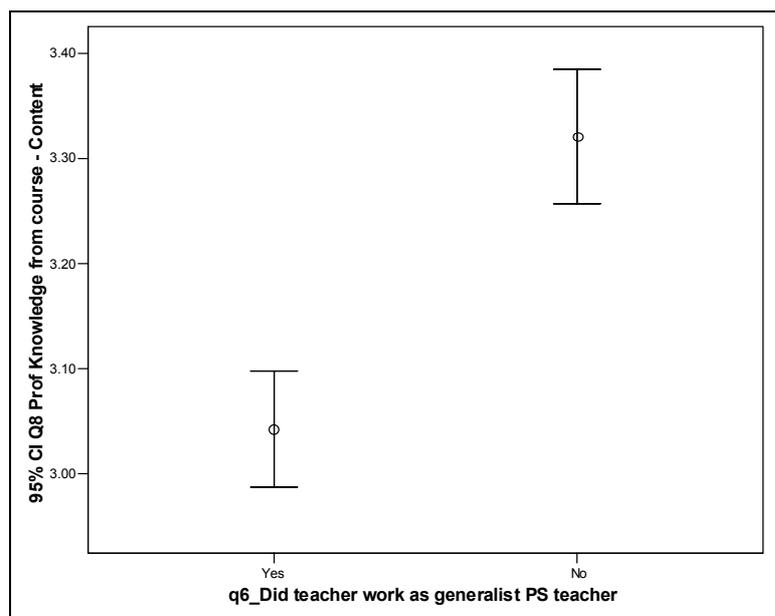


Figure 22 Mean scores for primary versus other teachers on the *professional knowledge - content* scale (showing 95% confidence intervals) – school principal data

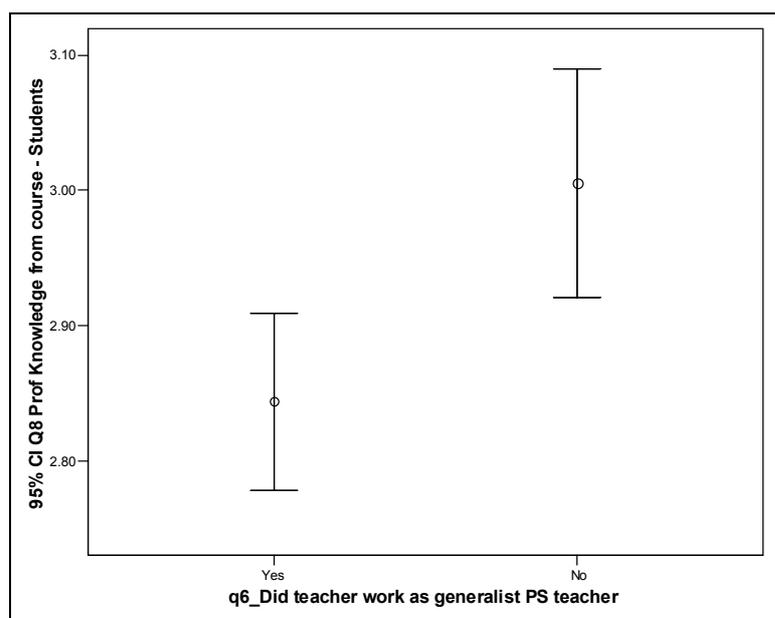


Figure 23 Mean scores for primary versus other teachers on the *professional knowledge - students* scale (showing 95% confidence intervals) – school principal data

The provision of professional practice

There were six aspects tapping the extent to which teacher respondents felt they were prepared for professional practice and for which data were collected. Principals were also asked about these same six aspects of professional practice:

1. Professional practice to do with the curriculum.
2. Professional practice to do with classroom management.
3. Professional practice to do with assessment.
4. Professional practice to do with cross-curriculum teaching.
5. Reflection on own teaching.
6. Work with parents and others.

Professional practice to do with the curriculum

There was a statistically significant difference between those who taught only as primary teachers and other teachers in terms of the average level of professional practice to do with the curriculum as reported by the principals. As Figure 24 shows, primary teachers, on average, scored their courses lower on this aspect than other teachers.

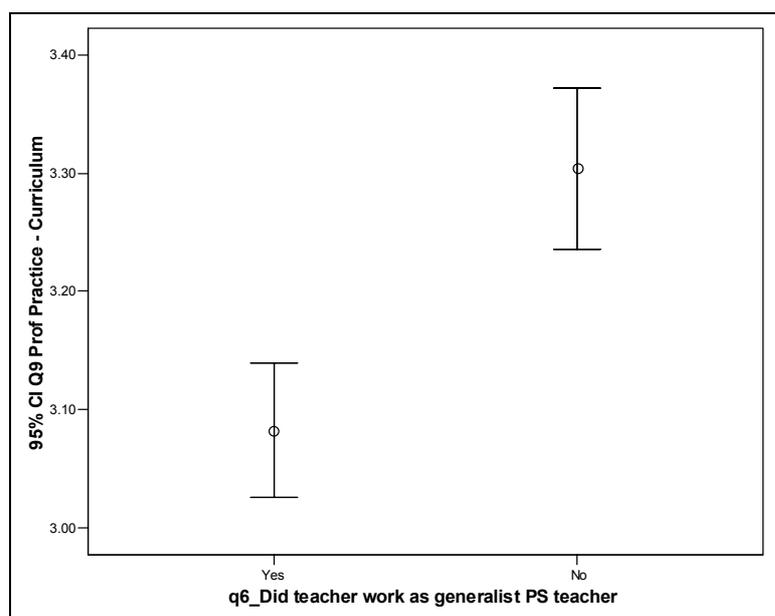


Figure 24 Mean scores for primary versus other teachers on the *professional practice to do with the curriculum* scale (showing 95% confidence intervals) – principal data

There was no statistically significant difference between those who taught only as primary teachers and other teachers on this variable as reported by the teachers.

Professional practice to do with classroom management

There were no statistically significant differences between primary and other teachers found on the *professional practice to do with classroom management* scale in the data from the principals and the teachers.

Professional practice to do with assessment

Figure 25 shows that there was a statistically significant difference between primary and other teachers, with principals reporting that, on average, primary teachers had lower levels of preparation for professional practice to do with assessment. Likewise primary teachers also reported they had lower levels, on average, than other teachers on this variable. This can be seen in Figure 26.

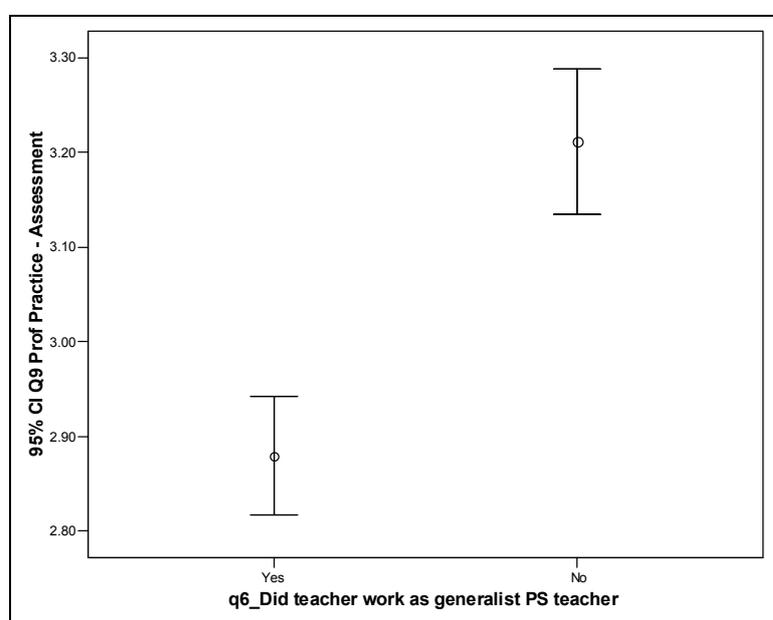


Figure 25 Mean scores for primary versus other teachers on the *professional practice to do with assessment* scale (showing 95% confidence intervals) – school principal data

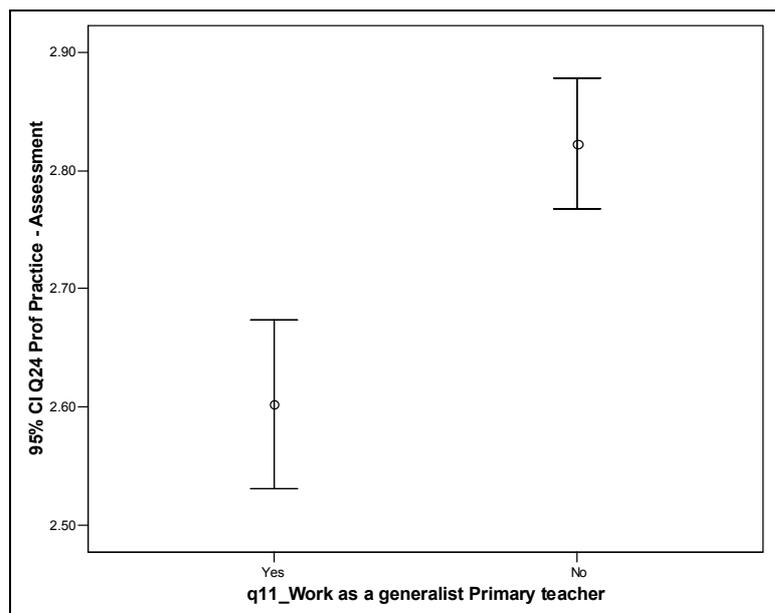


Figure 26 Mean scores for primary versus other teachers on the *professional practice to do with assessment scale* (showing 95% confidence intervals) – teacher data

Professional practice to do with cross-curriculum teaching

There was a statistically significant difference between primary and other teachers, with principals and teachers reporting that primary teachers had, on average, higher levels of professional practice to do with cross-curriculum teaching. This consistency between teacher and principal perceptions is reflected in Figure 27 and Figure 28.



Figure 27 Mean scores for primary versus other teachers on the *professional practice to do with cross-curriculum teaching scale* (showing 95% confidence intervals) – school principal data

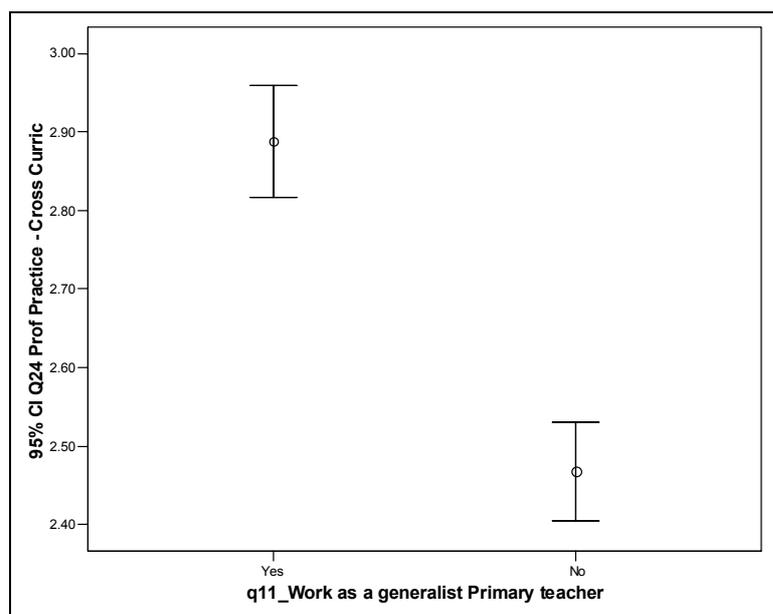


Figure 28 Mean scores for primary versus other teachers on the *professional practice to do with cross-curriculum teaching scale* (showing 95% confidence intervals) – teacher data

Professional practice to do with parents

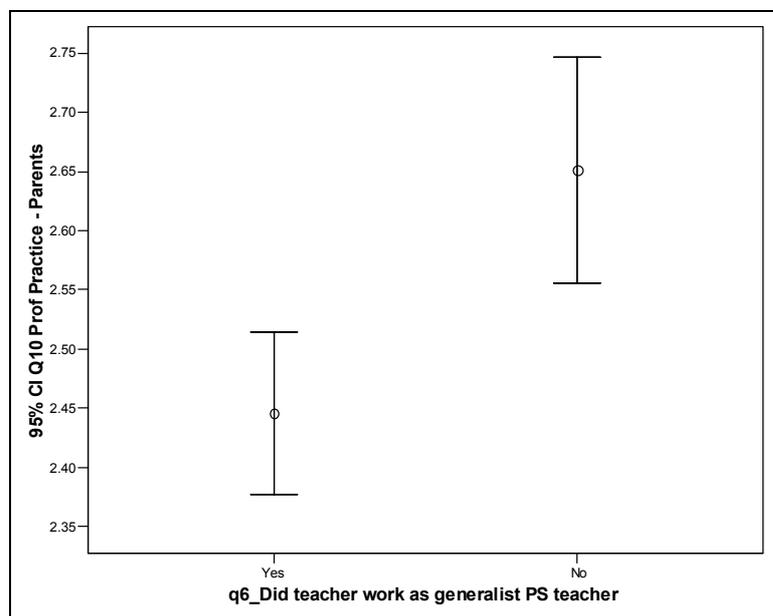


Figure 29 Mean scores for primary versus other teachers on the *professional practice – working with parents scale* (showing 95% confidence intervals) – school principal data

Figure 29 shows that there is a statistically significant difference between primary and other teachers, with principals reporting that primary teachers had, on average, lower levels of

professional practice to do with working with parents. There was no difference found in the teacher data for this variable.

