PRE-SERVICE TEACHER EDUCATION IN AUSTRALIA: A MAPPING STUDY OF SELECTION PROCESSES, COURSE STRUCTURE AND CONTENT, AND ACCREDITATION PROCESSES

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June 2004

A report prepared for the MCEETYA
Taskforce on Teacher Quality and Educational Leadership

ACER

The Teacher Quality and Educational Leadership Taskforce commissioned the Australian Council for Educational Research (ACER) to undertake this research project.

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EXECUTIVE SUMMARY

PURPOSE

The main purpose of this study was to conduct a survey of Australian institutions that provide pre-service teacher education courses for primary and secondary teachers. The key elements of this mapping exercise included:

Selection processes: The criteria and processes that teacher education institutions use to select students for courses.

Course structure and content: The types of course content and structure that exist currently, including key components such as arrangements for the practicum and for ICT.

Accreditation processes: The processes currently used, both internally and externally, for the accreditation and evaluation of teacher education courses.

METHOD

The survey instrument was sent to all universities that provide pre-service teacher education courses. Responses were received from 38 of the 38 university providers and covered 102 individual pre-service teacher education courses, including undergraduate, postgraduate and double degree courses. State and Territory registration bodies and agencies responsible for course approval were also surveyed for the accreditation section.

FINDINGS

1.   Selection processes in teacher education

- For undergraduate courses, a satisfactory Year 12 completion with the necessary ENTER score (or equivalent) was the requirement for admission. Sometimes universities required specific subjects to have been completed at school. For postgraduate courses an undergraduate degree was a prerequisite. Again, universities required appropriate subject specialities.

- Nearly all universities used tertiary admission centres for selecting students into undergraduate courses. There was only minor variation to this, often associated with the use of special entry provisions. Postgraduate courses often used Grade Point Averages from the undergraduate degree supplemented with other methods (interviews, written statements from applicants) particularly when trying to choose among marginal cases.

- For both undergraduate and postgraduate courses academic ability as measured by ENTER scores, tests scores or Grade Point Averages was the criterion most commonly identified as 'very important' for selecting students. Special consideration was commonly seen as 'somewhat important'. Few universities were able to use interviews to make judgements about the likely quality of the applicant as a teacher to sort applicants.

- Universities with small numbers of applicants appear to be able use a wider range of selection procedures than those with large enrolments.

- Universities devote considerable resources to ensuring students quickly learn if teaching is for them. The most common practice is to get students into classrooms as soon as possible. This is typically done using the practicum. There is counselling, academic time, mentoring and monitoring also used by universities. This appears to be a major concern of educational faculties.

- Resources limit what universities can do to change their selection procedures. Many regard their current procedures as at least adequate – they are equitable, resource efficient, and provide reasonable chance of selecting suitable students – and at best, very good. Interviews are often cited as another option, but in large institutions these are seen to be impracticable.

- No universities reported using "aptitude" tests in selecting students for pre-service teacher education programs, as recommended in the recent DEST report *Australia's Teachers: Australia's Future.*

- Demand for teacher education places is strong. However, universities differ in their capacity to attract students of high academic quality into teacher education courses. ENTER scores for teacher education courses vary significantly from university to university.

Summary

The data from these universities suggests that the key factor used to select into pre-service teacher education – whether undergraduate or postgraduate – is the measured academic ability of the applicant. Tertiary admission centres nearly always process applications to undergraduate courses, and special access provisions supplement these processes.

One of the features of the data was how similar the selection procedures are across Australia. The major differences in selection are to be found between undergraduate and postgraduate courses. For undergraduate courses the use of Tertiary Admission Centres is near universal, and little other data are used to make selections. However for postgraduate courses where applicants have already attained a degree, universities use a wider range of information to guide selection. Again, the type of information used is common to most universities. This similarity suggests that universities have optimised their selection procedures in terms of efficiency. However it is interesting to reflect upon the speed with which most courses put their new students into classrooms to help them to decide if teaching really is for them – such haste suggests that universities may have some concerns about the validity of their selection procedures. Thus there may be issues to be found to do with selection despite the uniformity in the procedures and rationales for these procedures across Australia.

2. Pre-service teacher education: Course structure and content

Professional experience and the practicum

- This was the area of greatest concern to respondents in providing quality courses and the area where resources seemed most overstretched. When asked what they would change if more resources were available, most respondents said that improving the amount and quality of school experience and supervision would be their first priority.

- While students are reported to be adequately to well prepared for beginning teaching roles, most respondents indicated that graduate quality and competence would be enhanced by longer experiences in schools, experiences that were more embedded in school communities and included closer mentoring by school and university staff. Most respondents indicated it was difficult to organize, fund and manage professional experience and that the contributions of all stakeholders would be enriched by closer relations between schools and universities.

- Of greatest concern was the high cost of running professional experience programs (especially the administration costs, payment of teachers and schools, and payment of supervisors), difficulties in providing adequate supervision and mentoring of students, the difficulty in finding enough schools and classes willing to host students, and schools' reluctance to participate as partners in the development of new teaching professionals. A major problem for many respondents was that structure and organization of professional experience programs seemed to be governed more by financial and organizational constraints than the needs and interests of students and the future of a high quality teaching profession.

- Many respondents were extremely concerned about the shortage of professional experience placements, the stress this placed on program management and the limited pool of exemplary teachers that were available to host students. They highlighted the need to publicise the benefits to school communities of being involved with teacher education programs and work with schools, teachers and other stakeholders, especially those most reluctant to host students, to increase access to places. However, most acknowledged that convincing schools to offer more places required time and money and stressed the need to better resource initiatives between teacher education programs and education authorities to forge closer partnerships with school communities aimed at increasing opportunities for professional experiences and mentoring throughout the duration of the teacher education course.

- The issues raised by teacher educators in this study are not new, but they appear to be increasingly problematic and causing genuine stress within courses. The quest for "quality" permeates most responses, yet little is known about what constitutes "quality" in professional experience. Given these findings and the valid and heartfelt concerns about the value and direction of professional experience it is timely to explore the many complex dimensions of professional experience and the factors that affect its outcomes for students. Clearly, there are many models of professional experience, varying durations and approaches to supervision and assessment, but little is known of what works best in which context and for which students. Research to clarify the impact of practicum experiences and to identify effective models and practices is needed if universities are to deliver quality professional experience.

Content of teacher education programs

It was only possible in this brief mapping exercise to conduct a preliminary analysis of the content of teacher education programs. A method for analysing course content was developed in terms of core teaching standards. Teaching standards describe what beginning teachers should know and be able to do. A generic set of core teaching standards was developed for the purposes of this analysis. Units of study within courses were analysed in terms of the extent to which they were directed at enabling beginning teachers to meet these standards.

This preliminary analysis proved successful in providing an overview of teacher education courses. For the courses analysed, it showed that teacher education courses are placing strong emphasis on areas that relate directly to effective teaching: for example, subject matter knowledge, student learning and development, curriculum planning, and skills for reflection on practice. Areas that receive less emphasis appear to be methods for assessing student learning and development and focused training in teaching skills using modelling and feedback.

ICT and Teacher Education

The self assessments of ICT use in teacher education show awareness of the importance of developing graduates' ICT competencies, varying progress toward preparedness for teaching with and about ICTs, and considerable variation in assessment and interpretation of ICT experiences within courses and institutions.

There were wide ranging interpretations of ICT "innovation". Activities considered to be innovative included simple communication skills such as Power Point presentations, on-line teaching and teaching support using platforms such as WebCT, core ICT units, subjects that integrated ICT, students development of curriculum resources- such as Web pages, students' use of ePortfolios, and collaborative, problem-solving and decision making initiatives supported by technology.

There was considerable diversity in apparent understandings of ways to prepare student teachers for ICT applications in teaching. In some courses the focus was mainly on students' acquisition of basic ICT skills and the use of ICT in university teaching and learning. In others there appeared to be a greater focus on ICT classroom and pedagogical processes and experiences. Many respondents seemed to believe that development of students' own ICT skills (such as information presentation, retrieval and management skills) together with lecturers' use of on-line course delivery systems such as WebCT, would enable students to use ICTs in their classroom teaching.

There was little evidence that students had opportunities to incorporate ICTs in their teaching during in-school experiences and there was a general concern that schools did not provide students with sufficient opportunity to see or use ICTs in classrooms.

Assessment of students' ICT use in teaching varied and seemed to reflect the broader focus on ICT preparation. Some universities appeared to focus mainly on assessment of basic ICT skills during core ICT units. Others focused on ICT assessment as an integral part of key learning areas and pedagogy subjects.

Preparedness to incorporate ICT in teaching was reported to be variable. Most students were considered "well prepared" but with one key mediating factor- the willingness of the schools in which they might work to encourage and support ICT use. Some students graduated with ICT skills that exceeded those of many practising teachers. Preparedness was considered to be dependent on a range of factors including entry-level ICT skills, ICT aptitude and interest, ICT focus within teacher education programs, and access to opportunities for in-school modelling and experiences. While some graduates were deemed more ICT competent than others, the importance of teachers adapting to changing technologies and school and classroom needs was also noted. It was suggested that graduates should have a strong foundation on which to build classroom appropriate ICT skills and pedagogies.

There was general concern that students were not able to be placed in schools with "sufficiently" developed ICT capabilities to enable them to experience ICT first hand and that this hindered universities' capacity to make graduates ICT-ready.

The difficulty of providing students with exemplary ICT classroom experiences was considered a major factor impeding the linking of ICT theory and practice. It was felt that students needed better in-school experiences with ICT, to see a repertoire of ICT pedagogies modelled by their cooperating teachers, and to incorporate ICT experiences in their teaching.

Linkages between theory and practice

Respondents believed current methods for linking theory to practice were working well, or very well. Respondents generally, more often primary teacher educators, interpreted this question pragmatically as referring to tasks that enabled students to undertake "authentic" teacher type work, rather than the incorporation of theory into their knowledge and practice. The main methods they mentioned, in order of frequency, included:

- Assignments
- Developing units of work
- School experience
- Tasks that promote reflection on practice, journal writing, etc.

- Modelling and observation of expert teachers
- Feedback on practice

The most commonly mentioned method was through assignments, especially assignments that students undertake as part of the practicum, such as preparing a portfolio entry.

To do justice to the range of current methods for linking theory to practice would require a major in-depth study of a sample of teacher education courses – much more than the brief survey used in the present study. An accurate indication of the nature and extent of the theoretical and research-based components in current teacher education courses would require detailed content analysis of courses and units, observations, interviews with lecturers and students, together with an analysis of reading lists, assignments and examinations.

3. Accreditation and quality assurance

Across Australia, the picture of external accreditation of university teacher education courses is very uneven. Some states have statutory bodies that attempt to regulate the teaching profession, some do not. In some states, these regulatory bodies are called 'Registration Boards', in others they are 'Institutes' or 'Colleges'. Rationales for their existence vary, as do stakeholder perceptions of their core purposes. More variation is to be found in their relationships with stakeholders, the ways they carry out their key functions, and their standing in the wider education community.

Of the eight Australian states and territories, only Queensland and Victoria have teacher registration bodies that possess statutory power to carry out teacher preparation course accreditation. In Tasmania and South Australia the teacher registration bodies exercise an indirect form of accreditation, in that graduates must meet their requirements to be registered as teachers in those states. Good communication between these registration bodies and the universities ensures that the registration bodies have an advisory role that is valued by the universities. In The Australian Capital Territory (ACT), the Northern Territory, New South Wales and Western Australia, state teacher registration bodies have yet to start functioning although, in the latter three states, this situation is likely to change in the very near future, as the legislation necessary for their establishment is passed.

Most of the respondents from universities who had experience of external accreditation by a statutory body were satisfied with the processes that were used to accredit courses. Some welcomed this kind of external scrutiny, saying that it helped them to develop their courses, gave them a broader focus and provided direction for improvement. This appeared particularly true of Queensland universities, which had the longest experience of this kind of evaluation. The overall impression gained from university responses was that universities in those states that had more developed external accreditation processes, such as Queensland and Victoria, also had more sophisticated understandings of how to carry out self-evaluation.