Professional practice to do with reflection on own teaching

Figure 30 shows that there is a statistically significant difference between primary and other teachers. Primary teachers felt less well prepared to work with parents and guardians than other teachers.

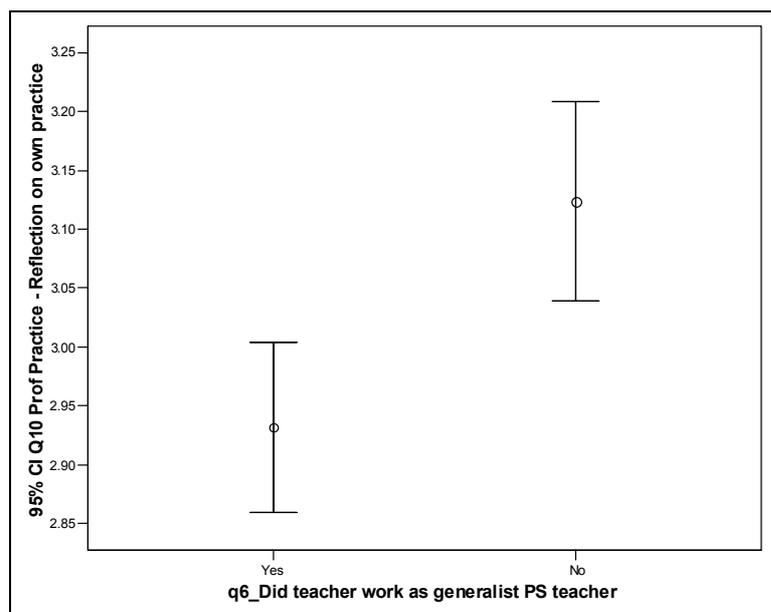


Figure 30 Mean scores for primary versus other teachers on the *professional practice – reflection on own teaching* scale (showing 95% confidence intervals) – principal data

Figure 30 shows principals reporting that primary teachers had, on average, lower levels of professional practice to do with reflection on their own teaching. There was no difference found in the teacher data for this variable.

The quality of university teaching

Respondents were asked to indicate how often the university staff who taught them during their pre-service teaching course engaged in a range of practices known to be associated with effective teaching. As Figure 31 indicates, non-primary teachers felt that, on average, they had better teaching at university than primary teachers.

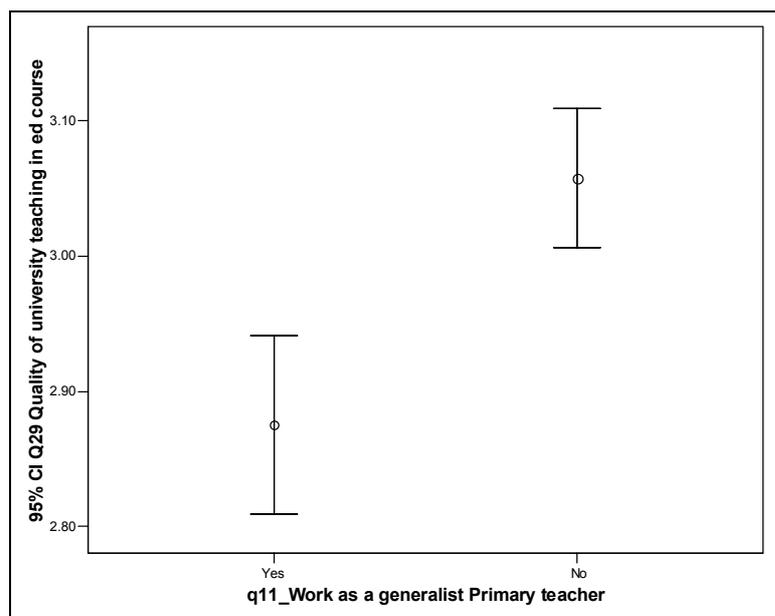


Figure 31 Mean scores for primary versus other teachers on the *quality of university teaching* scale (showing 95% confidence intervals)

The overall effectiveness of the course

Respondents were asked to rate the overall effectiveness of their pre-service teaching education course in preparing them as a teacher. There was no statistically significant difference between primary and other teachers on this variable.

Summary and discussion

These data show that where differences are found between primary and other teachers, typically primary teachers are less positive about their pre-service course. These differences were found in opportunities to learn during the course and the provision of professional practice. Despite this, primary teachers and principals were more likely to view primary teachers as better prepared to teach across the curriculum.

These findings may suggest that teachers and principals perceive those graduates who are *not* working as generalist primary teachers as generally better prepared.

7. FACTORS ASSOCIATED WITH VIEWS OF PRE-SERVICE TEACHING – TEACHERS’ DATA

This section of the report describes the strength of associations between a range of factors theorised to affect perceptions of pre-service courses by first-year teachers.

Overview of the analyses

The results reported in this section were obtained by using multiple regression. This is a procedure which, as Kerlinger and Pedhazur (1973, p. 3) note:

... is a method of analysing the collective and separate contributions of two or more independent variables ... to the variation of a dependent variable.

The procedure estimates the strength of the linear relationship between a dependent variable and a set of independent variables.

The order in which these variables were entered into the equation was determined by the theory underlying the research (as discussed in Chapter 1).

In this section of the study, the purpose of these analyses is to identify which factors associated with aspects of pre-service courses undertaken by the respondents are associated with a range of teaching outcomes, while controlling for the effect of a range of extraneous factors which may affect perceptions but have little to do with the quality of these courses.

These ‘extraneous’ factors included some characteristics of the respondent:

1. Gender – theorised to be related to perceptions of the course because of a possible lack of comfort some male teachers might feel teaching in a primary school environment now strongly feminised (Gottfredson, 1981, 1996, 2002).
2. Age (whether under 25 or over) – theorised to be important on the expectation that a wider life experience of older graduates may provide a different framework for reflecting upon their pre-service course.
3. Whether the respondent had another career before commencing their pre-service teacher education – theorised to be important for much the same reason as the age of the respondent.

These factors also included characteristics of the students and the school (where the respondent was teaching most frequently during 2003):

1. Average contact hours per week – theorised to be important on the assumption that the more teaching the respondent experienced, the better able they would be to make an informed judgment about the quality of their pre-service course.
2. Proportion of English as a Second Language (ESL) students – theorised to influence perceptions of pre-service course quality on the assumption that these students present particular challenges and difficulties which will shape the experience of teaching and hence reflections on the adequacy of the pre-service course.
3. Proportion of students with English literacy problems – theorised to be relevant on the same basis as the proportion of ESL students.
4. Induction provided by the school – was theorised to be important because where the transition to the world of work is supported by the school, it is likely that the experience will be less difficult for the new teacher. This may, in turn, influence the perceptions of the adequacy of the pre-service course.
5. Formally allocated a mentor – was theorised to be important for the same reason as for whether there was a formal induction into the school.

The characteristics of the pre-service course included:

1. Opportunity to learn content knowledge and how to teach it.
2. Opportunity to learn the practice of teaching.
3. Opportunity to learn via feedback from university staff.
4. Opportunity to learn about assessment and planning.
5. The perceived quality of the teaching given at the university during the pre-service course.
6. The type of pre-service degree (Postgraduate versus the rest).

An especially important element of the pre-service course was the practicum. There were a range of variables designed to tap aspects of the practicum including:

1. The number of days spent in schools.
2. The number of days spent teaching in schools.
3. Whether the practicum was done in a block or blocks rather than, for example, as a fixed number of days per week. For the analyses reported here, those who had only fixed blocks are contrasted against all others.
4. Whether the respondent worked with a fellow student during their practicum.
5. The perceived width of the role of the student teacher within the school.
6. The perceived quality of the practicum.

Reporting the results

The results for the regression analysis are summarised in tables. Each table shows the standardised regression coefficients and significance levels for each of the predictors in the model. The use of standardised coefficients permits easy comparison of the strength of associations within the model. For example, a standardised beta coefficient of 0.27 is three times as strong in its effect as one of 0.09. When examining these effects, it is important to remember that they are net of the effects of other variables in the model. The regression analysis thus shows the unique contribution that each variable makes to changes in the dependent variable. In the tables below, coefficients appear in the column headed ‘Stand. Coeff’. As a rough guide, the larger these numbers, the more interesting they are because they are indicating a strong effect.

Effects may be negative or positive. A positive effect indicates that the independent variable (the ‘cause’) is associated with an increase in the dependent variable (the ‘effect’) and conversely, when the effect is negative, an increase in the independent variable is associated with a decrease in the dependent variable.

Statistically significant results – those where it 95% likely that the coefficient is different from zero – are marked in bold in the tables. Statistical significance is shown in the columns

headed 'Sig.'. Here numbers smaller than 0.05 are sought. At this threshold and below, the coefficient is deemed to be statistically significant.

The proportion of variance explained by a model (R^2) is also given. Where the proportion of the variance in the dependent variable is high, it suggests that several features in the model are reasonably good predictors of whether teachers would rate a professional development program as effective.

The following rule of thumb was applied in characterising the strength of the standardised coefficients:

- 0 to 0.19 is weak
- 0.2 to 0.39 is moderate
- 0.4 to 0.59 is strong
- greater than 0.6 is very strong

A substantive interpretation of the proportion of variance explained is dependent upon the context of the study being reported. In the physical sciences, 95% of the variance might be explained in a rigorously controlled experiment and be seen as a weak result. In the social sciences such results are rare and are dependent upon a rather loose consensus about what might be reasonable given the results of previous studies. For the purposes of this study, accounting for around 50% or more of the variance is seen as providing evidence of theoretical importance in the findings.

Results and discussion

Professional knowledge

Table 23 shows the most important factors associated with having a good understanding of professional knowledge to do with the content taught. The extent to which the pre-service teacher education program (including the practicum) gave the opportunity to learn this content had the strongest effect (0.45). Also important was the opportunity to learn about assessment and planning which had a moderately strong effect (0.30). An opportunity to learn via feedback from university staff during the pre-service course and the quality of the teaching conducted within this course both had weak effects.

Doing the practicum only as a block had a weak positive effect. No other aspects of the practicum had statistically significant effects on professional knowledge to do with content.

This model explains 65% (adjusted R-squared) of the variance in the dependent variable – having a good understanding of professional knowledge to do with the content taught.

Table 23 also shows the most important factors associated with having a good understanding of professional knowledge concerning students. The strongest effect was the extent to which the pre-service teacher education program provided an opportunity to learn how to practice teaching (0.27). This is a moderately strong effect. All other opportunity to learn variables had a weak but statistically significant effect. Also having a weak effect was the quality of university teaching in the pre-service course (0.12), and whether the school had formally allocated a mentor to the respondent when starting at their school (0.10).

Table 23 Factors associated with professional knowledge of content and students

	Professional knowledge: content		Professional knowledge: students	
	Stand. Coeff	Sig	Stand. Coeff	Sig
Sex (F=0 M=1)	0.04	0.16	-0.04	0.21
Age (<=25=0, >25=1)	0.02	0.62	0.03	0.49
Previous career (Yes=1 No=0)	-0.04	0.30	0.00	0.94
Average contact hours per week	0.04	0.18	0.02	0.56
Proportion of ESL students	-0.01	0.74	-0.07	0.04
Proportion of students with English literacy problems	0.03	0.29	0.05	0.15
School induction (Yes = 1 No = 0)	-0.05	0.12	-0.09	0.02
Formal mentor at school (Yes = 1 No = 0)	0.04	0.15	0.10	0.01
OTL - Content knowledge & how taught	0.45	0.00	0.16	0.00
OTL - Practice of teaching	0.03	0.53	0.27	0.00
OTL via feedback from uni staff	0.08	0.01	0.13	0.00
OTL - Assessment & planning	0.30	0.00	0.19	0.00
Quality of university teaching in ed course	0.11	0.00	0.12	0.00
Degree type (PG=1 else=0)	-0.02	0.69	-0.05	0.24
No. of days spent in schools	-0.03	0.50	-0.01	0.83
No. of days spent teaching	0.04	0.23	0.00	0.97
Practicum only done as a block (Yes=1 No=0)	0.08	0.01	0.07	0.04
Student partner for practicum (Yes=1 No=0)	-0.05	0.08	-0.05	0.10
Width of role in school practicum	-0.01	0.73	0.00	0.95
Quality of the practicum	-0.02	0.45	-0.01	0.75

Whether the school offered an induction program had a weak negative effect. The proportion of students in the school with English as a second language also had a weak effect (-0.07) such that the higher the proportion, the less likely the respondent was to report their pre-service course gave them a good understanding of students.

Doing the practicum only as a block had a weak positive effect. No other aspects of the practicum had statistically significant effects on professional knowledge to do with content.

This model explains 46% of the variance in the dependent variable – having a good understanding of professional knowledge concerning students.

Summary – professional knowledge

Having an opportunity to learn is clearly important for the perception that first-year teachers have of the quality of their understanding professional knowledge. The quality of teaching during this course also has a weak effect. (See preceding section *Reporting the results* for an interpretation of a ‘weak effect’.)

For the understanding of professional knowledge related to students, some school and student characteristics have weak effects.

Gender, age or having had another career do not appear, on this evidence, to have an effect on perceptions of the quality of professional knowledge.

Professional practice

Table 24 shows the most important factors associated with the extent to which respondents reported that their pre-service course had prepared them for a variety of professional practices related to: (1) the curriculum, (2) classroom management, (3) professional practice, and (4) cross-curriculum teaching.

Table 24 shows the most important factors associated with reporting that the pre-service course prepared the respondents for professional practice relating to the curriculum. Having the opportunity to learn about both content (0.29), and assessment and planning (0.34) had moderately strong effects. The opportunity to learn about assessment and planning, and via feedback from university staff both had weak effects. An opportunity to learn via feedback from university staff during the pre-service course and the teaching quality within this course both had weak effects. While having a high proportion of students with literacy problems had

a weak effect, it is clear that the most important factors affecting preparedness for professional practice relating to the curriculum were opportunities to learn during the pre-service course.

This model explains 56% of the variance in preparedness for professional practice relating to the curriculum.

Table 24 shows the most important factors associated with reporting that the pre-service course prepared the respondents for professional practice relating to classroom management. Having had the opportunity to learn about content (0.24), and assessment and planning (0.20) had moderate effects. Feedback from university staff, the quality of the teaching conducted within this course and having a high proportion of students with literacy problems had weak positive effects. Having an induction program at the school had a weak negative effect. Again, the most important factors affecting preparedness for professional practice – this time relating to classroom management – were opportunities to learn during the pre-service course.

This model explains 48% of the variance in preparedness for professional practice relating to classroom management.

Table 24 shows the most important factors associated with reporting that the pre-service course prepared the respondents for professional practice relating to assessment. Having had the opportunity to learn about assessment (0.46) had a strong effect. One other opportunity to learn variable also had a weak effect – feedback from university staff. The number of contact hours also had a weak effect such that the fewer hours, the lower the level of preparedness for the professional practice of assessment the respondent was likely to report. Gender also had a weak effect – males were slightly more likely to report higher levels of preparedness. Once again, the most important factors affecting preparedness for professional practice were opportunities to learn during the pre-service course.

This model explains 49% of the variance in preparedness for professional practice relating to assessment.

Table 24 shows the most important factors associated with reporting that the pre-service course prepared the respondents for professional practice relating to cross-curriculum teaching. Having the opportunity to learn about assessment (0.20) and content knowledge (0.24) had moderately strong effects. Having the opportunity to learn about the practice of

teaching had a weak effect. Having an induction program in the school and a formally allocated mentor had weak effects. Again the most important factors effecting preparedness for professional practice were opportunities to learn during the pre-service course, experience in the school, and the type of pre-service course.

Table 24 Factors associated with professional practice: curriculum, classroom management, assessment and cross-curriculum

	Prof Practice: Curriculum		Prof Practice: Classroom Management		Prof Practice: Assessment		Prof Practice: Cross-Curriculum	
	Stand. Coeff	Sig	Stand. Coeff	Sig	Stand. Coeff	Sig	Stand Coeff	Sig
Sex (F=0 M=1)	-0.01	<i>0.65</i>	0.01	<i>0.68</i>	0.06	0.05	-0.06	<i>0.14</i>
Age (<=25=0, >25=1)	-0.03	<i>0.50</i>	0.00	<i>0.94</i>	0.02	<i>0.70</i>	-0.01	<i>0.81</i>
Previous career (Yes=1 No=0)	0.02	<i>0.57</i>	-0.02	<i>0.57</i>	0.00	<i>0.99</i>	0.04	<i>0.45</i>
Average contact hours per week	0.01	<i>0.74</i>	-0.02	<i>0.54</i>	-0.08	0.02	0.04	<i>0.24</i>
Proportion of ESL students	0.00	<i>0.89</i>	-0.05	<i>0.11</i>	0.00	<i>0.95</i>	-0.06	<i>0.12</i>
Proportion of students with English literacy problems	0.07	0.03	0.09	0.00	-0.01	<i>0.85</i>	0.05	<i>0.23</i>
School induction (Yes = 1 No = 0)	-0.06	<i>0.06</i>	-0.09	0.02	-0.03	<i>0.37</i>	-0.11	0.01
Formal mentor at school (Yes = 1 No = 0)	0.03	<i>0.46</i>	0.06	<i>0.08</i>	0.00	<i>0.94</i>	0.14	0.00
OTL - Content knowledge & how taught	0.29	0.00	0.24	0.00	0.09	<i>0.07</i>	0.24	0.00
OTL - Practice of teaching	0.02	<i>0.69</i>	0.09	<i>0.07</i>	0.10	<i>0.06</i>	0.12	0.05
OTL via feedback from uni staff	0.10	0.01	0.19	0.00	0.11	0.01	0.03	<i>0.48</i>
OTL - Assessment & planning	0.34	0.00	0.20	0.00	0.46	0.00	0.20	0.00
Quality of university teaching in ed course	0.16	0.00	0.14	0.00	0.04	<i>0.33</i>	0.08	<i>0.12</i>
Degree type (PG=1 else=0)	-0.04	<i>0.35</i>	-0.01	<i>0.81</i>	-0.03	<i>0.44</i>	-0.08	<i>0.15</i>
No. of days spent in schools	-0.02	<i>0.59</i>	0.00	<i>0.98</i>	-0.07	<i>0.13</i>	0.10	<i>0.09</i>
No. of days spent teaching	-0.02	<i>0.61</i>	0.01	<i>0.86</i>	0.00	<i>0.96</i>	-0.02	<i>0.71</i>
Practicum only done as a block (Yes=1 No=0)	0.03	<i>0.30</i>	0.04	<i>0.28</i>	0.03	<i>0.40</i>	0.04	<i>0.27</i>
Student partner for practicum (Yes=1 No=0)	0.00	<i>0.88</i>	0.02	<i>0.63</i>	0.01	<i>0.77</i>	0.02	<i>0.54</i>
Width of role in school practicum	0.01	<i>0.64</i>	0.02	<i>0.49</i>	0.02	<i>0.56</i>	-0.04	<i>0.28</i>
Quality of the practicum	0.02	<i>0.49</i>	0.01	<i>0.74</i>	0.03	<i>0.46</i>	-0.02	<i>0.65</i>

However, it should be noted that this model explains only 29% of the variance in preparedness for professional practice relating to cross-curriculum teaching. This suggests that key variables are missing from this model and that this account is therefore incomplete.

Table 25 shows the most important factors associated with reporting that the pre-service course prepared the respondents for professional practice relating to parents.

Table 25 Factors associated with professional practice: parents and reflection on own practice

	Professional practice: parents		Professional practice: reflection	
	Stand. Coeff	Sig	Stand. Coeff	Sig
Sex (F=0 M=1)	0.05	0.14	-0.03	0.43
Age (<=25=0, >25=1)	-0.07	0.17	-0.13	0.00
Previous career (Yes=1 No=0)	-0.02	0.71	-0.01	0.89
Average contact hours per week	0.00	0.97	0.03	0.43
Proportion of ESL students	-0.08	0.02	-0.01	0.80
Proportion of students with English literacy problems	0.08	0.02	0.02	0.53
School induction (Yes = 1 No = 0)	-0.02	0.58	0.00	0.93
Formal mentor at school (Yes = 1 No = 0)	0.04	0.37	0.00	0.95
OTL - Content knowledge & how taught	0.11	0.04	0.13	0.01
OTL - Practice of teaching	0.10	0.06	0.34	0.00
OTL via feedback from uni staff	0.09	0.05	0.01	0.79
OTL - Assessment & planning	0.29	0.00	0.14	0.00
Quality of university teaching in ed course	0.16	0.00	0.22	0.00
Degree type (PG=1 else=0)	-0.04	0.47	-0.06	0.20
No. of days spent in schools	-0.10	0.06	0.06	0.20
No. of days spent teaching	0.02	0.72	-0.01	0.85
Practicum only done as a block (Yes=1 No=0)	0.00	0.95	0.01	0.73
Student partner for practicum (Yes=1 No=0)	0.03	0.38	-0.01	0.75
Width of role in school practicum	0.02	0.67	0.05	0.18
Quality of the practicum	-0.02	0.57	-0.06	0.10

Having the opportunity to learn about assessment and planning (0.29) had a moderate effect. Having the opportunity to learn about content knowledge had a weak effect. Having an opportunity to learn via feedback from university staff and the quality of the university teaching had weak effects. The proportion of students with a literacy problem had a weak effect. The higher the proportion, the lower the preparedness for cross-curriculum practice. The proportion of students with English as a second language also had a weak effect. However, on this variable the lower the proportion, the lower the preparedness for cross-

curriculum practice. Again the most important factors affecting preparedness for professional practice were opportunities to learn during the pre-service course.

This model explains 38% of the variance in preparedness for professional practice relating to parents. This suggests that key variables may be missing and that this account is therefore somewhat incomplete.