Although no university mentioned the Australian Universities Quality Agency (AUQA) in its responses, it is likely that the internal evaluation processes described were, to some extent, driven by AUQA requirements. Universities conducted internal evaluation of their courses in similar ways, using similar structures and evaluation instruments, but some universities appeared more committed to rigorous processes of self evaluation than others. In one Victorian university, staff were required to address issues arising from internal course reviews through their annual performance appraisal. The response from this university indicated that internal review was a more powerful and immediate driver of change and improvement than external review.

Views on a possible single national accreditation body for teacher education were mixed, though a majority were supportive of the idea, especially the smaller states and territories. Australian universities do not appear to have a problem with external accreditation, as long as the processes are seen to be effective, useful and sensitive to the individual needs and

circumstances of the universities. Indeed, from the responses received it seems likely that external accreditation helps universities to improve their own systems for self-evaluation.

The advantages, mentioned in the survey responses, of having a single national accreditation body for teachers included: portablilty of qualifications to meet the requirements of all state education systems, improved professional status of teachers, ensuring comparibility of standards developed by state bodies, and the fostering of national standards for teaching.

Only thirty seven universities offer teacher education courses in Australia. All share the aim of graduating competent teachers who are well prepared to teach in a variey of contexts. However, the fragmented and uncertain nature of course accreditiation in Australia must hinder their ability to achieve this aim. And how will they know if it is achieved? In other professions (e.g. the medical profession through the Australian Medical Council) there are moves by national bodies to develop outcomes measures as part of course accreditation. In the USA , the National Council for the Accreditation of Teacher Education (NCATE) is also moving in this direction, as it develops performance assessments to evaluate the quality of the professional knowledge and skills of graduates from more than five hundred teacher education institutions. In the UK, the Teacher Training Agency monitors the quality of graduate outcomes and adjusts the number of student places it funds in universities accordingly. These developments have been made possible, largely, because they have occurred in a national context. A national approach to teacher education course accreditation, like that of the AMC in medical education, has the potential to play a major role in assuring and enhancing the quality of teacher education.

1. PROJECT OVERVIEW

The main purpose of this study was to conduct a survey of Australian institutions that provide pre-service teacher education courses. The key elements of this mapping exercise were to include:

Selection processes: The criteria and processes that teacher education institutions use to select students for courses.

Course structure and content: The types of course content and structure that exist currently, including key components such as arrangements for the practicum and for ICT.

Accreditation processes: The processes currently used, both internally and externally, for the accreditation and evaluation of teacher education courses.

The project was commissioned by the MCEETYA Teacher Quality and Educational Leadership Taskforce (TQELT) in March 2004. Through this mapping exercise, TQELT hoped to gain a sound understanding about pre-service teacher education and to set in train a process that would help to identify those aspects of teacher education practices that best support the preparation of quality teachers.

The study was clearly intended as a mapping exercise. Survey instruments were designed to gather and summarise the descriptive information about current teacher education programs outlined above. The brief for the study did not call for the development of a conceptual framework, or the development of scales to measure aspects of key concepts identified in the framework.

2. METHODOLOGY

The project brief called for a survey of all Australian institutions providing teacher education courses to map selection processes and pre-service education practices.

Key stages in the project included:
- Developing a set of draft questionnaires to gather information from tertiary institutions about current practices

- Refining these questionnaires through meetings with university teacher education coordinators and officers from the Victorian Institute of Teaching, and feedback from the MCEETYA Taskforce Reference Group

- Trialling the questionnaires in one university

- Distributing the questionnaires to tertiary institutions to complete and return

- Analysis of responses and drafting of a report

- Circulating the draft report for comment

- Preparing a final report with recommendations for the Taskforce.

SURVEY ADMINISTRATION

The initial approach to universities was through letters to the Australian Council of Deans of Education and to individual Deans (or Heads of Schools). These letters outlined the purposes of the MCEETYA study and sought support for its conduct. Letters to Deans also asked for names of staff most able to provide accurate information and permission to approach them. Deans readily gave support and letters to these staff quickly followed seeking co-operation in the survey. Despite the heavy demands on their time, and the fact that some of the information required was not readily available in an organised form, cooperation was readily given in completing the surveys.

The process of preparing the survey instruments was greatly facilitated by a draft set of questions provided by the MCEETYA Taskforce secretariat. This provided a clear guide to the purposes of the study and the information needs of the Taskforce.

Appendix A contains a table listing the universities and colleges for each state that provide teachers education courses. This table shows the number of students who completed initial teacher training award courses in 2002 by state, institution, mode of attendance, type of attendance and gender. It shows that 14,377 students completed courses in 2002 in 37 universities. (Note: Christian Heritage College is not included in this table from the Australian Government Department of Education, Science and Training.) Numbers of students graduating ranged widely across universities. The largest, Queensland University of Technology, graduated 1038. The smallest, Batchelor Institute in the Northern Territory, graduated 17.

Each university typically provides several teacher education courses. The websites of the 37 universities list over 400 teacher education courses. In 2001, Ballantyne et al. found that 136 of them had no students. Only 42 courses had more than 100 students graduating in that year. We found a similar situation. A large proportion of teacher education courses have small enrolments. One of the largest programs, the Graduate Diploma in Education for secondary teachers at The University of Melbourne has over 500 students.

Six main types of pre-service teacher education courses were identified, as set out in the following sampling frame.

	Undergraduate Single Degree	Undergraduate Two degrees	Post-graduate diploma or degree
Primary			

Secondary			

These six categories accounted for almost all teacher education programs for prospective P-12 school-teachers. (The MCEETYA brief did not include courses for early childhood or adult education, and there were few specialist courses for middle school teaching). As conditions such as selection procedures differed from course to course, it was necessary to develop six separate survey instruments, tailored to each type of course. A seventh questionnaire was used to gather data not specific to courses.

University contact people were asked to complete no more than four of the six questionnaires. They were also asked to select the largest courses they provided on campus to increase the representativeness of the sample. Most universities agreed to complete at least two questionnaires.

Several methods could have been used to administer this survey. We designed the questionnaires so that they could be distributed to respondents and returned via email as Word files. Regular contact by telephone was maintained with respondents during the survey phase to ensure the purposes and procedures of the study were understood and speedy return of the questionnaires. Information about course structure and content was gathered by examining websites of selected institutions.

The data gathering process turned out to be quite complex. Many universities have several campuses and the same course may be provided on more than one campus. Some universities offer as many as ten pre-service teacher education courses. As the survey covered selection, course structure and accreditation, as many as three different staff members might be needed to complete each questionnaire. The burden on respondents was consequently high. Selection of students, for example, was sometimes the responsibility of different staff members from those who were directors of teacher education programs. Sometimes two to three staff members in each university needed to be contacted in order to report on the main teacher education programs. Primary and secondary preparation programs were often on different campuses. Selection and admission processes may be the responsibility of yet another staff member.

Table 1 lists the universities and colleges that provide teacher education courses. It shows that all 38 universities responded, returning at least one of the six course questionnaires. Questionnaires were received for 102 separate courses (28 undergraduate primary, 10 undergraduate secondary, 5 double degree primary, 17 double degree secondary, 13 postgraduate primary and 29 postgraduate secondary courses). As universities were asked to complete questionnaires for their largest courses, Table 1 indicates that the findings of this study are representative of conditions that apply to most pre-service teacher education courses.

Data were gathered over a period of about four weeks. (The Easter holiday extended the time beyond what was planned.) Regular telephone and email contact was maintained with the university staff members who were completing the surveys.

ANALYSIS AND REPORTING

The task of analysing and reporting the data was shared among the ACER research team. Details about the processes used in analysing the data are explained in each of the following sections of the report.

Table 1 Questionnaires received as at 1 June 2004 *

UNIVERSITY	STATE	UGP	UGS	DDP	DDS	PGP	PGS	O/V
University of Canberra	ACT	1	1					1
Avondale College	NSW	1			1	1		1
Charles Sturt University	NSW	1			1	1		
Macquarie University	NSW	1	1			1	1	1
Southern Cross University	NSW				1		2	1
University of New England	NSW	1		1	1		1	
University of New South Wales	NSW						1	
University of Newcastle	NSW			1	1	1	1	1
University of Sydney	NSW				1			
University of Technology, Sydney	NSW						1	
University of Western Sydney	NSW				1		1	
University of Wollongong	NSW	1					1	
Batchelor Institute of Indigenous Tertiary Education	NT	1						1
Charles Darwin University	NT	1				1		1
Central Queensland University	QLD	1	1		1			1
Christian Heritage College	QLD	1						1
Griffith University	QLD	1	1		1		1	1
James Cook University of North Queensland	QLD	1	1					
Queensland University of Technology	QLD	1					1	1
University of Queensland	QLD				1		1	1
University of Southern Queensland	QLD	1	1					1
Flinders University of S.A.	SA	1					1	1
University of Adelaide	SA						1	1
University of South Australia	SA				1		1	1
University of Tasmania	TAS	1				1	1	1
Australian Catholic University	VIC	1		1	1	1	1	1
Deakin University	VIC	1	3				1	
La Trobe University	VIC					2	2	1
Monash University	VIC	1		1	1		1	1
RMIT University	VIC	1				1	1	1
University of Ballarat	VIC	1					1	1
University of Melbourne	VIC	2		1	1	1	1	1
Victoria University	VIC	1					1	
Curtin University of Technology	WA	1	1		1			1
Edith Cowan University	WA	1			1	1	1	1
Murdoch University	WA	1				1	1	1
University of Notre Dame Australia	WA	1					1	1
University of Western Australia	WA				1		1	1
Total		28	10	5	17	13	29	28

*UGP – Undergraduate Primary; UGS – Undergraduate Secondary; DDP – Double Degree Primary; DDS – Double Degree Secondary; PGP – Postgraduate Primary; PGS – Postgraduate Secondary; O/V – Overview.

3. RECENT RELATED RESEARCH STUDIES

There have been several recent national research studies and reviews of pre-service teacher education in Australia. With its distinct focus on selection, course structure and accreditation, the present study, in the main, complements these studies well. Previous studies include:

Australia's Teachers: Australia's Future. Advancing Innovation, Science, Technology and Mathematics conducted by the Committee for the Review of Teaching and Teacher Education for the Australian Government in 2003. This study had a wide brief, but included a section reviewing current arrangements for pre-service teacher education. In this section, the report looked at new and flexible pathways into teaching, quality assurance in teacher education, selection into teaching and new approaches to the practicum, school experience and the internship. The Review team did not conduct their own research, but relevant to this study, they did report on studies suggesting that it was possible to make valid assessments of aptitude for teaching. They recommended the use of evidence of aptitude for teaching as a criterion for selection into teacher education programs despite the lack of evidence that this can be done in ways that are reliable and valid.

Teacher Education Courses and Completions: Initial Teacher Education courses. This study was commissioned by the Evaluation and Investigations Programme, Higher Education Division of the Department of Education, Training and Youth Affairs and was conducted by Roy Ballantyne, John Bain and Barbara Preston in 2002. One of the primary purposes of this study was to develop a data base that would provide a sounder basis for teacher labour market considerations in the future. It provides a useful map of the numbers of teachers coming down the "pipeline" from entry to training to employment.

The report contains a comprehensive list of all teacher education courses offered by universities and other educational institutions in Australia. It also provides data on the numbers of teacher education graduates from 1999 to 2001 in each program and in each area of specialisation in teaching.

The report indicates that 410 teacher education courses are listed by the 38 institutions that prepare teachers. The number is deceptive as universities may continue to list courses in their handbooks that are no longer enrolling students. The authors found that 136 (33 per cent) of the courses listed had no recorded student completions for the previous year. Another feature of the findings was how small most courses were. For 43 per cent of the courses, less than 50 students completed in 2001. Only 42 courses had more than 100 students completing in 2001.

The number of courses reflects, in part, the diversity of specialisations in teaching, both by level of schooling and subject area. It also reflects the slow pace with which courses have been rationalised, despite the amalgamations of the Colleges of Advanced Education with universities over the past twenty-five years or so.