Table 25 shows the most important factors associated with reporting that the pre-service course prepared respondents for professional practice relating to reflection on the teacher's own practice. Having had the opportunity to learn about the practice of teaching had a strong effect (0.34). Having had an opportunity to learn about content and about assessment and planning had weak effects. The quality of the university teaching had a moderate effect (0.22). The age of the respondent also had a weak effect – younger respondents tended to feel somewhat better prepared to reflect upon their practice. Again the most important factors affecting preparedness for professional practice were opportunities to learn during the pre-service course. However the quality of the teaching in the pre-service course was also reported as important.

This model explains 47% of the variance in preparedness for professional practice relating to reflection on their own teaching.

Table 26 shows the most important factors associated with reporting that the pre-service course was, overall, effective in preparing the respondents to teach. Having the opportunity to learn about content knowledge and how to teach it had a strong effect (0.38). Having an opportunity to learn via feedback from university staff had a weak effect. The quality of the university teaching had a weak effect (0.15). The type of degree had a weak effect such that teachers with non-postgraduate degrees were more likely to report their courses as overall effective. Gender had a weak effect such that females tended to report their course as more effective than males.

Table 26 Factors associated with reports of the overall effectiveness of pre-service teacher education program in preparing to be a teacher

	Overall effectiveness	
	Stand. Coeff	Sig
Sex (F=0 M=1)	-0.07	0.04
Age (<=25=0, >25=1)	-0.05	0.27
Previous career (Yes=1 No=0)	-0.06	0.24
Average contact hours per week	-0.04	0.32
Proportion of ESL students	0.04	0.27
Proportion of students with English literacy problems	0.01	0.73
School induction (Yes = 1 No = 0)	-0.04	0.34
Formal mentor at school (Yes = 1 No = 0)	0.04	0.30
OTL - Content knowledge & how taught	0.38	0.00
OTL - Practice of teaching	0.01	0.84
OTL via feedback from uni staff	0.15	0.00
OTL - Assessment & planning	-0.01	0.90
Quality of university teaching in ed course	0.15	0.00
Degree type (PG=1 else=0)	-0.13	0.01
No. of days spent in schools	-0.01	0.82
No. of days spent teaching	0.03	0.52
Practicum only done as a block (Yes=1 No=0)	0.06	0.08
Student partner for practicum (Yes=1 No=0)	-0.05	0.13
Width of role in school practicum	0.08	0.03
Quality of the practicum	0.07	0.09

This model explains 39% of the variance in the reported overall effectiveness of the pre-service course.

Summary

Consistently, the opportunity to learn during the pre-service course had the strongest effect on the range of outcomes examined here. It will be recalled that *Opportunity to Learn* refers to:

- Opportunity to learn content knowledge and how it is taught
- Opportunity to learn the practice of teaching
- Opportunity to learn via feedback from university staff
- Opportunity to learn assessment and planning

Also important is the quality of the university teaching in the pre-service course. On this evidence pre-service teacher courses need to maximise the students' opportunities to learn key elements of what teachers need to know and be able to do.

8. PRINCIPALS' PERCEPTIONS OF PRESERVICE EDUCATION

This section of the report draws upon the data taken from the open-ended questions asked of the principals, namely:

1. How could pre-service teacher education programs be improved to help new teachers learn how to teach?
2. How could the practicum component of pre-service teacher education programs be improved to help new teachers learn how to teach?

Improvements required in pre-service teaching courses

General comments

- Raise the entry standard
- 'The quality of student teachers has improved dramatically in the last few years – is it the ability of the students or the course?'
- Improve initial selection processes
- 'Better 'weeding out' systems. Those not suited to teaching should be removed at the pre-service level, rather than leaving it to schools.'
- Mature aged teachers good
- 'Bring back the 'Demonstration Schools' (see South Australian teacher training in the 1960s!)
- Have 'liaison person' between schools and Unis
- More and better communication between the Uni and the schools
- Use of practising teachers and/or teachers with recent classroom experience as lecturers and/or visiting speakers, especially excellent classroom teachers. They should 'model' good teaching
- 'Uni teachers are so out of touch with the reality of a 'real' classroom. They need to go back into a classroom and get what goes on.' (Typical of many responses.)

- Currently, lecturers seem lacking in real knowledge about programs. Unis should second coordinators, district staff, experienced teachers to assist.’
- ‘University of Ballarat and Melbourne University students seem better prepared to walk into a classroom than (sic) other institutions.
- Graduate from ACU is by far the best prepared teacher I have employed.’
- Melbourne internship model praised.
- ‘Ballarat University graduates (as a group) stand out from the rest. Their preparation and understanding of what is required in schools is definitely as a result of their training at Ballarat. You can pick them from their application through to their commitment to ‘whole school’ activities.’
- The university faculty did a very poor job of helping graduate diploma students prepare for teaching VCE. The lecturers seem more in love with their craft rather than producing teachers who know anything about teaching.
- I have coordinated student teachers for some time and believe the best equipped are those that come through the Deakin program where they undertake 3 teaching rounds at the same school.
- I have been in this role for over 10 years. As such I have worked with many graduates. The huge difference between those having done a 4 year Bachelor of Education/Teaching and those who do a Dip. Ed. on top of whatever still amazes me, although I am expecting it these days. ...The amount of mentoring time needed is far greater for the Dip. Ed. Teachers.
- Best graduates come from four-year courses, not one year Dip Ed type courses.
- ‘The pre service education (the degree) was in no way related to primary teaching – so effectively the teacher has had only 1 year of training.’ (Reflected in a number of responses.)
- ‘Our best beginning teachers have worked in other professional areas for around two years, e.g. journalism, teaching overseas and working as a camp coordinator.’

- More in-school immersion (A constantly recurring comment)

Practical/skills/strategies

- Cater for range of student abilities and differences including cultural differences and boys education. Learn to develop differentiated curriculum. ‘Coping’ with students with special needs, e.g. ADD. (Many comments on this.)
- Classroom/behaviour management that aims to engage students. Incorporate.
- ‘Learn the realities of discipline’
- ‘So much of the graduate’s knowledge and expertise gained at university was suppressed, while all effort was put into classroom management’
- (Many comments on need for classroom management strategies.)
- Psychology and counselling, especially of difficult children
- Mentors to advise on classroom management issues
- ‘Develop a mentoring program in 3rd or 4th year to get students in touch with the classroom and school life on a regular basis.’
- More practical and fewer ‘academic’ subjects. Link theory with practice. How to use ‘real’ school curriculum and other documents
- Learning to read data and tests (e.g. TORCH)
- Pre- service teachers to attend PD that teachers go to
- More on using ICT in the classroom (A number of comments on this.)
- Knowing how students learn and teaching accordingly
- Learn how to teach reading, Early Years, Middle Years, Reading recovery WA First Steps, Thinking Curriculum, social skills and values, de Bono’s hats, Blooms, PMIs.

- More Early Years Literacy and Numeracy experiences – it seems what lecturers are telling schools it is irrelevant.

Many principals commented on the need for future teachers to learn about:

- Government initiatives' e.g.' With strong focus on EY Literacy and Numeracy I am surprised that we are teaching graduates these fundamental structures and strategies in Term 1.
- More on school operations, daily organisation, and working with the wider community. Funding and how to spend it
- Dealing with difficult parents. Legal issues

'Academic' content of courses

- 'Programs need to encourage students to develop a philosophy of education'
- Courses should focus on relevant and current curriculum material, pedagogy and development of a philosophy of teaching. These will all have a huge bearing on the capacity of graduates to contribute beyond the classroom.
- 'Where are the risk takers, those who will show up us 'oldies' e.g. in the ways they organise a classroom, involve students more actively in the learning process, at least at times turn secondary teaching processes on their head.'
- Relatively few comments (3) on need to develop subject content knowledge
- Many comments on developing an understanding of how children learn
- Develop thorough knowledge of curriculum at all levels
- Learn to use on line curriculum resources, e.g. 'Curriculum at Work.'
- (Secondary teachers) need knowledge of the primary curriculum Student teachers should be taught 'to expect and ensure' that learning occurs
- Skills in collaborative curriculum development across different learning areas

- Skills in time management and balancing personal/professional lives
- ‘Students need in-depth understanding, both in relation to their disciplines and in relationship to developing productive pedagogy.’
- More emphasis on contemporary pedagogy and assessment. Criteria based assessment of student work. Using assessment to generate data that drives teaching and learning programs
- ‘Often ‘young’ teachers revert to more traditional styles of teaching (the way they were taught) because they don’t have a mental construct of how people learn, and what’s really important for life long learning.’
- ‘Many pre-service teachers appear to lack understanding of curriculum framework and program content’
- Understanding the links between curriculum, engagement and student management.
- Learn more and at greater depth about the CSF, VCE, Middle Years, and Early Years research and documents
- Working in teams and professional learning groups
- ‘More opportunity to work in professional learning teams/tutorial groups on a range of current methodology’
- More on planning units of work and the CSF. Closer links between curriculum planning and assessment and evaluation
- Enhanced understanding of whole school curriculum
- More awareness of how to engage with the CSF

Pastoral care and the importance of relationships

- More emphasis on relationship building and understanding the views of others

- Maximise potential of successful learner. Promote self esteem. Value themselves and others as learners
- Build communication skills.
- Understand isolation that can occur in a smaller school
- Student welfare, social, cultural, emotional issues.
- Develop interpersonal skills. Dealing with difficult children and parents.
- Personal organisation and learning to work as part of a team
- Learn how to build 'code of co-operation'
- Focus on teamwork and reflection
- Conflict resolution
- Dress, language and reporting techniques
- Better awareness of the work of support staff e.g. guidance officers

Improvements required in the practicum component of pre-service teaching courses

Many principals comment that student teachers need more time in schools. 'More of it and for longer periods' sums up the general feeling.

High support for 'internship' models and 'apprenticeship type' programs and 'extended placements'

- Model of one day per week for a year is 'brilliant.'
- 'Exposure over long period of time possibly 3 days in school +2 days uni.'
- '(more time) .in a classroom viewing daily routines of a cash book, roll, which are all part of teaching.
- More feedback needed from uni lecturers

- And more communication – uni to school
- ‘Practicums that allow new teachers to take as much responsibility as possible and the chance to work with effective mentors who give honest, constructive feedback and encourage reflection in new teachers.’
- Need for ‘accreditation’ of supervising teachers.
- More careful selection of supervising teachers
- More careful selection of schools
- More communication and regular school-uni contact
- ‘Pre-service education programs that provide a regular weekly contact with school life are desirable’.
- High support for the idea of ongoing contact with schools including student teachers working as members of a school team.
- More practice less theory
- Develop classroom management unit as mandatory
- Practicum the best part of the pre-service program
- Use of video to capture pre-service teachers’ lessons with follow up analysis
- I believe that ‘new teachers’ should have more opportunities to have ‘full’ control of a class before taking on the huge responsibility to do this independently. That is, in charge of everything (planning, evaluating, parent contact, cashbooks etc.)
- VUT program good (impressed) as it allows a weekly program of visits as well as a long block. Other training institutions could learn from this method.
- Clearer guidelines and more regular visits from tertiary institutions.
- Too much variation between arrangements for different unis and courses.

- ‘The unis all seem to have different programs. Degree, Double Degree Block placement, once per week? One year teaching practice, 4 years of teaching practice – who knows what uni does what? Do we ever see a lecturer from a uni? Not really. Principals are so out of touch with what unis do, so how can we answer your questions?’
- ‘develop a ‘community of learners’ relationship between unis and schools
- Make sure student teachers do their practicums in innovative schools
- Have practicums early in the course.
- More input from practising school professionals to link pedagogy with practice
- Increased primary placement for secondary trainees
- More needs to be done at school level with support of VIT to ensure students experience positive mentoring from teachers who demonstrate professional standards.
- Arrange practicum experience for student teachers to observe students all levels and all stages of development
- Practical component should include direct teaching of the literacy block
- End of term is not a good time for teachers in schools to supervise student teachers – reports etc.
- Send them out to the country. Let them experience the alternative of a school where small numbers allow the capacity to focus more on teaching and learning rather than management.
- More rigour. More feedback
- Build better school-uni partnerships
- More time for supervising teachers to help student teachers and give feedback
- Practicum across different sectors of the education system to see cultural/geographical/socio economic differences and effects on learning.

- ‘When students return to courses they do not systematically process the practicum experiences.’

Summary

The vast majority of responses advocate student teachers spending much more time in schools, more and longer ‘blocks’ of time, internships, especially in the fourth year, better communication between the school and uni, more careful selection of schools and supervising teachers, development of teams to support student teachers, ‘authentic’ tasks for student teachers, better integration of the practicums into the courses. There were a number of ‘complaints’ about not seeing lecturers.

9. FINDINGS

The study was designed to address two major questions:

1. What are the perceptions of stakeholders (beginning teachers and their employers) about the effectiveness of current teacher education models in Victoria?
2. What changes do stakeholders believe should be made to teacher education programs to better prepare future teachers?

The answers to these questions are, in turn, designed to identify steps that could be taken to ensure that teaching graduates in the future would have the knowledge and skills to be effective teachers.

The survey was distributed in March 2004 to 2667 registered teachers who graduated in 2002 and were beginning their second year of teaching in 2004. A total of 1147 teachers returned completed questionnaires, a response rate of about 44%. A similar questionnaire was distributed to all school principals in Victoria (2364). Those who had at least one first year teacher in 2003 were asked to respond, with one of the first year teachers in mind as they completed the questionnaire. A total of 1663 returned the questionnaires and 749 indicated they had had a beginning teacher at their school in 2003.

Perceptions of effectiveness

With the experience of their first year of teaching behind them, teachers rated the effectiveness of their teacher education programs on the core elements of the VIT professional standards for full teacher registration.

These elements included:

Teachers' knowledge

- About the content they were expected to teach
- About students and their learning

Professional practice

- Curriculum planning
- Classroom management
- Assessment
- Literacy and numeracy across the curriculum

Professional responsibilities

- Working with parents and guardians

- Reflective practice

Teachers were also asked to rate the overall effectiveness of their teacher education program in preparing them for the first year of teaching, the quality of teaching in their university course and the quality of the practicum.

On a four point scale (1 = not at all, 2 = to a minor extent, 3 = to a moderate extent and 4 = to a major extent) these teachers generally scored the core elements of their courses slightly below a 3, except for working with and reporting to parents and guardians, which scored near 2 on average. In other words, respondents on average said their teacher education program had prepared them to a moderate extent on the core elements of the VIT standards.

As this is the first time these measures of teacher education outcomes have been used there is no basis on which to make comparisons with previous years, or with teacher education courses in other states and territories. However, while the distribution of ratings indicates many teachers believed their courses prepared them well for the first year, it also indicates that a worrying proportion felt their preparation was less than adequate.

It should be kept in mind that perceptions of effectiveness vary with the time a survey such as this is administered. As a rule, perceptions gradually improve the longer teachers have been teaching. Teachers often rate their first year of teaching as the most demanding and stressful year they have experienced.

In this study, teachers who completed a four-year undergraduate course generally reported more favourably on their course than teachers who completed a post-graduate degree (but the latter rated the quality of university teaching they received significantly higher). Primary principals rated beginning teachers in their schools as less well prepared on several outcome measures (such as knowledge of content, curriculum planning and assessment than secondary principals did, regardless of whether they had undergraduate or postgraduate qualifications in education. The reasons for this are unclear and would need to be explored in a later study.

Significant differences were not found between double degree courses and undergraduate or postgraduate courses on the outcome measures. School experience was rated higher than other elements of teacher education programs, but teachers from most courses made frequent mention of unsatisfactory arrangements, including the selection and preparation of teachers supervising the practicum experience in schools.

“It could have been more tied to the university course rather than being completely separate”

“My 2nd prac was absolutely fantastic - My first prac was very disappointing as my mentor teacher lacked interest in me or was busy most of the time, patronising and unable to give me any useful advice. More one to one time is crucial to practicum.”

“One of my teachers totally lacked energy and enthusiasm and was bordering on negligent in her approach to me and her students. It was alarming to witness.”

“Lecturers had not been in a school for 20 years and (the course) did not relate to my experiences in a school.”

Teachers rated their courses in terms of *opportunities to learn* how to teach along four key dimensions that included content knowledge, teaching skills, feedback from lecturers and assessment of student learning. On the same four-point scale (1 = not at all, 2 = to a minor extent, 3 = to a moderate extent and 4 = to a major extent), average ratings were about 2.75, except for feedback where the average was about 2.5. This is not a strong endorsement of the methods currently used to help people to learn how to teach. Given the central importance of feedback for learning, especially in acquiring new skills, these findings point to areas that require more focused attention and structured provision in teacher education programs.

Summary: What are the perceptions of stakeholders (beginning teachers and their employers) about the effectiveness of current teacher education models in Victoria?

Overall, teachers and principals viewed pre-service teacher education positively, although they still saw room for improvement. Twenty five percent of teachers rated their course as very effective and about 50% rated it as effective.

Nearly 80% said they would recommend their course to others.

Teachers who had completed an undergraduate degree course were more likely to rate their course as effective overall compared with teachers who had completed a postgraduate degree (but, interestingly, the latter rated the quality of university teaching they received significantly higher).

Teachers who completed a four-year undergraduate course generally reported more favourably on the effectiveness of their courses across the outcome measures (knowledge,

teaching practice, professional practice) than teachers who completed a post-graduate degree. The most highly rated courses were undergraduate courses that prepared secondary specialist teachers, such as physical education teachers.

In contrast, secondary principals rated new teachers with postgraduate qualifications more highly than primary principals rated teachers with undergraduate qualifications. However, like the teachers, the highest ratings were given to undergraduate specialist courses.

Preparing future teachers: features of effective programs

Significant variation was found across the universities in the reported effectiveness of courses on each of the outcome measures listed in Section 1 above. This study was designed to allow analysis of the extent to which a range of features of teacher education courses accounted for this variation. It was also designed to control for the contribution that other factors might make to the variation, such as the background characteristics of the beginning teachers (e.g. age, sex, previous career) and the context of the school in which they spent their first year of teaching (e.g. workload, presence of induction or mentoring programs).

Features of courses included in the analysis were:

1. The structure of the course – whether the course was an undergraduate degree, a postgraduate qualification or a double degree.
2. The practicum experience - this covered organisational features of the practicum such as block or extended rounds, number of days in schools (observing and teaching), as well as the range of roles students were given during the practicum and the quality of the practicum organisation.
3. The quality of university teaching in the course – this included items about the extent to which lecturers modelled good teaching practices and linked their subjects to the school experience component of the program.
4. Opportunity to learn – the extent to which students had opportunities to:
 - learn the content they were expected to teach and how to teach it;
 - actively engage in the process of learning how to teach;
 - receive feedback about their developing skills as a teacher; and

- learn how to assess student learning and plan curriculum units.

When the effects of these features were compared, the ‘opportunity to learn’ features of teacher education programs had the strongest effects on the extent to which teachers felt adequately prepared to carry out their duties in their first year of teaching. Some of these features, such as the focus on content, had more pervasive effects than others, but each had a significant bearing on at least some of the outcome measures.

The effects of these ‘opportunity to learn’ variables were independent of the background characteristics of the new teacher, their in-school experiences during their pre-service course and in the school in which they worked as a teacher in their first year of teaching.

The feature of teacher education programs that had the strongest and most consistent effect on reported outcomes was the extent to which the course had a strong focus on the ‘content to be taught’. Courses with a strong content focus enabled future teachers to:

- a) gain a deep understanding of the content knowledge they were expected to teach
- b) make clear links between content or subject matter units and units about how to teach the content
- c) make clear links between theoretical and practical aspects of teaching
- d) develop a sound understanding of how students learn the specific content that they were expected to teach
- e) learn how to probe students’ prior understandings of content they were about to teach
- f) learn how to present content in ways that built on students’ existing understanding
- g) learn methods of teaching specific to the content they were expected to teach

Teachers who reported that they were well prepared for the demands of teaching were those whose courses had a strong focus on these features. Students from highly rated courses frequently referred to the most helpful features of these courses in these terms:

“Developing and implementing units of work for various KLAs.”

“Providing fantastic support and encouragement /providing in-depth theory as well as relating it in a practical sense”

“Knowledge of Early Years Literacy”

“Planning units of work as a team”

“The assignments that I can use in my teaching now, eg designing units of work and planning a maths unit for a term.”

Opportunity to learn ‘how to assess student learning and plan curriculum units’ was strongly associated with adequacy of professional knowledge in the first year of teaching and knowledge of students (as defined in Chapter 3). It was also very strongly related to teachers reporting that they were able to deal with core professional tasks in their first year, such as designing challenging curriculum units, managing classrooms, assessing student progress, cross curriculum teaching, and interestingly, working effectively with parents. However, less than 20% of teachers said their courses had prepared them, to a major extent, to establish appropriate learning goals for their students, give useful and timely feedback to students about their learning and keep useful records of their students’ progress.

Opportunity to *receive feedback* was also significantly related to the reported effectiveness of courses. Students in the most highly rated courses were much more likely to mention the opportunities they had had for gaining timely and useful feedback from lecturers and practicing teachers as helpful features.

“Our pre-service rounds were the best opportunity to practice methods and strategies in the environment we will be working in and gain instant feedback.”

“Observation of leading teachers and the opportunity to gain instant feedback.”

“Doing it and reflecting and doing it again”.

However, in talking about how this course could be improved, one teacher did say that the course could be improved by,

“Further analysis by lecturers/tutors from the uni, (I was) only observed once in 4 years and 100 days of teaching.”

An important finding from this study is that teachers generally reported receiving little feedback from university staff as they were learning to teach. It is understood that current levels of funding for teacher education do not make it easy for university staff to provide feedback to students about their developing practice. However, the low level of feedback about practice may point to a significant weakness in current approaches to teacher education, as has been found in research on continuing professional learning for teachers, where it is

now understood opportunities for feedback need to be funded and built into programs from the start.

Given the context of initial teacher education, which is preparation for professional practice, it is surprising that feedback is not at a much higher level. One of the key elements in linking theory to practice is feedback. New understandings, skills and attitudes are rarely acquired without timely, relevant and informative feedback about our actions and their effects. It is hard to understand how teacher education courses can link theory to practice effectively if lecturers are rarely in a position to provide feedback to students as they attempt to put the theory into practice. Encouraging students to reflect on their practice may go some way toward helping the situation, but self-reflection is not an adequate substitute for the kind of feedback and insights that an expert teacher can provide.

The study found that courses for the preparation of physical education teachers particularly appear to be organised in ways that facilitate strong links between the presentation of theory and modelling by university staff and opportunities for student teachers to practice the theory and receive feedback and coaching. In contrast, teachers in less effective courses were rarely in situations where it was possible to try new practices and receive feedback. The feedback that supervising teachers gave on teaching rounds was valued, but the relationship between this type of feedback and the theory being taught in the university courses is uncertain.

The effects of the four 'opportunity to learn' features of teacher education programs on the outcome measures were much stronger than the effects of a number of features of the practicum. These features included: the number of days in schools; number of days teaching; whether done as a block of time (e.g. three weeks) or extended over time (e.g. 2-3 days per week); whether they worked with a fellow student; the width of their role in the school; and the perceived quality of the practicum.

These features of the practicum were not related to the reported effectiveness of teacher education programs. This is not to say that the practicum is not important. It is more likely that, for this study, the practicum experience was probably much the same for students from highly rated courses and poorly rated courses. One of the most consistent themes that comes through in the beginning teacher comments about the practicum is the general difficulty of integrating the work that student teachers undertake on the practicum - what they practice - and what they are learning about teaching in the university component of the course. This makes the conditions for linking theory and practice less than optimal. Another is the quality

of the school based supervising teacher and the lack of special training to be an effective student-teacher supervisor in a school.