Clever Teachers, Clever Sciences: Preparing Teachers for the Challenge of Teaching Science, Mathematics and Technology in the 21st Century (2003). This study was also commissioned by the then Department of Education, Training and Youth Affairs as part of its Evaluation and Investigations Programme and was conducted by Geoffrey Lawrance and David Palmer in. The study focused on mapping programs for the preparation of science, mathematics and technology teachers. Its brief was to examine how these teacher education programs dealt with the following issues, among others:

- The nature and level of content studies undertaken in mathematics, science and technology

- Articulation between content studies and pedagogical studies

- The integration of teaching theory and practice.

This 400-page report provides a comprehensive compilation and description of university programs that, in 2002, prepared teachers to teach mathematics, science and technology. It also contains brief case studies of 13 reputedly innovative teacher education programs. However, no evidence was gathered about the knowledge and capacity of graduates from these programs that would enable the effectiveness of these programs to be compared with each other, or with conventional programs.

Neither of these studies was designed to examine the processes involved in learning to become a teacher within specific teacher education programs. The researchers who conducted these studies did not have the resources to go inside the teacher education programs to gather data about the theory or logic that underpins course design and the ways in which this logic plays out in the activities that student teachers experience in learning to teach. Nor do they provide evidence that would shed light on the relative impact of programs on outcomes such as beginning teachers' content knowledge, pedagogical content knowledge, or ability to meet performance standards for beginning teachers.

Quality Matters. Revitalising Teaching: Critical Times, Critical Choices. This report was prepared for the NSW Department of Education and Training by a team led by Gregor Ramsey. This report took a critical look at existing arrangements for pre-service teacher education and anticipated the introduction of the New South Wales Institute of Teachers with responsibilities such as the development of a framework of professional standards and a system of accreditation levels from graduate teacher to school leadership.

Apart from Australian studies such as these, there is growing international interest in research that helps to identify the central features of effective teacher education programs. The IEA is planning a six-year long international study that will analyse methods used to prepare teachers of mathematics in 20-30 countries and measure the effects of these programs on beginning teachers' knowledge and pedagogical content knowledge. (ACER is jointly managing this project with Michigan State University in the US.). The OECD has just concluded a project across member countries called Attracting, Developing and Retaining Effective Teachers, which included a review of arrangements for pre-service teacher education.

4. SELECTION PROCESSES IN TEACHER EDUCATION

This section of the report considers the selection of students into pre-service teacher education courses across Australia. It is organised around each of the types of course previously described – undergraduate and postgraduate primary and secondary single and double degrees.

To organise the information from the questionnaires, each group of questionnaires was read and the key features of responses recorded on a tally sheet. This provided a summary of the main features of the data. Occasionally, text from the questionnaires is quoted verbatim to illustrate features of the data.

One of the features of the data was how similar the selection procedures are across Australia. The major differences in selection are to be found between undergraduate and postgraduate courses. For undergraduate courses the use of Tertiary Admission Centres is near universal, and little other data are used to make selections. However for postgraduate courses where applicants have already attained a degree, universities use a wider range of information to guide selection. Again, the type of information used is common to most universities. This similarity suggests that universities have optimised their selection procedures in terms of efficiency. However it is interesting to reflect upon the speed with which most courses put their new students into classrooms to help them to decide if teaching really is for them – such haste suggests that universities may have some concerns about the validity of their selection procedures. Thus there may be issues to be found to do with selection despite the uniformity in the procedures and rationales for these procedures across Australia.

This section of the report broadly follows the structure of the questionnaires used to collect the data. It provides some background to universities and the courses. This includes summaries of the duration of courses and the size of enrolments. It also includes a description of how the balance between part-time and full-time places, and for secondary courses, how the balance across subject specialities is determined. There is also some discussion of career change student enrolments and recruitment. Next this section considers aspects of selection including: pre-requisites for courses, selection procedures and criteria (for non fee paying and fee paying students). It finishes with consideration of what universities do to help students find out if teaching is for them. The chapter concludes with a discussion of the implications of these data.

BACKGROUND

Undergraduate pre-service primary teacher education: Data from 27 universities offering undergraduate pre-service primary teacher education courses were available. All States and both Territories were represented.

Undergraduate pre-service secondary teacher education: Data from eight universities offering undergraduate pre-service secondary teacher education courses were available. Responses were received from universities in Queensland, Western Australia, NSW, Victoria and the ACT.

Undergraduate pre-service double degree primary teacher education: Data from five universities offering undergraduate double degrees in primary teacher education courses were available. Responses were received Victoria, NSW and the Australian Catholic University.

Undergraduate pre-service double degree secondary teacher education: Data from 17 universities offering undergraduate double degrees in primary teacher education courses were available. Responses were received from all States except Tasmania. No responses were received from either of the Territories.

Postgraduate pre-service primary teacher education: Data from 12 universities offering postgraduate pre-service secondary teacher education courses were available. Responses were received from universities in NSW, Northern Territory, Tasmania, Victoria and Western Australia.

Postgraduate pre-service secondary teacher education: Data from 27 universities♠ offering postgraduate pre-service secondary teacher education courses were available. All States and the Northern Territory were represented.

DURATION OF COURSES

Undergraduate pre-service primary teacher education: All except one course takes four years to complete. One course takes three years, and one of the four courses could be fast-tracked and completed in three calendar years. There is thus considerable uniformity across Australia in the length of undergraduate pre-service primary teacher education courses.

Undergraduate pre-service double degree primary teacher education: All four courses were of four years' duration and one (a combined teaching and music degree) was of five years duration.

Undergraduate pre-service secondary teacher education: All ten courses take four years to complete. One course could be fast-tracked and completed in three calendar years.

Undergraduate pre-service double degree secondary teacher education: Eleven courses take four years to complete. The other six courses take 4.5 or 5 years, depending upon the curriculum area of the double degree. For example, a B Ed./B. Law double degree at Monash takes five years.

Postgraduate pre-service primary teacher education: Seven courses take one year to complete, one takes 18 months and five take two years to complete.

Postgraduate pre-service secondary teacher education: A majority of these courses (n=19) take one year to complete. Six courses take two years, but three of these could be fast-tracked and completed in 18 months. One course is 18 months long but can be fast-tracked and completed in 12 months. One is an off-campus course offered only part-time and is of two years duration. There is a deal of variation across Australia in the length of postgraduate pre-service secondary teacher education courses.

Summary: Nearly all undergraduate pre-service teacher education courses – primary and secondary – take four years to complete in Australia. Some double degrees take longer, up to five years. Most postgraduate courses are one year in length, but there are many that take 18 months or two years to complete.

SIZE OF ENROLMENTS

Undergraduate pre-service primary teacher education: Reflecting the diversity in university sizes and specialisations, the size of course enrolments varied widely despite the study asking respondents to provide data only on their largest courses.

Undergraduate pre-service double degree primary teacher education: One course had five, another had 32 enrolments, another had 92. Another reported that there were 272 places offered. However, this university also noted that it was difficult to give an accurate figure because the course covers both the primary program and two secondary programs (one for intending high school English teachers and one for intending high school social sciences teachers). Data were missing for the fifth university.

♠ The Australian Catholic University offers a postgraduate secondary pre-service teacher education course at its campuses around Australia. They provided data about this course using one questionnaire. Where there is variation between states, this was noted and so sometimes the counts will sum to more than the number of universities replying. For example, for the length of the course, in Victoria and NSW it is one year and in Queensland it is two years. In the data reported here this information was treated as referring to three universities.

<u>Undergraduate pre-service secondary teacher education</u>: Course sizes varied widely: 20, 40, 114 and 216 were given by universities that could identify numbers in this type of course.

<u>Undergraduate pre-service double degree secondary teacher education</u>: The smallest enrolment was 14 and the largest 428. A number of universities indicated that the enrolment in double degrees did not 'belong' to the education faculty.

<u>Postgraduate pre-service primary teacher education</u>: The size of course enrolments varied from 28 through to 142. They tended to be a little smaller on average than post-graduate secondary courses.

<u>Postgraduate pre-service secondary teacher education</u>: The size of course enrolments varied, although less widely than with the undergraduate primary course. Typical enrolment sizes were around 100, with the largest 585.

Summary: The number of students enrolled varied widely between institutions. Typically undergraduate primary and postgraduate secondary courses had the largest enrolments.

HOW THE TOTAL NUMBER OF PLACES IN A COURSE IS DETERMINED

<u>Undergraduate pre-service primary teacher education</u>: In all cases, the university determined the number of places in undergraduate primary teacher courses. Typically, this decision involved only senior university staff. It was stated by a number of universities – and it seems reasonable to infer it was implicit in the responses of others – that there is no consultation with education stakeholders outside of the university in this decision making process. (One university pointed out that while there is now no consultation, when the course was originally designed there was consultation with external authorities.)

Once the university determined the total number of student places for the Education Faculty, the next step was to divide numbers between the different courses on offer. One university indicated that this division of numbers within the Faculty was driven by such considerations as expected student demand, timetabling limitations and the difficulties of implementing professional practice placements. This is likely to be the experience of most Education Faculties.

Only Catholic universities held discussions with the main employing authority.

In two small universities, all eligible applicants were accepted, presumably because they have yet to achieve their planned student enrolment targets.

On this evidence, in most Australian universities, the number of places made available for undergraduate pre-service primary teacher education courses is determined by the university, with little consultation with education stakeholders.

<u>Undergraduate pre-service double degree primary teacher education</u>: Four universities supplied information about the allocation of places to these courses. One, a Catholic university, indicated consultation with the system was undertaken. Two others said that it was decided by the senior university staff and the fourth indicated that it was decided 'internally'.

<u>Undergraduate pre-service secondary teacher education</u>: For these types of courses, the number of places made available for undergraduate pre-service secondary teacher education courses is determined by the university. No mention was made of any consultation with education stakeholders.

<u>Undergraduate pre-service double degree secondary teacher education</u>: The Catholic university consulted with the system and held discussions with other faculties in determining the size of the enrolment in these degrees. Other universities used methods that were similar

to other secondary degrees. The university distributes the number of places to each Faculty, and within the Faculty places are distributed to individual courses. Factors considered at the Faculty level included previous demand levels, the capacity to place students in schools for professional practice, and timetabling limitations.

Postgraduate pre-service secondary teacher education: Compared with the undergraduate primary courses, the setting of numbers of students appeared to focus much more explicitly on resourcing of courses, with a greater concern to match the supply of students to demand from the system, particularly across school subject areas.

Resources issues included: the number of staff available, room allocations and the number of schools available for the practicum. This last was mentioned by many of the universities.

Discussions and negotiation with education authorities was also more often reported, too. A response from one university indicates the complex mix of factors that seem to shape the final numbers available to a postgraduate secondary education course:

> We receive many more applications than we can accept. Numbers are decided by the number in each learning area that can be accommodated for school experience. We are also aware of the shortage of teachers in some learning areas in WA and have attempted to increase the intake in these. We do communicate with the Department of Education and Training about the difficulties we are facing regarding the shortage of practicum places. However we have seen little improvement despite some initiatives to encourage more teachers to participate. The problem is common to all universities in WA.

Catholic universities appeared to take particular account of demand from the system for subject areas.

While formally, the setting of numbers via university procedures was similar to that used for undergraduate courses, the postgraduate courses appear to have a stronger focus on areas of demand from the system, and to be more driven by concerns about resource shortages.

Postgraduate pre-service primary teacher education: Places for postgraduate primary places seem to be determined more by university procedures than consideration of external demands. That is, the allocation of these places is more like that seen with undergraduate primary courses than postgraduate secondary courses.

Summary: For undergraduate courses, the university generally allocated the number of places to faculties and within these, places were distributed to courses. There was little evidence of consultation with education stakeholders in this process except for Catholic universities. In contrast, for postgraduate course and especially secondary postgraduate courses, there was more focus upon system level needs and capacities. For both undergraduate and postgraduate courses the capacity of schools to take students for the practicum was a major factor in setting enrolment sizes.

HOW THE BALANCE BETWEEN PART-TIME AND FULL-TIME PLACES IS DETERMINED

Undergraduate pre-service primary teacher education: The balance between part-time and full-time places appears to be struck largely by student demand or choice. This does not appear to be a policy issue in most universities. For example, one university noted that, while it offered four part-time places a year, "The decision is purely administrative, and not based on discussions with outside agencies." Some courses were offered only on a full-time basis, but even then it was possible to go part-time. For example one university wrote: "Full time is the only accepted mode. Occasionally a student is permitted to proceed in an extended programme due to special circumstances."

There was some indication that some universities would prefer students not to enrol part-time. For example, two universities wrote:

> The course is not activily advertised as being available part-time anymore, and as a consequence only very few students enrol on a part-time basis; and,

> Students [are] encouraged to enrol full-time, consequently part-time numbers are manageably small and don't at this stage in the University's evolution require closer scrutiny.

On this evidence, in most Australian universities, the balance between part-time and full-time places for undergraduate pre-service primary teacher education courses is determined by student demand, and further, this balance is of little concern to universities.

Undergraduate pre-service double degree primary teacher education: One course is only offered full-time, and for the others students may choose full- or part-time study as they wish.

Undergraduate pre-service secondary teacher education: In these courses a number of universities do not offer part-time study, but for those that do, it appears to be left to the students to decide.

Undergraduate pre-service double degree secondary teacher education: For these courses, a small number of universities do not offer part-time study. Others offer a small number of part-time places only, but for most the allocation to full-time or part-time enrolment is left to the students to decide. One university noted that part-time enrolment was discouraged because of difficulties this caused when planning practicum placements.

Postgraduate pre-service secondary teacher education: The balance between part-time and full-time enrolments is typically left to the students and does not appear to be a major concern for universities. For example, one university wrote:

> On the whole, we do not determine the number of part-time places. Students just apply and on enrolment we are informed that they will be taking the course on a part-time basis.

However, some universities are not keen to have students enrol in a one-year course part-time. One university wrote:

> We have only a few part-time students - usually TAFE teachers and they negotiate their situation individually with the course coordinator and their employer. We discourage part-time only because it is a cohesive one year course.

So, as with undergraduate primary courses, in most Australian universities, the balance between part-time and full-time places for postgraduate pre-service secondary teacher education courses appears to be set by student demand, and seems to be of little concern to universities.

Postgraduate pre-service primary teacher education: The balance between part-time and full-time enrolments is typically left to the students and does not appear to be a major concern for universities. This is similar to postgraduate secondary courses.

Summary: The mode of study – full- or part-time – did not appear to be much of an issue with universities. Some postgraduate courses did not encourage part-time study.

THE MIX OF STUDENT NUMBERS ACROSS SUBJECT SPECIALITIES

Undergraduate pre-service secondary teacher education: Nearly all responding universities indicated student choice was the main factor distributing students across subject specialities. This contrasts with the range of factors shaping the mix of students across subject areas in postgraduate secondary courses.

Undergraduate double degree pre-service secondary teacher education: Student demand was the most frequently cited mechanism for determining the mix of student numbers. Other factors mentioned included timetabling, the availability of places in schools for the practicum and the need to have classes of a viable size. One university indicated it offered places in all key learning areas, apparently irrespective of demand.

Postgraduate pre-service secondary teacher education: Universities appear to be driven by a combination of factors in determining the mix of students across subject specialities. For some universities it is driven by student choice, in others it is limited by timetabling and practicum placement restrictions. For others, there is consultation with school principals, teacher registration bodies and other agencies to help meet immediate and emerging needs. Some universities aim to provide coverage across all key learning areas. In some small universities this does not appear to present as an issue.

Summary: For undergraduate courses, universities seem to allow student demand to set enrolments across subject specialities. In contrast, for postgraduate courses, they were more likely to describe limitations placed on subject enrolments by such factors as timetabling limitations, the capacity of schools to provide access for practicums and the demand for particular subject specialists from the system.

THE PROPORTION OF 'CAREER CHANGE' STUDENTS

Undergraduate pre-service primary teacher education: Universities were asked to identify the proportion of career change students in their most popular undergraduate pre-service primary teacher education courses. Many respondents did not have this information available suggesting that this is not an important issue in most universities. Where estimates were made, the proportions were typically small although one university reported that around 50 per cent of their students could be classified as 'career change'.

Undergraduate pre-service double degree primary teacher education: Three universities indicated they did not know how many career change students were enrolled and one estimated about 10 per cent. One university did not provide data.

Undergraduate pre-service secondary teacher education: Nearly all universities running this type of course, who provided data, were uncertain about the numbers of career change students enrolled. This suggests it is not important for them.

Undergraduate double degree pre-service secondary teacher education: Around half of all universities running this type of course who provided data were uncertain about the numbers of career change students enrolled. For the others, the proportions of career changes students ranged widely from near zero to near 100 per cent.

Postgraduate pre-service secondary teacher education: A small number of universities reported that they did not have any statistics to help answer the question about how many career change students were enrolled. However a number did provide estimates, which ranged widely from 15 per cent through to nearly 100 per cent of enrolments. However it should be noted that some respondents thought the question was about mature-aged students and as the course is postgraduate, formally all students are mature-aged. Despite this, the data suggest that career change students are an important group for post-graduate secondary teacher education courses.

Postgraduate pre-service primary teacher education: The responses from the universities indicated very similar proportions of career change students in primary as in secondary postgraduate courses.

Summary: There was a wide range of career change students in universities. There appears to be higher proportions enrolled in postgraduate courses. However many universities did not have data on how many of these students were enrolled in courses.

ATTRACTING MATURE-AGED OR CAREER CHANGE STUDENTS

Undergraduate pre-service primary teacher education: Given that there was little apparent interest in attracting mature-aged or career change students for undergraduate pre-service primary teacher education courses, it was not surprising that most universities rarely actively recruited this group. Typically, 'Open Days', 'expos' and such like, were used by universities, but there was little evidence that this group of students was being actively recruited. One possible explanation for this is, as one university noted: "… we do not have enough places for those who do Direct and VTAC Applications." One university, however, did note that they provided work opportunities and helped with family commitments for their students. Another university said it had a mature-age entry scheme.

One university indicated that the selection of mature-aged students formed part of broad policy of ensuring a good mix of students. They wrote:

> We have quotas for particular sub-categories of students. The aim is to create as diverse a profile as possible. [There are] also equity considerations. So, approx[imately] 55 per cent of the intake is school leavers. approx[imately] 15 per cent for higher ed[ucation] transfers, 15 per cent mature age entry (STAT test) students and includes some students who complete the University's Foundation Course. The remaining 15 per cent includes space for Indigenous students, TAFE students and students from rural/remote areas.

A similar concern with getting the student mix right was evident at other universities. For example one wrote: " It is well known by applicants that we take approximately 50 per cent of non-Year 12 applicants."

It was noted by a number of universities that the availability of external studies encouraged mature-aged students to enrol. Another university stated how important mature-aged women were as a group:

> Increasingly, we are noticing that students at entry are not predominantly of school leaving age. Older students who are entering this course are mainly women and they would not be so much representative of people changing careers. Rather, they now have the time and opportunity to develop a career path in teaching. Career-change people are attracted much more to the Graduate entry progams in pre-service teacher education.

There were exceptions to this typical lack of interest in recruiting mature-aged or career change students. One university wrote:

> The University as a whole aggressively targets mature age and "career change" students in its marketing programs and the Faculty contributes to this campaign through attending information nights at TAFE and other centres including in-house. The Faculty also offers advanced standing for students with other qualifications. As you can see from our intake in 2004 most of our students are from the non-Year 12 category.

It was not clear why this university was keen to attract these students for its undergraduate pre-service primary teacher education courses.

Thus, while most universities do not actively recruit mature-aged or career change students, most have provision for them, some include their enrolment within course profiles designed to provide an optimum mix of students, and one is vigorously recruiting these students.

Undergraduate pre-service double degree primary teacher education: One university reported that the course was developed to attract career change students. Another noted:

> We provide information nights to assist students in understanding what is involved in teacher education and the selection process. Open days are targetted to a range of students not just school students. We participate in many careers festivals and expos around the state and overseas. We try to highlight our graduates in as many publications as possible and these graduates are from a range of backgrounds, not just school leavers.

This suggests that a wide range of approaches may be taken by a university.

Undergraduate pre-service secondary teacher education: Four of the universities indicated they did nothing to attract career change applicants and the other four used advertising campaigns (however they did not indicate if these were targeted at this group of students).

Undergraduate double degree pre-service secondary teacher education: Most of the universities indicated that they did not specifically target career change students for these degrees. One indicated that they had a mature-age entry scheme; another indicated that they targeted this group for postgraduate courses only.

Postgraduate pre-service secondary teacher education: Most universities reported that they do not target career change or mature-aged students for their postgraduate pre-service secondary teacher education courses. However a number did indicate they had a strong interest in this group. One university also sent letters to Bachelor graduates from other courses asking them to consider applying for the postgraduate education degree.

Postgraduate pre-service primary teacher education: Universities do not appear to promote postgraduate primary courses specifically targeting career change applicants. A number of universities indicated that they did not need to conduct such campaigns because there is already such a high level of demand from career change applicants.

Summary: Apart from a small number of universities that appear to target career change or mature-aged students, most universities did not appear to be concerned to recruit this group of students. Some universities recruited these students so that they had an 'optimal' profile or student mix to enrich their courses.

APPLICANTS TO TEACHER EDUCATION COURSES

Supply and demand of teacher education students

Universities were asked a number of questions related to the number of HECS places and applicants for teacher education courses.   Table 2 documents their responses. The table is limited to survey data returned from Victorian universities, though similar data could be made available for all states and territories. Table 2 shows the reported number of HECS places for each course in 2004, the number of applicants, the number of students who took up a place, and the number of full fee places available.

Table 2 serves the purpose of making several points. The first is that the number of applicants for all types of teacher education courses in 2004 greatly exceeded the number of HECS funded places available. The extent of the demand is particularly high for one-year

post-graduate courses like the Graduate Diploma in Education. For example, Monash University had 2628 applicants for 417 places and the University of Melbourne had 2209 applicants for 585 places. But demand is also strong for places in undergraduate teacher education courses such as the B. Ed. Primary. This unmet demand for places is happening at a time when the state of Victoria, like most states, is expected to experience shortages of teachers in the near term. A recent report from the Victorian Department of Education and Training confirms this finding, claiming, "In 2003 and 2004 over 60% of eligible applicants for teacher training missed out on a place".[1] Data reported here also indicates that the main area of shortage is the number of HECS places available, not the number of applicants.

Table 2 Teacher education courses in Victoria: Number of HECS places and applicants in 2004

UNIVERSITY	Education degree/Campus	Type of course*	No. of HECS places in 2004	No. of applicants in 2004	No. of students who took up a place in 2004
Australian Catholic University	B.A./Bachelor of Teaching	DDP	32	105 (1st pref.)	26
Deakin University	B.Ed. (Primary) BPE (Phys, Ed.) B. Teach. (Sec) B. Teach. (Pri & Sec)	UGP UGS UGS PG	300 54 160 125	500~ All 1st pref All 1st pref. All 1st pref.	330 48 117 139
La Trobe University	Dip.Ed.Bundoora Dip. Ed. Shepp'ton Dip.Ed. P-12 Albury-Wodonga Dip.Ed.(Sec) Bundoora	PGP PGP PGS PGS	58 30 45 50	1400 146 240 700	98(+33 full fee students) 32 47 47
Monash University	B.Ed. Peninsula. B.Primary Ed. Peninsula B.Ed.Clayton & G'land Dip.Ed. Clayton & G'land	UGP DDP DDS PGS	? ? 200 417	249 (1st Pref.) 136 (1st Pref) 402 2628	61 52 200 424
RMIT University	B.Ed. (Primary) DipEd.(Primary) Dip.Ed.(Secondary)	UGP PGP PGS	110 28 65	540 853 800	114 56 106
University of Ballarat	B.Ed.(Primary Dip.Ed.(Secdy)	UGP PGS	95 40	168 (1st pref) 230	71 44
University of Melbourne	B.Ed.(Primary) B.Music/B.Teaching. B.Teaching Dip. Ed.	UGP DDP(Music) DDS PGS	135 No quota 585	335 (1st pref) 48 (1st pref) 2209	152 37 685
Victoria University	B.Ed. (P-12) Dip. Secdy Ed..	UGP PGS	125 101.5	662 500	160 120

*UGP – Undergraduate Primary; UGS – Undergraduate Secondary; DDP – Double Degree Primary; DDS – Double Degree Secondary; PGP – Postgraduate Primary; PGS – Postgraduate Secondary

Several universities reported that they are now making teacher education places available for full-fee paying students (we did not ask universities how many students took up these places in 2004, though La Trobe University reported that 33 out of 35 of its full fee places had been

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[1] Department of Education and Training. (2004). *Teacher Supply and Demand for government schools*. East Melbourne: DET

taken up for its Dip.Ed. course). Another trend suggested by the survey, is that for many courses, significant proportions of applicants to teacher education courses are no longer entering directly from school. (This data confirms the trend toward older students entering teacher education programs reported in Table 4 below, based on VTAC reports.)