Differences between the schools where teachers spent their first year of teaching made little difference to their reported effectiveness, except where beginners were allocated a formal mentor teacher, as was the case with the VIT's Standards and Professional Learning Project during 2003. Teachers with mentors were more likely, for example, to report that they felt they knew their students well and that they could handle cross-curriculum aspects of teaching literacy and numeracy. (A recent study of a mentor program to support beginning teachers in California has shown that it can also reduce the attrition rate of beginning teachers.)

This finding appears to be worthy of further investigation. Well-trained supervising teachers and mentors might help to rectify the theory-practice problem and the low level of accurate and timely feedback mentioned above. Now that all provisionally registered teachers in Victoria are expected to have a trained mentor in their first year or two of teaching - and that mentors are expected to observe and give feedback on several lessons using the VIT standards - it may be worth investigating in another survey whether the beneficial effects of the VIT's 2003 pilot project have generalised and "gone to scale" in 2004.

The quality of teaching in the teacher education program, had significant though weak effects on several of the outcome measures, specifically reflection, curriculum planning and classroom management. Recency of teaching experience among lecturers was not related to ratings of course effectiveness, but modelling of good teaching practice and linking of their units to school the school experience component of the program were. Recency of lecturer experience was a frequent theme in the open-ended comments. In listing helpful features of programs, teachers from highly rated courses were more likely than teachers who had completed other courses to make statements such as:

"Having lecturers who had recently been in schools was most beneficial."

"Subjects about teaching and learning . . . with recently practising teachers as tutors – inspirational and very helpful"

When talking about how courses could be improved, teachers from poorly rated courses were more likely to make comments such as:

"Engaged professional lecturers who teach relevant material"

“The university (people) were out of touch and didn’t provide enough practical skill development which is essential in the field. On job learning was the only development I had.”

Summary: What changes should be made to teacher education programs to better prepare future teachers?

When comparing the significance of the different opportunity to learn variables, two stand out: opportunity to learn the content and opportunity to learn about assessment. Courses rated highly in terms of effectiveness, for example, were more likely to be rated highly on the opportunity to learn content and assessment dimensions than the on the opportunity to learn methods for reflection on teaching.

These results are consistent with recent research on the characteristics of effective programs for teachers’ continuing professional learning. These researchers have also found that the substance of what teachers learn matters more than the form. The most effective professional learning programs, in terms of improved student learning outcomes, strengthens teachers’ knowledge of the content they are expected to teach, how students learn that content, how to help students learn that content and how to diagnose student progress in learning that content. This kind of knowledge has pervasive or generative effects on teachers’ capacity to manage the complex demands that teaching presents. In other words, it is foundational and has flow on benefits to areas such as pedagogy, classroom management and the capacity to provide a challenging and supportive learning environment.

While teachers and principals provided plenty of comments about ways in which teacher education might be improved, it is important to note that this study does not rely on anecdotal evidence in reporting its findings about what do future teachers need to know and be able to do. Claims are based on analyses of the strength of the relationship between course characteristics and ratings of preparedness and effectiveness by teachers with experience of their first year of teaching clearly in mind.

Major differences were found in the effectiveness of different teacher education courses, as reported by these teachers beginning their second year of teaching. The design of this study made it possible to analyse the relative effects of a range of carefully measured components of teacher education courses on a range of outcome measures.

Structural features of teacher education courses did not relate closely to the variation in perceived effectiveness. The key features of effective courses lie in the quality of the opportunities and processes for learning how to teach.

In developing standards for the accreditation of future teacher education courses, this study suggests several features of courses that warrant examination, but close attention should be given to the capacity of the course to ensure that graduates:

- can demonstrate deep understanding of what they will be expected to teach,
- learn methods of teaching specific to the content they will teach,
- understand how students learn that content
- plan and prepare units of work collaboratively, based on this understanding, and
- receive opportunities to practice new skills and receive useful feedback about their teaching from lecturers and expert practitioners,

These suggestions will not appear particularly new. While major changes are taking place in society as a result, for example, of information technology and globalisation - and teacher education will need to take account of these - this study provides a reminder that certain core features of quality teaching and learning will remain. These features include an understanding of what it means to educate a mind and what it takes to meet the core challenge in teaching – how to reach a child and how to ensure a pleasurable meeting of minds around worthwhile subject matter and fertile questions in a trusting environment.

The results of this study, though perhaps unsurprising, do say that teacher education matters. In a field where some have questioned the impact of, or need for, professional preparation programs, this is a significant finding. While we have found wide variation in the reported quality of teacher education programs, we have not found that teacher education does not make a difference. Quite the opposite.

Teachers who reported that they felt well-prepared to meet the demands they faced in their first year of teaching, as defined in the VIT registration standards, had completed courses that gave them deep knowledge of what they were expected to help students learn, and how students learned it, as well as skill in diagnosing students' existing levels of understanding of

the content to be taught, planning activities that would promote further development and assessing the extent to which development had taken place. These professional capabilities appear to remain the necessary, though not sufficient, foundations in preparing teachers to meet the wider demands of the job, from establishing a productive learning environment to working effectively with parents.

Benchmarking for future surveys

One of the purposes of this study was to develop and trial measures that might be used subsequently as benchmarks for monitoring the outcomes of the teacher education system. It was found that the measures developed for this study were high on internal consistency. They were also able to discriminate between teacher education courses. The reliability of these measures means that they could be used as benchmarks for examining changes over time, or the effects of programs or policies designed to influence the quality of teacher education. There was a wide distribution of individual scores on each measure. Significant differences between courses were also found on each of these measures. The results of this study indicate that the scales developed for the survey instrument would be suitable as a basis for creating benchmarks that might be used in a monitoring system. The scales also provide room for detecting changes in perceptions of teacher education courses on each of the outcome measures if they were to be used in the future.

APPENDIX: THE SURVEY INSTRUMENTS

This appendix consists of the survey instruments used for the study. The beginning teacher survey is shown first followed by the school principal (employer) survey.



FUTURE TEACHERS PROJECT

TEACHER QUESTIONNAIRE

March 2004

About this questionnaire

Who? This survey is intended for all registered teachers who completed their pre-service teacher education program between the 31st March 2002 and the 31st March 2003.

Why? The survey will be used by the *Victorian Institute of Teaching* (VIT) to identify effective components of current teacher education models, as well as those changes you believe should be made to teacher education programs to better prepare future teachers. It is one of a range of data collection strategies that will be used in the process of reviewing and developing the guidelines to assess and approve teacher education courses for the future.

How? For most questions you only need to tick a box.

When? Please complete and return the survey within the next week.

How long? During its development, teachers took between 30 and 40 minutes to complete the questionnaire.

Where? Use the envelope that accompanies this questionnaire to return it to the *Australian Council for Educational Research*. If you misplace the envelope, then please send the completed survey to:

Australian Council for Educational Research
Reply Paid 444 (VIT Study)
Private Bag 55
CAMBERWELL Vic 3124

If you use this address, you do not need to pay any postage.

If you choose not to complete the survey, please write your registration number on the survey form and return it to us so that we do not send you reminders. This will save both of us time.

Use of the data The data collected from this survey will be processed and analysed for the *VIT* by the *Australian Council for Educational Research* (ACER).

ACER has been contracted by the VIT to conduct this study.

ACER will prepare a report for the VIT and once this report is finalized, the data held at ACER will be transferred to the VIT. No individual or school will be identified in any reports produced using data collected for this study. No individual or school will be identifiable from the data.

Any questions? If you have any questions or concerns related to this survey, please contact Ruth Newton, Manager Accreditation, VIT, via phone 9616 0852 or email ruth.newton@vit.vic.edu.au

The first question asks for your VIT registration number so that we will know which questionnaires have been returned. This information will not be stored electronically and your written response below will be cut from the questionnaire and confidentially destroyed upon return of this questionnaire.

Q 1 What is your VIT registration number? (Please write your number in this box)



Q 2 When did you complete your pre-service teacher education course?

Please tick one box only.

Before 31st March 2002 *If you ticked this box, please **STOP HERE and return this questionnaire to the address shown at the front.** We ask you to stop here because the study is designed for teachers who graduated in 2002 or early 2003.*

Between 31st March 2002 & 31st March 2003 *Please go to Q 3*

After 31st March 2003 *If you ticked this box, please **STOP HERE and return this questionnaire to the address shown at the front.** We ask you to stop here because the study is designed for teachers who graduated in 2002 or early 2003.*

Q 3 Are you female or male?

Female

Male

Q 4 How old are you?

25 years or younger

Over 25 years of age

Q 5 Prior to commencing your pre-service teacher education course, did you have another career?

For the purposes of this question, a career is having a paid job that you regarded as likely to form your life's work.

Yes

No

Q 6 Which pre-service teacher education program have you completed?*Please tick one box only.****Australian Catholic University at campuses in Victoria***

- a. Bachelor of Arts/Bachelor of Teaching
- b. Bachelor of Education (Primary)
- c. Postgraduate Bachelor of Education (Primary)
- d. Graduate Diploma of Education (Secondary)

Charles Sturt University – Albury

- e. Bachelor of Education (Early Childhood)

Deakin University

- f. Bachelor of Teaching (Primary) with another degree
- g. Bachelor of Teaching (Secondary) with another degree
- h. Bachelor of Teaching (Primary/Secondary) – postgraduate
- i. Other

La Trobe University

- j. Bachelor of Teaching with another year of study such as B.Ed.
- k. Graduate Diploma in Education (Primary)
- l. Graduate Diploma in Education (Secondary)
- m. Graduate Diploma in Education (P-12)
- n. Graduate Diploma in Technology Education
- o. Other

Monash University

- p. Bachelor of Education – Primary with another degree
- q. Bachelor of Education – Secondary with another degree
- r. Bachelor of Primary Education
- s. Bachelor of Early Childhood Education
- t. Graduate Diploma of Education (Secondary)
- u. Graduate Diploma of Education (Primary)
- v. Other

RMIT

- w. Bachelor of Education
- x. Bachelor of Applied Science (Physical Education)
- y. Graduate Diploma of Education (Secondary)
- z. Graduate Diploma of Education (Primary)

University of Ballarat

- aa. Bachelor of Arts/Bachelor of Teaching
- bb. Bachelor of Education
- cc. Bachelor of Teaching (Postgraduate)
- dd. Bachelor of Education (Physical Education)
- ee. Graduate Diploma of Education (Secondary)

University of Melbourne

- ff. Bachelor of Education (Primary)
- gg. Bachelor of Teaching (Primary)
- hh. Bachelor of Teaching (Secondary)
- ii. Graduate Diploma in Education (Secondary)
- jj. Other

Victoria University of Technology

- kk. Bachelor of Education
- ll. Graduate Diploma in Secondary Education

Teacher pre-service programs outside of Victoria

- mm. A pre-service education program completed in Australia but outside of Victoria

nn. A pre-service education program completed overseas

Q 7 Did you teach at any school in 2003?

Yes **If yes, were you ...**

Please tick as many boxes as apply.

a. in an on-going position

b. on a contract or contracts

c. doing Casual Relief Teaching (CRT) or emergency teaching

No **If no, please go to Q 22.**

Q 8 What type of school or schools did you teach at during 2003?

Please tick as many boxes as apply.

a. Primary (P-6)

b. Secondary (7-12)

c. P-10

d. P-12

e. Other

Q 9 In what sector(s) did you teach in 2003?

Please tick as many boxes as apply.

a. Government

b. Catholic

c. Independent

Q 10 a) What year level(s) did you teach in 2003?

If you taught a composite class, tick each year level in your class.

b) What year levels were you trained to teach in your pre-service teacher education program?

If you are a qualified generalist primary teacher please tick all the boxes from Prep to Year 6.

Similarly, if you are a secondary teacher, tick all year levels you are qualified to teach, even if you have never taught at these levels.

Please tick as many boxes as apply.