Quality of applicants for teacher education courses

Table 3 provides cut off scores for undergraduate pre-service teacher education courses in South Australia. To the extent that TER scores are indicators of quality, Table 3 indicates that the academic ability of applicants to teacher education courses has risen in recent years. Similar trends are reported in most states and territories over the past five to six years, particularly with double degrees. (It remains uncertain whether retention rates will be as high for graduates from these degrees.)

Table 3 Year 12 Cut off Scores for South Australian Undergraduate Pre-Service Teaching Courses

University	Courses available to year 12 students	2003/4	2002/3	2001/2	2000/1	99/2000
Adelaide	Secondary Teaching (double degree)	91.35	na	na	na	na
Flinders	Junior Primary/Primary Teaching	79.90	75.55	71.95	70.30	73.55
Flinders	Secondary Science Teaching	75.55	75.05	72.10	73.90	70.15
Flinders	Upper Primary/Lower Secondary Teaching	78.25	75.95	73.05	72.25	70.30
UniSA	BEd (Junior Primary and Primary) Magill	78.70	76.80	70.80	66.85	71.60
UniSA	BEd (Junior Primary and Primary) Underdale	76.45	73.30	67.50	64.80	67.05
UniSA	Bachelor of Science/Bachelor of Education	76.45	82.60	na	na	na

Research and Development
South Australian Tertiary Admissions Centre
13 May 2004

Table 4 lists the teacher education courses in Victorian universities that take students directly from Year 12 only based on data supplied by the Victorian Tertiary Admissions Centre. Similar data can be obtained for each state. For each course, Table 4 provides:

1) the Clearly-in ENTER ranks for 2003 (i.e. the ENTER rank at or above which every year 12 student who applied for that course and was eligible would be offered a place) (data for 2002 is in brackets);
2) the fringe ENTER (i.e. the ENTER rank at or above which 95% of offers were made). Where the Fringe ENTER is higher that the Clearly-in, this indicates that 95% of offers were made above the Clearly-in ENTER.
3) the % below the clearly in rank, i.e. the percentage of applicants accepted into that course with and ENTER lower than the Clearly-in ENTER.

Table 4 Victorian Teacher Education Courses: ENTER scores for 2003 and 2002 (in brackets)

University	Course/Campus	Clearly-in ENTER	Fringe ENTER	% of offers below Clearly In	Year 12 2003 (Total) offers through VTAC
ACU	Primary Ballarat	70 (65)	66 (60)	38 (31)	58 (83)
	Primary Melb.	80 (77)	75 (65)	41 (43)	27 (62)
	Teaching/Arts Melb.	77 (78)	75 (70)	- (36)	50 (62)
Deakin	Primary Geelong	74 (68)	74 (-)	- (-)	59 (105)
	Primary Melb	76 (75)	76 (69)	20 (28)	93 (232)
	PE Secondary Melb	81 (-)	82 (-)	- (-)	36 (66)
	Secondary/Arts Melb.	79 (81)	79 (79)	16 (15)	64 (112)
	Secondary Health Science Melb.	80 (78)	80 (79)	- (-)	32 (45)
	Secondary Science Melb	74 (78)	75 (76)	- (42)	7 (29)
	Primary Warrnambool	68 (65)	65 (57)	45 (45)	47 (80)
La Trobe	Primary Bendigo	73 (73)	69 (65)	50 (39)	84 (182)
	Primary Mildura	71 (70)	71 63v	- (50)	14 (22)
	Arts/Ed Bundoora	88 (-)	81 (-)	56 (-)	9 (19)
	Sci/Ed Bundoora	71 (-)	73 (-)	-	10 (19)
Monash	Arts/Ed Clayton	89 (92)	89 (88)	- (38)	31 (64)
	Science/Ed Clayton	77 (76)	83 (77)	- (-)	38 (62)
	Primary Gippsland	75 (76)	75 (70)	27 (-)	15 (31)
	Arts/Ed Gippsland	83 (-)	83 (-)	- (-)	8 (13)
	Arts/Ed Primary Peninsula	82 (80)	82 (77)	- (50)	21 (29)
	ECE Peninsula	73 (76)	76 (71)	- (48)	20 (39)
	Primary Peninsula	79 (77)	77 (75)	18 (33)	22 (53)
RMIT	Education	75 (77)	68 (40)	29 (39)	85 (204)
Uni of Ballarat	PE	68 (67)	69 (63)	- (19)	68 (87)
	Teaching	67 (66)	67 (-)	- (-)	103 (144)
Uni of Melbourne	ECE	76 (75)	75 (68)	20 (39)	61 (130)
	Primary	86 (84)	85 (76)	18 (-)	56 (164)
Victoria University	Ed. (P-12)	N/A	N/A	N/A	11 (28)
	PE (Primary)	N/A	N/A	N/A	16 (36)

The right hand column of Table 4 lists the number of offers made to year 12 students in 2003 for each course and, in brackets, the total number of offers made to all applicants from Round 1 for 2003. The data in this column indicates that, for many courses, a minority of students enter directly from school. For example, only 93 of the 232 offers made through VTAC for the Deakin B.Ed. Primary course at the Melbourne (Burwood) campus came directly from school. The number of career change students tends to be higher for postgraduate courses. The average age of students in the University of Melbourne Graduate Diploma in Education course in 2004 is 28. For the RMIT Postgraduate Diploma in Primary Education, 80% of students had completed their first degree at least five years previously. The perception that teachers coming out of training know little more of life than educational contexts appears to be a myth.

Table 4 still serves the purpose of indicating that there is a significant variation from course to course in the ENTER scores of applicants to teacher education courses. (It is recognised that ENTER scores for courses need to be treated with a great deal of caution.) Double degrees, in general, appear to be able to attract students with higher ENTER scores than single undergraduate degrees in education. Courses for preparing primary teachers in some universities attract students with significantly higher ENTER scores than other universities. There will be several reasons for this variation, including some that may have little bearing on the actual quality of the courses, such as the geographic situation of a university.

To the extent that ENTER scores represent an indication of academic ability, these variations raise some interesting issues, given the research that indicates a relationship between academic ability and subject matter knowledge and the effectiveness of teachers (Darling-Hammond, 2000). In broad terms, this research indicates it is in the public interest for teaching as a profession to be able to compete with other professions for its share of the ablest school or university graduates.

While the quality of teacher education applicants and the demand for places is strong at present, with a period of teacher shortage predicted over the next few years, there will be a danger that the academic ability of applicants could decline once more to the levels that caused concern in the late 1980s and early 1990s. If such a situation looked likely, questions may arise about the extent to which it is in the public interest for universities to have the freedom to recruit applicants regardless of ENTER scores, in order to ensure quotas for their teacher education courses are filled. The Teacher Training Agency in England illustrates one response to such a situation. Universities that had difficulty attracting applicants with sufficiently good "A" levels in the 1990s had the number of student places for which they received central funding reduced.

SELECTION

The questionnaire asked about a range of issues related to selection into pre-service teacher education courses. These included: (a) course prerequisites; (b) selection procedures; (c) the importance of different selection criteria; (d) how any of the preceding may have varied for fee-paying students; and what advice was offered to prospective students.

Prerequisites

The questionnaire asked what, if any, were the prerequisites for admission.

For undergraduate primary education courses: Most education faculties indicated that they use university-wide prerequisites, namely a satisfactory academic achievement as indexed by an ENTER score or equivalent, TAFE qualifications, or test scores. Some faculties required a minimum level of achievement in English or Mathematics or both at Year 12. Most respondents to this question focussed on subject requirements (following a cue given in the question), however one university pointed out that a police clearance was required. It might be expected that this requirement was more common than the data suggest. One university required that all applicants attend an interview at the university.

For undergraduate secondary education courses: Three universities indicated that an appropriate ENTER score was required; one university indicated there were no pre-requisites; and the other two indicated that ENTER score plus appropriate subjects for enrolment in specialist education areas (mathematics, science).

Undergraduate pre-service double degree primary teacher education: One university indicated a minimum Year 12 score in English and two units of mathematics, another indicated the same plus equivalent qualifications from TAFE, and two indicated a range of academic qualifications were considered. One did not provide data.

Undergraduate double degree pre-service secondary teacher education: Most universities indicated that a satisfactory ENTER score was the main prerequisite of admission. Subject requirements varied according to the double degree component.

Postgraduate pre-service secondary teacher education: All universities required applicants to have completed a Bachelors degree with a major in a methods area. Some specified a minimum Grade Point Average. Some reported elaborate procedures for overseas students. Most of these procedures aimed to ensure English language skills were adequate to undertake the course.

Postgraduate pre-service primary teacher education: Most universities indicated that any three or four year degree was a pre-requisite for enrolling in their postgraduate primary teacher course. However two indicated that this degree needed to be approved by a teacher registration agency.

Summary: For undergraduate courses, a satisfactory Year 12 completion with the necessary ENTER score (or equivalent) was the requirement for admission. Sometimes universities required specific subjects to have been completed at school. For postgraduate courses an undergraduate degree was a prerequisite. Again, universities required appropriate subject specialities.

Selection procedures

The questionnaire asked respondents to describe the selection procedures used for admission to education courses.

Undergraduate pre-service primary teacher education: All universities reported using tertiary admission centres. Variations included: (a) using the Principals Report Entry Program for regional school leavers; (b) the use of Special Tertiary Admissions Test (STAT) scores; and, (c) some provision for special entry under equity provisions.

One small Christian college used direct application with a set of internal selection procedures, which could include an optional interview with the applicant. A Catholic university used TER scores plus a mandatory interview "to determine suitability and aptitude for teaching".

Undergraduate pre-service double degree primary teacher education: Two universities indicated that tertiary admission centres were used to select students. One did not provide data.

Undergraduate pre-service secondary teacher education: All six universities indicated that tertiary admission centres were used to select students.

Undergraduate double degree pre-service secondary teacher education: All universities indicated that tertiary admission centres were used to select students. Where performing arts or related courses were included with the double degree a folio, interview or other forms of assessments were also sometimes required.

Postgraduate pre-service secondary teacher education: Universities reported using a wide range of procedures for selecting into postgraduate pre-service secondary teacher education courses including:

- Grade Point Averages

- Reviewing undergraduate results transcript

- Interviews

- Written statements from applicants

- Evidence of experience or interest in educational activities

- Evidence of proficiency in English.

In large universities where the number of applicants precludes the use of interviews, the Grade Point Average is often used as a sorting mechanism. Other methods are then used to select borderline cases.

When asked why these methods were used, resourcing issues typically were seen to govern the choice of methods. Equity and fairness was the rationale behind all decision-making

procedures, with a concern to ensure that people with the best chance of succeeding as a teacher were selected. As one university noted: "The 500 word statement provides evidence of their commitment to teaching and not to the perceived benefits of holidays!"

One university rejected the use of Grade Point Averages and used intereviews and written submissions, noting:

> [These procedures] allow us to get to know students and to make a judgement on their suitability to the career of teaching. A less complex process such as GPA used elsewhere means high rates of failure and less committed people entering the profession. We have a 99 per cent success rate and 99 per cent employment rate for our graduates.

For selection into this type of course, there was little emphasis on academic potential – presumably because it was demonstrated by the applicants having a degree – and far more on the applicants' potential to be effective teachers.

Also important for the universities was to select students who had the necessary methods areas to be eligible to teach in their local systems.