	(a) Year levels you taught in 2003	(b) Year levels you are qualified to teach
a. Prep	<input type="checkbox"/>	<input type="checkbox"/>
b. Year 1	<input type="checkbox"/>	<input type="checkbox"/>
c. Year 2	<input type="checkbox"/>	<input type="checkbox"/>
d. Year 3	<input type="checkbox"/>	<input type="checkbox"/>
e. Year 4	<input type="checkbox"/>	<input type="checkbox"/>
f. Year 5	<input type="checkbox"/>	<input type="checkbox"/>
g. Year 6	<input type="checkbox"/>	<input type="checkbox"/>
h. Year 7	<input type="checkbox"/>	<input type="checkbox"/>
i. Year 8	<input type="checkbox"/>	<input type="checkbox"/>
j. Year 9	<input type="checkbox"/>	<input type="checkbox"/>
k. Year 10	<input type="checkbox"/>	<input type="checkbox"/>
l. Year 11	<input type="checkbox"/>	<input type="checkbox"/>
m. Year 12	<input type="checkbox"/>	<input type="checkbox"/>
n. Year 13	<input type="checkbox"/>	<input type="checkbox"/>
o. Other	<input type="checkbox"/>	<input type="checkbox"/>

Some new graduates find they teach in more than one school in their first year after graduation. If you taught in more than one school in 2003, when answering the following questions think of the school in which you spent the most time as a new teacher.

Q 11 In your work as a teacher in 2003, did you work only as a generalist primary school teacher?

Yes If yes, please go to Q 13

No

Q 12 a) In what key learning area(s) did you teach in 2003?

b) In what key learning area(s) were you trained to teach in your pre-service teacher education program?

Please tick as many boxes as apply.

	(a) KLAs you taught in 2003	(b) KLAs you are trained to teach
d. Arts	<input type="checkbox"/>	<input type="checkbox"/>
e. English	<input type="checkbox"/>	<input type="checkbox"/>
f. Health and Physical Education	<input type="checkbox"/>	<input type="checkbox"/>
g. Languages other than English	<input type="checkbox"/>	<input type="checkbox"/>
h. Mathematics	<input type="checkbox"/>	<input type="checkbox"/>
i. Science	<input type="checkbox"/>	<input type="checkbox"/>
j. Studies of Society and Environment	<input type="checkbox"/>	<input type="checkbox"/>
k. Technology	<input type="checkbox"/>	<input type="checkbox"/>
l. Other	<input type="checkbox"/>	<input type="checkbox"/>

Q 13 On average, how many class contact hours per week did you have in your first year of teaching?

..... hours

Q 14 In your first year of teaching, what proportion of your students spoke English as a second language?

Please tick only one box.

Nearly 100%

About 75%

About half

About 25%

Hardly any

Q 15 In your first year of teaching, what proportion of your students had significant English literacy problems?

Tick only one box

Nearly 100%

About 75%

About half

About 25%

Hardly any

Q 16 Did your school provide an induction program for you?

Yes

No If *no*, go to Q 18

Q 17 To what extent did your experience of induction at your school support you in the development of your teaching practice?

Please tick only one box.

Not at all

To a minor extent

To a moderate extent

To a major extent

Q 18 To what extent did your professional learning team (colleagues) in your school support you in the development of your teaching practice?

Please tick only one box.

- Not at all
- To a minor extent
- To a moderate extent
- To a major extent

Q 19 In 2003, were you formally allocated your own mentor at your school?

Remember, if you taught in more than one school in 2003, when answering think of the school in which you spent the most time

- Yes
- No *If no, please go to Q 22*

Q 20 On average, how many times per week did you meet with your mentor?

..... *times*

Q 21 How helpful was this mentor to you in developing your teaching practice?

Please tick only one box.

- Not at all helpful
- Somewhat helpful
- Helpful
- Very helpful

The next question asks you about the opportunities to learn provided by your pre-service teacher education program.

Q 22 To what extent did your pre-service teacher education program (including the practicum) gave you the opportunity to ...

(If you completed a degree plus graduate diploma (Dip. Ed.) or other post graduate pre-service teacher education program, please consider your undergraduate degree as part of your preparation.)

Please tick one box on each row.

	Not at all	To a minor extent	To a moderate extent	To a major extent
a. gain a deep understanding of the content knowledge you were expected to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. make clear links between content or subject matter units and units about how to teach the content	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. make clear links between theoretical and practical aspects of teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. develop a sound understanding of how students learn the specific content that you were expected to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. learn how to probe students' prior understandings of content you were about to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. learn how to present content in ways that build on students' existing understanding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. learn methods of teaching specific to the content you were expected to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. see models of expert teachers in action	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. observe models illustrating new teaching practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. learn methods for reflecting on your teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. practise analysing and reflecting on examples of your practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. use teaching standards to identify specific areas of your practice that you needed to develop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. develop and test new teaching practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 22 continues on the next page ...

<i>Q 22 Continued:</i>				
<i>Your pre-service education program provided you with the opportunity to ...</i>				
<i>Please tick one box on each row.</i>				
	Not at all	To a minor extent	To a moderate extent	To a major extent
n. practise new teaching skills, with feedback from your tutor/lecturer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. receive useful feedback about your teaching from your university tutor/lecturer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. receive useful feedback about your teaching from your school-based supervisor/s	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. analyse your teaching practice in relation to standards for good teaching practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. examine student work in relation to standards for student learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. learn how to diagnose students' achievement in relation to expected learning outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. plan and prepare units of work collaboratively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. assess and monitor collaboratively, students' progress against standards for student learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. plan and assess in accordance with the CSF/VCE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- ***If you did not teach in 2003, please go to Q 28.***
- ***If you did teach in 2003 please go to the next question (Q 23).***

The next section of the questionnaire asks you about how well your pre-service education program prepared you by giving you a good understanding of aspects of teaching.

Professional knowledge

Q 23 Keeping in mind your teaching experiences in 2003, please indicate the extent to which your pre-service teacher education program gave you a good understanding of ...

(If you completed a degree plus graduate diploma (Dip. Ed.), or other post graduate pre-service teacher education program, please consider your undergraduate degree as part of your preparation.)

Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent
a. the content areas you were qualified to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. how to analyse students' existing understanding of topics you are about to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. how to build on students' existing knowledge and experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. individual differences in student approaches to learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. current developments in your field of teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. the effects of the social, cultural, religious and ethnic backgrounds of students on their learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. how individual students learn and develop	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. resources to support your students' learning in the areas you are qualified to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. the CSF and/or VCE in the areas you are qualified to teach	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. how to use findings from research to improve your knowledge and practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. the interconnectedness of learning across subject areas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. how cultural and gender differences can affect communication in the classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. ethical standards and codes of conduct expected of teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Professional practice

Q 24 Keeping in mind the requirements of your first teaching position, please indicate the extent to which *your pre-service teacher education program prepared you to ...*

Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent
a. design teaching and learning units/ programs relevant to your students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. communicate ideas and information clearly to your students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. use effectively the principles of curriculum documents (e.g. CSF)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. establish appropriate learning goals for your students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. set up learning activities to help students achieve learning goals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. develop questions to challenge students and promote higher order thinking	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. locate suitable curriculum materials and teaching resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. use computers to aid your teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. incorporate opportunities for teaching literacy skills across the curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. incorporate opportunities for teaching numeracy skills across the curriculum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. give useful and timely feedback to students about their learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. encourage your students to use a variety of critical thinking skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. establish a productive learning environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. assess and monitor the progress of your students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. use assessment to give effective feedback to your students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. keep useful records of your students' progress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 24 continues on the next page ...

Q 24 Continued:
The extent to which your pre-service teacher education program prepared you to ...
 Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent
q. enhance student confidence and self-esteem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. use motivational strategies effectively	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. encourage appropriate student behaviour	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. develop assessment tasks that promote learning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. provide flexible learning pathways	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. incorporate effective classroom management strategies into your teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w. make your teaching relevant to your students' experience	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 25 Keeping in mind the requirements of your first teaching position, please indicate the extent to which your pre-service teacher education program prepared you to ...

Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent
oo. work with parents or guardians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
pp. work with non-teaching professionals (e.g. speech pathologists, integration aides)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
qq. work collaboratively with other teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rr. use student data to develop an action plan for future improvement of your teaching practices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ss. use assessment to give effective feedback to parents or guardians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
tt. reflect upon the effectiveness of your teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
uu. reflect upon your professional knowledge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
vv. identify your learning needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ww. contribute to the development of a professional learning culture in your school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
xx. set up activities that cater for the learning needs of students with diverse social, cultural, religious and ethnic backgrounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 29 How often did your university lecturers and tutors in your pre-service teacher education program ...

Please tick one box on each row.

	Never	Rarely	Sometimes	Often
a. model good teaching practices in their teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. draw on and use research relevant to the content of their courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. model evaluation and reflection on their own teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. have recent experience in primary or secondary schools <i>(If you do not know, please do not tick a box for this row.)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. value the learning and experiences I had prior to starting the program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. link their university units to the school experience component of the program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. value the learning and experiences you had in your practicum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 30 During your pre-service teacher education program, about how many days in total did you spend in schools (whether practice teaching, observing or doing other activities)?

..... *days*

Q 31 During your pre-service teacher education program, about how many days in total did you spend *teaching* in schools?

..... *days*

Q 32 During your pre-service teacher education program, how was your practicum experience organised?

Please tick as many boxes as apply.

- a. Blocks of time (e.g. 3 weeks)
- b. A certain number of days each week (e.g. 2 days per week)
- c. Other (*Please describe*)

Q 33 Did you work in partnership with another student teacher on your teaching rounds (e.g. sharing the same supervising teacher)?

Yes

No

Q 34 During your pre-service teacher education program, how often did you ...

Please tick one box on each row.

	Never	Rarely	Sometimes	Often
a. observe other teachers (apart from your supervising teachers) in their classrooms	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. join in regular meetings of teachers (e.g. planning, reviewing student work, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. visit families or local community agencies and organisations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. interview principals and teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. conduct small research projects in the school as part of your pre-service teacher education program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. assist with wider school activities without teaching (e.g. helping or excursions, camps, with sport, providing individual tutoring)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. plan lessons jointly with other student teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 35 Thinking about your practicum during your final year of your pre-service teacher education program, to what extent do you agree with the following statements?

Please tick one box on each row.

	Strongly disagree	Disagree	Agree	Strongly agree
a. My supervising teacher(s) had a clear idea of what my university required me to do as part of my practicum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I had a clear understanding of what was expected of me as a teacher in order to pass the practicum	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I used teaching standards as a guide to evaluating and reflecting on my teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. My supervising teacher(s) used clear and explicit standards when reviewing my lessons with me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Overall, the feedback I received from my supervising teacher(s) helped me to improve my teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. The methods used to assess my ability to teach were valid	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. My university lecturer(s) and my school-based supervising teachers had similar views on good teaching methods	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. My supervising teacher(s) generally valued the ideas and approaches I brought from my university teacher education program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Overall, my practicum experience was a valuable part of my preparation to become a teacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. My supervising teacher(s) used criteria/standards provided by my university for evaluating my teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q 36 During the final year of your pre-service teacher education program, about how many times were you observed by a lecturer from your university?

..... times

Q 37 Please briefly describe the features of the practicum component of your pre-service teacher education program of most value in helping you learn how to teach.

.....

.....

.....

Q 38 Please briefly describe how the practicum component of your pre-service teacher education program may have been improved in helping you learn how to teach.

.....

.....

.....

Q 39 How helpful was the practicum experience to you in developing your teaching practice?

Please tick only one box.

- Not at all helpful
- Somewhat helpful
- Helpful
- Very helpful

Q 40 Knowing what you do now, would you recommend your pre-service education program to a person interested in becoming a teacher?

- Yes
- No

Please turn over the page, one short question to go!

Q 41 Overall, how effective was your pre-service teacher education program in preparing you as a teacher?

Please tick only one box.

- Not at all effective
- Somewhat ineffective
- Effective
- Very effective
- I do not know

Thank you for completing this questionnaire. Your help is much appreciated.