Postgraduate pre-service primary teacher education: Universities used a wide range of procedures for selecting into postgraduate primary teacher education courses, with the Grade Point Average of their degree being the most frequently cited. Sometimes this was the only data used, other times it was used as a preliminary sorting mechanism. Interviews, personal statements, previous work experience with children, portfolios, curriculum vitas and other information were also mentioned as part of the selection procedure. Only one university reported using the state tertiary admission centre to select students.

Selection into postgraduate primary courses appear to use similar procedures for selection into postgraduate secondary courses. Likewise the rationale for these procedures were similar.

Summary: Nearly all universities used tertiary admission centres for selecting students into undergraduate courses. There was only minor variation to this often associated with the use of special entry provisions. Postgraduate courses often used Grade Point Averages from the undergraduate degree supplemented with other methods (interviews, written statements from applicants) particularly when trying to chose among marginal cases.

Selection criteria

Undergraduate pre-service primary teacher education: Universities were asked to indicate the importance of a range of selection criteria. Figure 1 shows the results. It can be seen that ENTER (or equivalent) scores are very important or important for the universities replying to this question. Other academic criteria were important at six universities and not at all important at two. Judgements of likely teacher quality were important or very important at only four universities. Special consideration was very important or important at eleven universities and somewhat important in seven universities. Overwhelmingly, on these data, ENTER scores are the most important selection criteria used for admission into undergraduate primary teacher education courses.
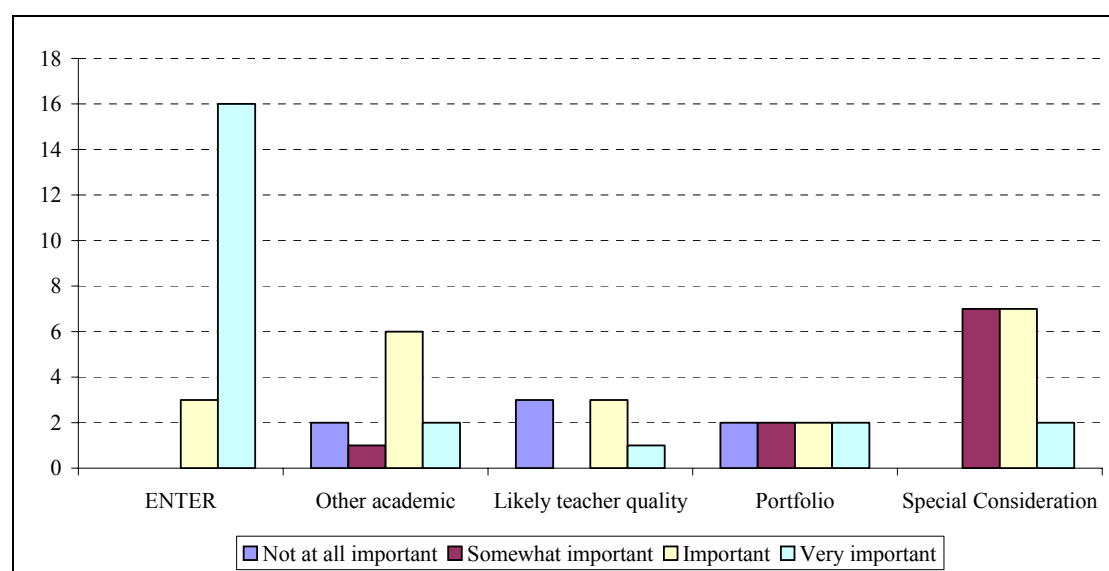
Figure 1 The importance of various criteria when selecting students into under-graduate primary education courses

Undergraduate pre-service double degree primary teacher education: Four universities indicated the ENTER score was very important. One university also said that estimates of ability based upon performance or a portfolio and special consideration provisions were also important.

Undergraduate pre-service secondary teacher education: Four universities indicated that the ENTER score was very important; three indicated that special consideration provisions were somewhat important; and, one university indicated these provisions were very important. One university reported that 'other academic achievements' were very important.

Undergraduate pre-service double degree primary teacher education: Three universities indicated that academic ability as indexed by the ENTER score was very important. Two indicated that special consideration provisions were either somewhat important or important
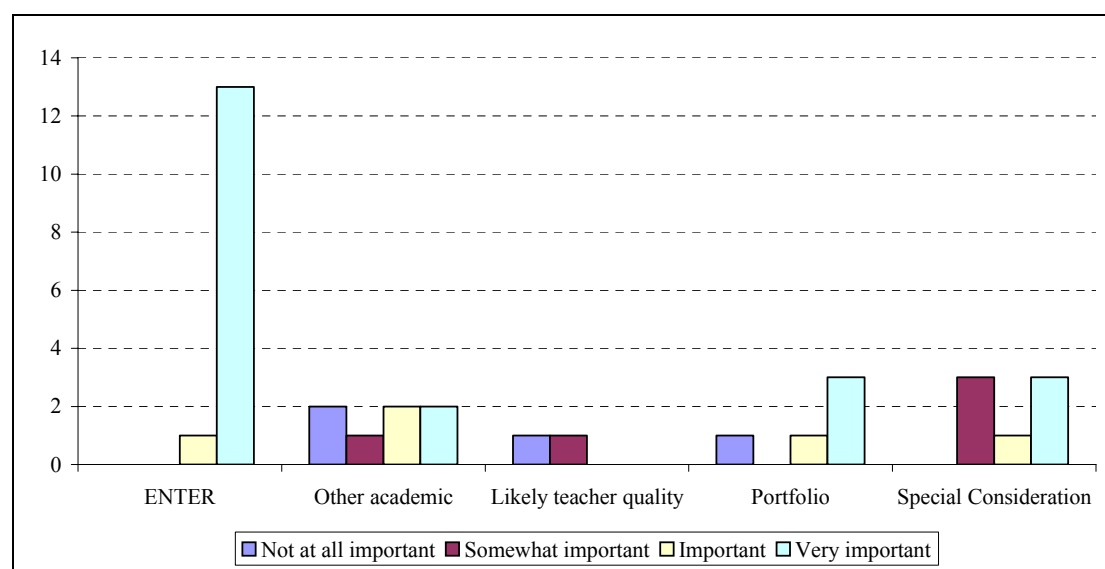
Figure 2 The importance of various criteria when selecting students into under-graduate double degree secondary education courses

Undergraduate pre-service double degree secondary teacher education: Figure 2 shows the importance of the ENTER (or equivalent) score for selection into these courses. The pattern seen here is similar to that seen in for undergraduate primary courses.

<u>Postgraduate pre-service secondary teacher education</u>: shows the importance of a range of selection criteria. Academic criteria are important, although interestingly, two universities do not appear to place strong emphasis upon it.
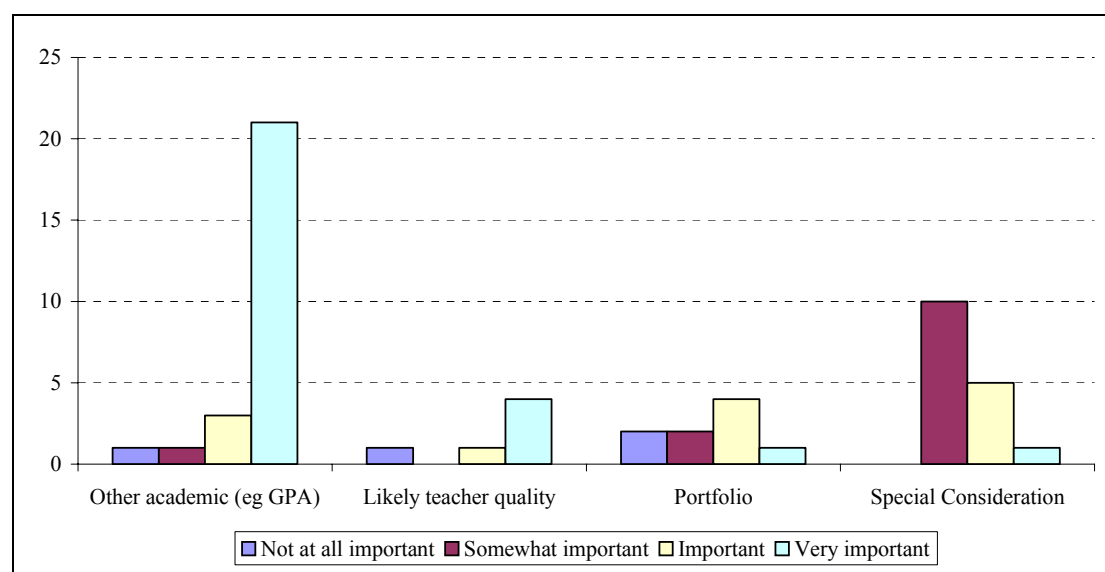
Figure 3 The importance of various criteria when selecting students into post-graduate secondary education courses.

Figure 3 points to an apparent contradiction in the data, for while it shows a strong focus upon academic achievement as a selection criteria, analysis of the open-ended questions (see above) indicated a much wider range of criteria were used by universities. The data in Figure 3 suggests that while academic achievement is only one of many criteria, it clearly remains very important to universities.
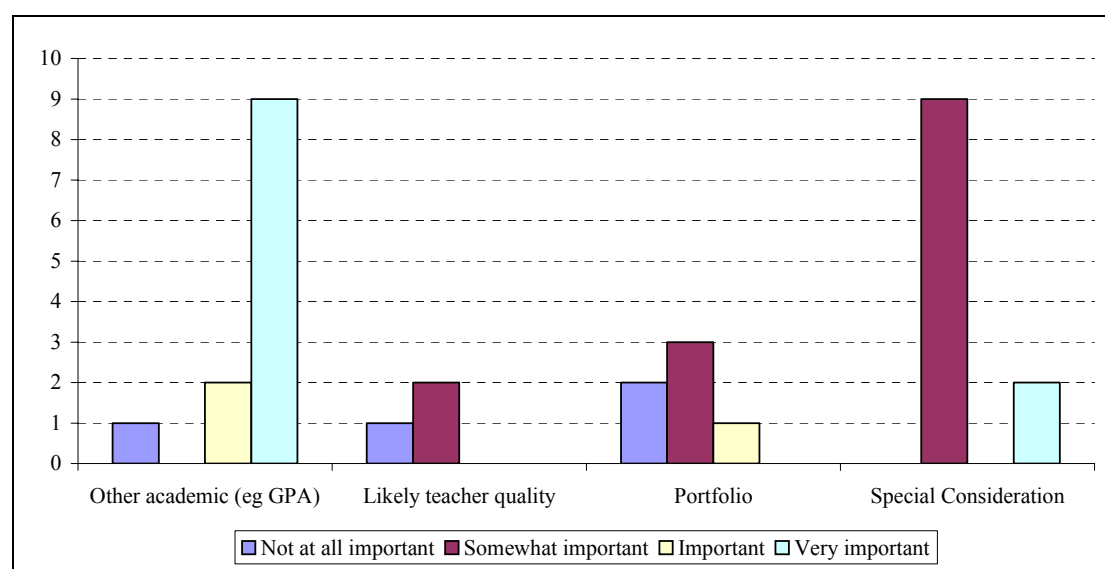
Figure 4 The importance of various criteria when selecting students into post-graduate primary education courses

<u>Postgraduate pre-service primary teacher education</u>: Figure 4 shows the importance of a range of selection criteria. Academic criteria are important in nearly all universities, and special consideration provisions are somewhat in important in most. Only two universities try to base selection, in part, on estimates of likely ability as a teacher.

Summary: For both undergraduate and postgraduate courses academic ability as measured by ENTER scores, tests scores or Grade Point Averages was the criteria most commonly identified as 'very important' for selecting students. Special consideration was commonly seen as 'somewhat important'. Few universities were able to use interviews to make judgements about the likely quality of the applicant as a teacher.

Selection procedures for non-fee paying not entering from school

Undergraduate pre-service primary teacher education: The most commonly cited, and often the only procedure used was the use of previous academic achievement (for example, Year 12 from previous years, TAFE, GPA if available from other studies, STAT or other test results). There was some reference to special consideration. Some universities used interviews. Some also use evidence of previous work-related experience such as working in schools or early childhood centres.