FUTURE TEACHERS PROJECT

Principal Questionnaire

March 2004

About this questionnaire

Who? This survey is intended for principals or their nominated representative who employed at least one teacher who qualified as a teacher between 31st March 2002 and 31st March 2003.

If this survey does not apply to you, please complete Q 1 and Q 2 and return it to us.

If you choose not to complete the survey, please write your school name on the survey form and return it to us so that we do not send you reminders. This will save both of us time.

Why? The survey will be used by the *Victorian Institute of Teaching* (VIT) to identify effective components of current teacher education models, as well as those changes you believe should be made to teacher education programs to better prepare future teachers. It is one of a range of data collection strategies that will be used in the process of reviewing and developing the guidelines to assess and approve teacher education courses for the future.

How? For most questions you only need to tick a box.

When? Please complete and return the survey within the next week.

How long? It should take about 15 to 20 minutes to complete the questionnaire.

Where? Use the envelope that accompanies this questionnaire to return it to the *Australian Council for Educational Research*. If you misplace the envelope, then please send the completed survey to:

***Australian Council for Educational Research
Reply Paid 444 (VIT Study)
Private Bag 55
CAMBERWELL Vic 3124***

If you use this address, you do not need to pay any postage.

Use of the data The data collected from this survey will be processed and analysed for the VIT by the *Australian Council for Educational Research* (ACER). ACER has been contracted by the VIT to conduct this study. ACER will prepare a report for the VIT and once this report is finalized, the data held at ACER will be transferred to the VIT. No individual or school will be identified in any reports produced using data collected for this study. No individual or school will be identifiable from the data.

Any questions? If you have any questions or concerns related to this survey, please contact Ruth Newton, Manager Accreditation, VIT, via phone 9616 0852 or email ruth.newton@vit.vic.edu.au

The first question asks for your school's name so that we will know which questionnaires have been returned. This information will not be stored electronically and your written response below will be cut from the questionnaire and confidentially destroyed upon return of this questionnaire.

Q 1 What is the name of your school? (Please do not abbreviate it!)



Q 2 Did you employ a teacher during 2003 who graduated from a pre-service teacher education program between 31st March 2002 and 31st March 2003?

No *If you ticked this box, please **STOP HERE** and return this questionnaire to the address shown at the front. We ask you to stop here because the study is designed to collect information only about teachers who graduated in 2002 or early 2003.*

Yes

Q 3 What type is your school?

Please tick only one box.

Primary (P-6)

Secondary (7-12)

P-10

P-12

Other

Q 4 In what sector is your school?

Please tick only one box.

Government

Catholic

Independent

In order to answer the next set of questions, we ask you to think of one of those teachers on your staff whom you employed a teacher during 2003 and who graduated from a pre-service teacher education program between 31st March 2002 and 31st March 2003.

If you have more than one teacher who fits this description, then choose the one about whom you feel you know most concerning their teaching practice at your school.

Q 5 Which pre-service teacher education program did this teacher complete?*Please tick one box only.***Australian Catholic University at campuses in Victoria**v. Bachelor of Arts/Bachelor of Teaching yy. Bachelor of Education (Primary) zz. Postgraduate Bachelor of Education (Primary) aaa. Graduate Diploma of Education (Secondary) **Charles Sturt University – Albury**bbb. Bachelor of Education (Early Childhood) **Deakin University**ccc. Bachelor of Teaching (Primary) with another degree ddd. Bachelor of Teaching (Secondary) with another degree eee. Bachelor of Teaching (Primary/Secondary) – postgraduate fff. Other **La Trobe University**ggg. Bachelor of Teaching with another year of study such as B.Ed. hhh. Graduate Diploma in Education (Primary) iii. Graduate Diploma in Education (Secondary) jjj. Graduate Diploma in Education (P-12) kkk. Graduate Diploma in Technology Education lll. Other **Monash University**mmm. Bachelor of Education – Primary with another degree nnn. Bachelor of Education – Secondary with another degree ooo. Bachelor of Primary Education ppp. Bachelor of Early Childhood Education qqq. Graduate Diploma of Education (Secondary) rrr. Graduate Diploma of Education (Primary) sss. Other **RMIT**ttt. Bachelor of Education uuu. Bachelor of Applied Science (Physical Education) vvv. Graduate Diploma of Education (Secondary) www. Graduate Diploma of Education (Primary) **University of Ballarat**xxx. Bachelor of Arts/Bachelor of Teaching yyy. Bachelor of Education zzz. Bachelor of Teaching (Postgraduate) aaaa. Bachelor of Education (Physical Education) bbbb. Graduate Diploma of Education (Secondary) **University of Melbourne**cccc. Bachelor of Education (Primary) dddd. Bachelor of Teaching (Primary) eeee. Bachelor of Teaching (Secondary) ffff. Graduate Diploma in Education (Secondary) gggg. Other **Victoria University of Technology**hhhh. Bachelor of Education iiii. Graduate Diploma in Secondary Education **Teacher pre-service programs outside of Victoria**jjjj. A pre-service education program completed in Australia but outside of Victoria kkkk. A pre-service education program completed overseas **Don't know**

Q 6 Did this teacher work only as a generalist primary school teacher?Yes If yes, please go to Q8No **Q 7 a) In what key learning area(s) did this teacher teach in 2003?****b) In what key learning area(s) was this teacher trained to teach in their pre-service teacher education program?***Please tick as many boxes as apply.*

	(a) KLAs taught in 2003	(b) KLAs trained to teach
w. Arts	<input type="checkbox"/>	<input type="checkbox"/>
x. English	<input type="checkbox"/>	<input type="checkbox"/>
y. Health and Physical Education	<input type="checkbox"/>	<input type="checkbox"/>
z. Languages other than English	<input type="checkbox"/>	<input type="checkbox"/>
aa. Mathematics	<input type="checkbox"/>	<input type="checkbox"/>
bb. Science	<input type="checkbox"/>	<input type="checkbox"/>
cc. Studies of Society and Environment	<input type="checkbox"/>	<input type="checkbox"/>
dd. Technology	<input type="checkbox"/>	<input type="checkbox"/>
ee. Other	<input type="checkbox"/>	<input type="checkbox"/>
ff. Don't know		<input type="checkbox"/>

The next section of the questionnaire asks you about how well this teacher's pre-service education program prepared them by giving them a good understanding of and preparation for teaching.

Professional knowledge

Q 8 Please indicate the extent to which, in your view, this teacher's pre-service teacher education program gave them a good understanding of ...

(If they completed a degree plus graduate diploma (Dip. Ed.) or other post graduate pre-service teacher education program, please consider their undergraduate degree as part of your preparation.)

Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent	Don't know
a. the content areas they were qualified to teach	<input type="checkbox"/>				
b. how to analyse students' existing understanding of topics they were about to teach	<input type="checkbox"/>				
c. how to build on students' existing knowledge and experience	<input type="checkbox"/>				
d. individual differences in student approaches to learning	<input type="checkbox"/>				
e. current developments in their field of teaching	<input type="checkbox"/>				
f. the effects of the social, cultural, religious and ethnic backgrounds of students on their learning	<input type="checkbox"/>				
g. how individual students learn and develop	<input type="checkbox"/>				
h. resources to support students' learning in the areas they are qualified to teach	<input type="checkbox"/>				
i. the CSF and/or VCE in the areas they are qualified to teach	<input type="checkbox"/>				
j. how to use findings from research to improve their knowledge and practice	<input type="checkbox"/>				
k. the interconnectedness of learning across subject areas	<input type="checkbox"/>				
l. how cultural and gender differences can affect communication in the classroom	<input type="checkbox"/>				
m. ethical standards and codes of conduct expected of teachers	<input type="checkbox"/>				

Professional practice

Q 9 Please indicate the extent to which, in your view, this teacher's *pre-service teacher education program* prepared them to ...

Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent	Don't know
a. design teaching and learning units/ programs relevant to their students	<input type="checkbox"/>				
b. communicate ideas and information clearly to their students	<input type="checkbox"/>				
c. use effectively the principles of curriculum documents (e.g. CSF)	<input type="checkbox"/>				
d. establish appropriate learning goals for their students	<input type="checkbox"/>				
e. set up learning activities to help students achieve learning goals	<input type="checkbox"/>				
f. develop questions to challenge students and promote higher order thinking	<input type="checkbox"/>				
g. locate suitable curriculum materials and teaching resources	<input type="checkbox"/>				
h. use computers to aid their teaching	<input type="checkbox"/>				
i. incorporate opportunities for teaching literacy skills across the curriculum	<input type="checkbox"/>				
j. incorporate opportunities for teaching numeracy skills across the curriculum	<input type="checkbox"/>				
k. give useful and timely feedback to students about their learning	<input type="checkbox"/>				
l. encourage their students to use a variety of critical thinking skills	<input type="checkbox"/>				
m. establish a productive learning environment	<input type="checkbox"/>				
n. assess and monitor the progress of their students	<input type="checkbox"/>				
o. use assessment to give effective feedback to their students	<input type="checkbox"/>				
p. keep useful records of their students' progress	<input type="checkbox"/>				

Q9 continues on the next page ...

Q9 Continued:
The extent to which this teacher's pre-service teacher education program prepared them to ...
 Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent	Don't know
q. enhance student confidence and self-esteem	<input type="checkbox"/>				
r. use motivational strategies effectively	<input type="checkbox"/>				
s. encourage appropriate student behaviour	<input type="checkbox"/>				
t. develop assessment tasks that promote learning	<input type="checkbox"/>				
u. provide flexible learning pathways	<input type="checkbox"/>				
v. incorporate effective classroom management strategies into their teaching	<input type="checkbox"/>				
w. make their teaching relevant to their students' experience	<input type="checkbox"/>				

Q 10 Please indicate the extent to which, in your view, this teacher's pre-service teacher education program prepared them to ...

Please tick one box on each row.

	Not at all	A minor extent	A moderate extent	A major extent	Don't know
a. work with parents or guardians	<input type="checkbox"/>				
b. work with non-teaching professionals (e.g. speech pathologists, integration aides)	<input type="checkbox"/>				
c. work collaboratively with other teachers	<input type="checkbox"/>				
d. use student data to develop an action plan for future improvement of their teaching practices	<input type="checkbox"/>				
e. use assessment to give effective feedback to parents or guardians	<input type="checkbox"/>				
f. reflect upon the effectiveness of their teaching	<input type="checkbox"/>				
g. reflect upon their professional knowledge	<input type="checkbox"/>				
h. identify their learning needs	<input type="checkbox"/>				
i. contribute to the development of a professional learning culture in the school	<input type="checkbox"/>				
j. set up activities that cater for the learning needs of students with diverse social, cultural, religious and ethnic backgrounds	<input type="checkbox"/>				

This next (and final) section asks you to briefly comment upon pre-service teacher education programs in general.

Q 11 Please briefly describe how, in your view, pre-service teacher education programs could be improved to help new teachers learn how to teach.

(Note the next question asks about the practicum so if your comments relate to this component, write them there.)

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Q 12 Please briefly describe how, in your view, the practicum component of pre-service teacher education programs could be improved to help new teachers learn how to teach.

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Thank you for completing this questionnaire. Your help is much appreciated.

REFERENCES

- Gottfredson, L. S. (1981). Circumscription and compromise: a developmental theory of occupational aspirations. *Journal of Counseling Psychology Monograph*, 28(No. 6, November), 545-579.
- Gottfredson, L. S. (1996). Gottfredson's Theory of Circumscription and Compromise. In D. Brown & L. Brooks (Eds.), *Career Choice and Development* (3rd ed.). San Francisco: Jossey-Bass.
- Gottfredson, L. S. (2002). Gottfredson's theory of circumscription, compromise, and self-creation. In D. Brown (Ed.), *Career Choice and Development* (4th ed., pp. 85-148). San Francisco: Jossey-Bass.
- Kidder, L. H., & Judd, C. M. (1987). *Research Methods in Social Relations*. New York: CBS Publishing Japan Ltd., for the Society for the Psychological Study of Social Issues.