Undergraduate pre-service double degree primary teacher education: The universities indicated that mature-age entry schemes, previous ENTER or equivalent scores, or STAT scores were used to select non-fee paying students not entering from school. Thus, these are similar to the undergraduate primary course selection procedures.

Undergraduate pre-service secondary teacher education: Similar procedures were used as for undergraduate primary and double degrees by universities.

Undergraduate pre-service double degree primary teacher education: Similar procedures were used as for other undergraduate degrees by universities.

Summary: The production of evidence of prior academic achievement, which is then standardised to a common metric, is the main procedure used to select non-fee paying applicants not entering from school.

Selection criteria for non-fee paying not entering from school

Undergraduate pre-service primary teacher education: shows that academic achievement is very important for the selection of students who enter these courses not directly from school.
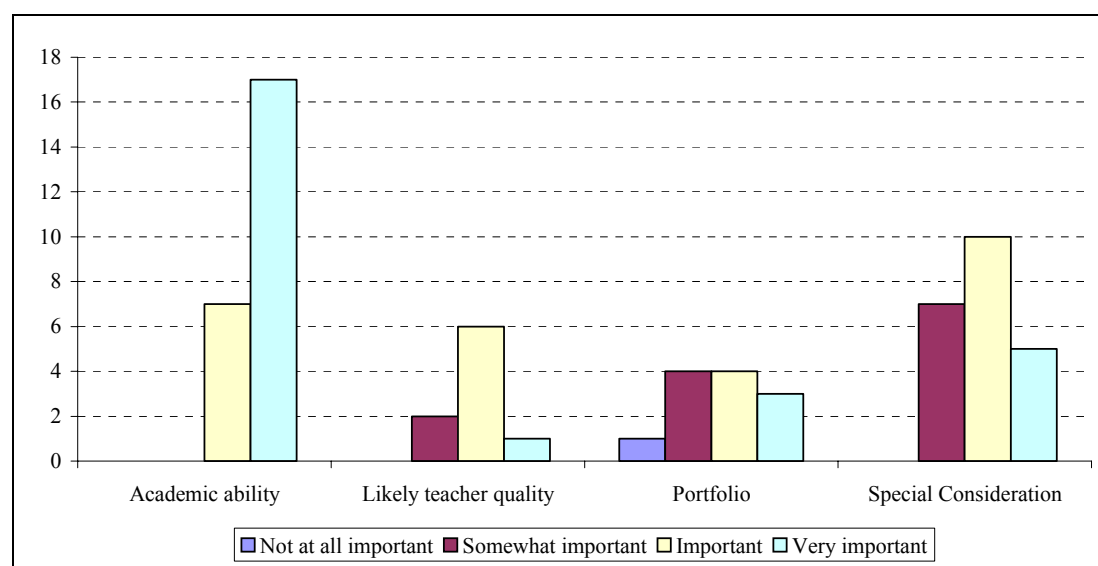
Figure 5 The importance of various criteria when selecting non-fee paying not entering from school students into under-graduate primary education courses

However, compared with those entering directly from school, there appears to be a tendency to more often consider the likely quality of the student as a teacher, and also to make more use of special consideration provisions.

Undergraduate pre-service double degree primary teacher education: One university indicated that all criteria were important for selecting students into these courses, one indicated that academic ability and special consideration were both very important. A third university indicated that academic ability was very important, that likely quality as a teacher was important and that special consideration provisions were somewhat important. A fourth university indicated that all ability was very important and the fifth that academic ability was very important and special provisions were somewhat important.

Undergraduate pre-service secondary teacher education: Nearly all data were missing for this question due to an error in the data collection instrument. One university indicated that overseas students needed to meet English standards.

Undergraduate pre-service double degree primary teacher education: where universities provided information for this question they referred to either the use of scores made equivalent to an ENTER score or special consideration provisions for entry and mature-age entry schemes.

Summary: Academic achievement is the main criterion used to select non-fee paying applicants not entering from school.

Helping students decide if teaching is for them

Undergraduate pre-service primary teacher education: Universities use a wide range of approaches to helping students to decide if teaching is for them. These include:

- Monitoring by course co-ordinators or other university staff, especially during early stages of the course (used by nearly all universities),

- The use of debriefing sessions (commonly used),

- Offering academic programs that are focused upon teaching and related issues. These are often held early in the course (occasionally reported),

- Counselling throughout the duration of the course (commonly used),

- Using the student's response to the practicum (commonly used)

- Monitoring of academic progress (commonly used),

- Having assessment based in part on work with children in schools (mentioned only once, but perhaps more frequently used),

- Career counselling (commonly used),

- Students undertaking a practicum through the whole course in a wide range of schools (mentioned once), and,

- Students in first year are assigned a third year mentor (mentioned once).

Universities use a wide range of activities to help students find out if teaching is for them, and this suggests that this presents as a significant issue.

Undergraduate pre-service double degree primary teacher education: Similar procedures and strategies were used by the universities as for undergraduate primary education degrees.

Undergraduate pre-service double degree secondary teacher education: Similar procedures and strategies were used by the universities as for undergraduate primary education degrees. Two universities noted how if students discontinued from their education degree, credits obtained in this degree could still be used for their other degree. One, for example, wrote:

> If students decide that they do not wish to continue in teaching they can exit with their companion degree using the points completed in Education at the end of their third year. In this way they are not disadvantaged.

Postgraduate pre-service secondary teacher education: similar strategies are used as for undergraduate courses. However early exposure to the demands of the classroom are a very common feature of programs. A number of universities employ a wide range of strategies. For example, one university noted:

> We start the year by asking students to explore [their] own 'autobiography of learning' and to identify their values and beliefs about teaching and learning. These are then revisited at various stages through the year as theoretical and practical knowledge develop. Constant discussion about the reality of teaching as a profession is important. 1:1 counselling is available for any student who may be experiencing doubts about entering the profession.

Another university described how assessment was linked to the experience of teaching saying:

> Our assessment tasks are real tasks for real teachers and in completing these the students are exposed to many aspects of teachers' work. The requirement to present to their peers in several classes quite early in the year and the microteaching component of the course also provide the students with early opportunities to respond to the pressures of teaching.

Postgraduate pre-service secondary teacher education: As with other types of course there appears to be close monitoring of students especially during their early practicum experiences in schools. Often it seems as if these practicums are placed early in the course so students get a chance early on to decide if teaching is for them. Many universities closely monitor their students to see if they are well suited to teaching, and offer support to those who are struggling. A measure of the importance attached to this aspect of the course is the involvement of senior staff. One university, for example, wrote:

> At the X campus we have a Course Coordinator who also teaches more than one subject in the course, and visits most of the students on their teaching practicums. This person has first hand knowledge of every student and therefore can discuss with them any issues that arise in relation to their suitability for teaching. This occurs after their first teaching practicum in May, so that the students can make an informed decision about continuing with the course. The Course Coordinator is available to provide support to students who may have personal and welfare issues.

Summary: Universities devote considerable resources to ensuring students quickly learn if teaching is for them. The most common practice is to get students into classrooms as quickly as possible. This is typically done using the practicum. There is counselling, academic time, mentoring and monitoring also used by universities. This appears to be a major concern of educational faculties.

DATA FROM THE OVERVIEW QUESTIONNAIRE

Universities were asked to make some general observations about selection into universities in an 'overview' questionnaire. One question asked about what was done to inform people

whether teaching was for them before they enrolled in a pre-service teacher education course. Universities typically replied by indicating what marketing activities they undertook. This was not the intent of the question, so it remains unclear to what extent universities help prospective students to decide if they were suited to teaching.

Universities were also asked what selection criteria they found were the best predictors of effective teaching. Some universities indicated that academic ability as indexed by an ENTER (or equivalent) score was the best criterion. Others suggested that it was a combination of academic ability and an interest in teaching and working with people. One university suggested that school-based recommendations were effective criteria. These data, however, need to be treated somewhat cautiously as often the only selection criteria used was an ENTER score so many of the responses were, self-acknowledged, to be suppositions only.

Universities were asked, if circumstances permitted, what criteria and procedures could be added to those that you use already, to increase their ability to select applicants best suited for a career in teaching. Four answered there were none that could be added. Others mentioned a wide range of possibilities, although sometimes concern was expressed about their practicality. Resourcing in particular was commonly seen as a large issue. Some possibilities cited included:

- Assessing how well applicants work in groups

- Conducting interviews (mentioned many times and often with the qualifier that it was impractical because too resource intensive)

- Information on previous relevant experience

- The inclusion of VET in the calculation of Grade Point Averages

- The use of tests including teaching aptitude, numeracy, literacy, personality and interests

- The use of portfolios

- The level of support from the family (at a university with a high proportion of Aboriginal students)

- An entrance essay and, related, an essay at the end of first year where the student argues for why they should be allowed to continue in the course.

Summary: Resources limit how much universities can do to change their selection procedures. Many regard their current procedures as at least adequate – they are equitable, resource efficient, and provide reasonable chance of selecting suitable students – and at best, very good. Interviews are often cited as another option, but in large institutions these are impracticable.

CONCLUSION

Main features of selection into pre-service teacher education courses in Australia

The data from these universities suggests that the key factor used to select into pre-service teacher education – whether undergraduate or postgraduate – is the measured academic ability of the applicant. Tertiary admission centres nearly always process applications to undergraduate courses, and special access provisions supplement these processes.

There is a clear concern in universities to ensure that only the most appropriate applicants are allowed into classrooms. This concern can be seen in the way in which universities put students into classrooms as soon as possible after the course starts so the student and the

university can assess their suitability. There is implicit in this, an acknowledgement that selection procedures may not give fully valid results.

Selection into postgraduate courses seems to involve a richer array of information than that used for selection into undergraduate courses. In part this is needed since a pre-requisite for admission to postgraduate courses is the completion of an undergraduate degree, which presumably indicates an adequate level of academic ability. Put another way, the variance in ability is likely to be far less among the applicants to postgraduate degrees than to undergraduate degrees. This lack of variability will encourage the use of other measures to guide selection.

Factors for further research

When the questionnaires returned from universities were being read one of their features was how much similarity there was between the responses from most of the universities. This had the effect of making those institutions that differed stand out, which in turn suggested that further research might use a case study approach to further investigate these unusual sites. Of the universities that stood out, the most unusual was the one that indicated academic ability was not an important selection criterion. Others that used an array of procedures for selection – typically small universities – could also make interesting case study sites. One of the attractions of these sites is the opportunity they provide to investigate, in depth, just how effective alternative procedures and practices are in selecting students who will make effective teachers.

A survey-based approach could be used for the investigation of selection procedures into postgraduate courses. Here there is more variation in the procedures used and more chance, therefore, of finding differences that have an effect using survey data. Of particular interest could be an examination of the cost benefits of each approach. It is clear that one of the benefits of using Tertiary Admission Centres for selection into undergraduate courses is that they are very cost effective. Further, they deal with measures of academic ability and it is academic ability that universities consistently see as one of the most important qualities needed in the students they select. If this is the case, then it is hard to imagine a more cost effective, efficient and valid system for selection. However if it can be shown that there are other factors, or that there are some contexts where this approach is not effective, efficient or valid, then these should be identified. A number of the small colleges seem to place much greater weight on personality, interest and motivation in their selection of students.

Summary: There is considerable uniformity across Australia in the selection of students for undergraduate pre-service teacher education courses. Further investigation of selection into these courses might be best done by using case studies methods. These case studies should be with those (few) small institutions that use other methods to investigate the cost and validity of their selection methods. For the further investigation of postgraduate selection, surveys might be considered as there is a wider range of activities undertaken by universities. The focus of the research might best be upon the extent to which the current methods are efficient and valid for all educational settings.

5. PRE-SERVICE TEACHER EDUCATION: COURSE STRUCTURE AND CONTENT

This section of the report focuses on the key components of teacher education courses. In particular:

A. Arrangements for school experience and the practicum;
B. The relative emphases given in courses to subject knowledge, pedagogical skill and knowledge, curriculum planning, knowledge about human development;
C. Preparation in the use of information and communications technology in teaching;
D. Methods for linking academic study (theory) and classroom realities (practice); and
E. Involvement of practising teachers and school leaders in teacher education.

A. PROFESSIONAL EXPERIENCE

The professional experience component within teacher education programs has been the subject of considerable discussion and debate for many years and has been raised as an issue of concern in several reviews, most recently *Australia's Teachers: Australia's Future* (2003).

There is wide spread agreement that professional experience is an integral part of all pre-service teacher education programs and provides the key link between theory and practice. The Australian Council of Deans of Education says that professional experience must be at the "heart" of teacher education and that theory and practice should be "mutually informing". While all stakeholders agree that professional experience is central to pre-service teacher preparation and should occupy a substantial part of the program, there is less agreement about how it should be structured, organized, and financed. There is considerable variation between practical experience components in teacher education programs within and between states, and within and between higher education institutions. There is no national consistency of duration, focus, or type of professional experiences within Australian teacher education. Even in states with teacher registration provision there is considerable variation within and between programs.

Such variation is not necessarily negative. Program diversity has developed in response to individual differences within teacher education courses and in the light of state-based education authority and school community needs. However, most respondents in this study felt that teacher education students should have greater involvement in the day-to-day life of schools and there should be better partnerships with school communities. A major concern highlighted in *Australia's Teachers: Australia's Future* (2003) is that the structure and organization of professional experience programs are governed more by financial and organizational constraints than educational needs and principles.

While the quality and quantity of professional experience was an issue for many respondents, several remarked on the absence of evidence-based research on the value and effectiveness of professional experience models and lengths of school placements. Indeed, the dearth of research on the impact of professional experience on graduates' professional competence indicators is well recognized. As one respondent said, "The issue is more about the quality of the experience than the simple quantity of days in schools" but research is needed to identify factors and experiences that predict quality outcomes for graduates.

Of concern to nearly all respondents was the difficulty in obtaining professional experience placements and the apparent lack of commitment on the part of schools and individual teachers to assist in the professional preparation of new teachers by offering professional experience placements. Respondents indicated it was generally a "struggle" to get placements and that universities often competed for a limited number of places. Most felt that better "connections" and "partnerships" between universities and schools and teachers and teacher educators would result in greater willingness to host students, but developing these partnerships required a concerted effort by all stakeholders.

Responses indicated two areas of complete agreement across all programs.

All programs required student to pass professional experience to graduate.

All programs met or exceeded the minimum number of days in states where these were specified by a teacher registration board.

Structure of professional experience

There was considerable diversity in the nature and type of professional experience or practicum available across the range of courses reviewed in this study. There was variation in the terminology used that must also reflect the nature and orientation of the programs. For example, there is, presumably, a substantial difference between a "supervisor" and a "mentor" in terms of the guidance and support offered to student teachers during their in-school experiences, although sometimes these terms were used interchangeably.

Professional experience was typically located both within pedagogy subjects and as a stand-alone subject. In most courses professional experience commenced with short periods of familiarization and observation in schools leading to limited teaching in small groups and assisting the teacher, and finally to students taking responsibility for a whole class. In most four year primary and secondary programs this sequence developed gradually over the course of the program- beginning with familiarisation in the first year, often in the first few weeks of the course. By the fourth year students were generally assuming full responsibility for a class. In one and two year programs students tended to follow the same developmental pathway but the stages, especially the familiarity periods, were compacted over a much shorter time.

Professional experience was generally spread throughout programs and included in every semester or in alternate semesters. Most programs locate professional experience within university teaching semesters but several indicated this could pose scheduling difficulties because of timetabling issues, especially of non-education subjects, and especially in secondary and double degree programs. Others used a combination of in-semester location and outside traditional semesters such as in the summer (February) semester or in June-July, during the mid year break.

There was considerable variation in the length of professional experience. The number of days ranged from 95 to 140 days in four-year undergraduate programs, 40 to 65 in one year postgraduate programs, and 50 to 115 in two-year postgraduate courses. Not all these days are "supervised" or "paid" days. A "supervised" day is generally a day in which the classroom teacher, or sometimes the school, is paid for providing guidance to the student and sometimes for undertaking assessment tasks. In non-supervised or non-paid days, teacher education students tend to work as "classroom volunteers" or undertake observation tasks that do not require direct teacher "supervision". Non-paid days are also associated with internships.

Most universities structured their professional experience as a combination of single days and blocks. As students progress through the various stages of their courses they assume greater degrees of responsibility in classrooms and "the role between student and teachers changes from one of direct supervision to one of colleague and mentor as the student teachers gains professional skills and confidence" (Dawson & McCulla, 1996).

The single days, "dispersed days" or "distributed days" tended to be in the first year or two of the program and were often embedded within or associated with introductory foundation, pedagogy or curriculum subjects. They focused on familiarity with education systems and communities, schools and classrooms. In many programs teachers and schools hosting students were not paid for these days as students were designated "observers" or acted as "assistants" or classroom "volunteers". Typically students visited a school for one day per week in first and/or second semester. During this time they observed classes, familiarised themselves with school and classroom policies and procedures and engaged with individual or

small groups of students. Some courses had on-going distributed days throughout a year or spread over the entire program.

Block periods of professional experience characterised the later years of programs and involved students in a combination of "observation" and "assistance", and small group and whole class teaching with guidance from mentor or supervising teachers.

Professional experience in the second and third years of four year courses was usually organized in blocks ranging from one to six weeks, sometimes accompanied by regular single or half day experiences. Students were usually considered to be "student teachers" or "assistant teachers" during this time and assisted or complemented the classroom teacher by working with individuals and small groups and taking responsibility for some whole class teaching.

In the final phases, most courses offered substantial block periods of in-school experience. Blocks ranged from 3 to 10 weeks. Generally students were considered to be "student teachers" and gradually increased their responsibility for classroom teaching and management until they were planning and managing learning for whole days or consecutive days. Most programs offered opportunity for an extended block placement or "internship" in the final period of professional experience.

Internships were first introduced in teacher education programs in the early 1990s. Internships typically range from 4 to 10 weeks and involve students in assuming full responsibility for teaching for some or all of the period. In some programs students are designated "Assistant Teachers" or "Associate Teachers", in others, "Interns". Internships are viewed as the "bridge" to fully qualified teacher status and enable students to assume a full range of classroom responsibilities with guidance and support. Internships are negotiated between universities, schools, employing authorities and unions. During the internship period the "mentor", "supervising", "cooperating" or "associate teacher" guides and supports students. In some intern programs where students have qualified teacher status, they assume the role of a typical classroom teacher and may be fully responsible for a class in the primary school or for several classes in one or more subjects in the secondary school, including full "duty of care". In these cases, the student teacher functions "above establishment" as an extra teacher in the school (Dawson & McCulla, 1996).

In some jurisdictions, universities pay schools (or teachers) for hosting students during internships, in others they do not. The issue of payment during internships seems to relate the roles and responsibilities of the student teacher and the cooperating teacher. Where the student is eligible for 'qualified teacher status' and assumes 'duty of care' in the classroom, teachers (or schools) are not paid. If the student acts as an "assistant" or co-teacher there is more likely to be payment to the school or the classroom teacher.

Teachers hosting interns often engage in a special school-based projects or collaborative school-university initiatives. Reduced payment (or no payment) to the school or mentoring teacher is supplemented by benefits negotiated with the school to improve teaching and learning efforts and programs. In essence, the period of the internship becomes a period of relief from face-to-face teaching.

Adequacy of professional experience

Most respondents indicated satisfaction with the number of days allocated to professional experience within their courses and reported that students had "sufficient experience in classroom and schools", but many commented that students would benefit from increased, quality professional experience. Respondents from courses with both high and low numbers of days, and from all program types, indicated that students would benefit from more in-school experience, especially time to reflect on their teaching, to practice skills and to "strengthen links between theory and practice".

Despite some responses that appeared to support virtually unlimited days of professional experiences in schools, most respondents indicated the importance of "quality" experiences. That there is little, if any, evidence to indicate the relationship between length of time in schools and outcomes for beginning teachers indicates the need to investigate this matter. In the absence of evidence-based studies, and on the basis of experiences within programs, it is usually argued that it is the quality of the time in schools, and especially the quality of the scaffolding afforded to student teachers that are implicated in enhanced professional competence.

While nearly all respondents indicated that their programs provided adequate professional experiences, three primary respondents and two secondary respondents said that the length of time for professional experience was inadequate. These respondents cited finding placements, making links between theory and practice, time for reflection, and time for skill development as problems associated with insufficient periods of professional experience.

Respondents who indicated the need for increased in-school experience suggested that more time in schools would provide deeper, more elaborated understandings of pedagogy and curricula, opportunities for "critical reflection and analyses of experience" and a useful transition to teaching experience. "But simply extending prac may not be useful, in fact could be counter productive", said one respondent. The concern here was that some schools and teachers participated in professional experience so grudgingly and reluctantly that more time spent with ambivalent, negative teachers might hinder rather than enhance teacher education students' development.

The main reason cited for not increasing in-school days and improving quality of experiences related to cost. Additional professional experience days require thoughtful planning, funding for mentor/supervising teacher payments, university supervision, travel and in the case of rural placements- accommodation for visiting staff. Further, while many students might like to experience a rural school placement, costs of travel, accommodation and lost income (from part-time or full-time employment), and family responsibilities preclude involvement in professional experience programs that require time away from their home base.

Respondents most concerned about limited in-school experience were associated with one or two year graduate entry programs. While most believed their graduates had "adequate" experiences there was a strong feeling that a "one year course placed great pressure on the system and thorough development of teaching skills".

Previous reports have highlighted the need to clarify the purposes of professional experience and improve quality, and again here, teacher educators stressed the need to build stronger partnerships with schools and improve in-school opportunities for their students. But in almost every case, respondents pointed to cost as a constraining and limiting factor.

Table 5 Professional experience days per program (range), and number of visits by university staff to schools during professional experience

Program Type	Range of professional experience days	Number of visits by university staff - range
Primary UG 4 year	95-140 days	0-27
Primary PG 1 year	40-65	4-10
Primary PG 2 year	50-102	1-14
Secondary UG 4 year	50-160	0-18
Secondary PG1 year	45- 60	0-6
Secondary PG 2 year	55-115	0-10

Students' roles and tasks in schools

While there is considerable diversity in the range and type of in-school experiences undertaken by students across programs, most begin with periods of familiarisation with the school, classroom and school community, including curricula and teaching resources. This familiarisation is especially important where school communities and cultures differ markedly from the cultures and communities most familiar to the teacher education students. Students then progress to small group teaching, assisting classroom teachers and finally to working with the whole class.

Teacher educators indicated that their professional experience program is normally framed within the overall course goals and aims to foster the professional and personal development of students. In-school activities are usually linked to professional, curriculum and pedagogy studies within each program and encourage development of teaching skills plus reflection on processes, purposes and outcomes of teaching and learning experiences. Typically, it was reported that professional experience aims to engage students in a range of teaching experiences, including planning, implementing learning experiences, evaluating teaching and students assessment and reporting. Students are also expected to experience of range of teacher responsibilities typical within a school setting. All respondents indicated that students undertook planning, teaching and assessment tasks throughout their professional experience.

All respondents indicated that schools were expected to provide:

1. supervised practice teaching
2. assessment of student performance
3. guidance and support in planning lessons

Most indicated that schools should provide opportunities for involvement in the school community, and a few also indicated that schools were expected to provide opportunities for meeting and/or communicating with parents.

While teacher educators indicated that schools were expected to provide a full range of experiences for their students there was some concern about the extent of and commitment to "supporting" and "guiding" students. Several respondents indicated the need for a stronger focus on "mentoring" rather than "supervising" to enrich experiences for students. In each case though, respondents indicated that developing mentoring programs first required closer partnerships with schools and incentives for teachers. There appeared to be little opportunity for most universities to work collaboratively with schools on a wide scale, due mainly to lack of funding to support professional learning programs and teacher release time.

Supervision of pre-service teachers during professional experience

As mentioned earlier the process of guiding, supporting and mentoring teacher education students during in-school experiences changes over the course of the program. Early in the program the student teacher is likely to be closely guided and supported on a day-to-day basis by the classroom teacher. Analyses of responses to questions about the guidance and support provided by university staff (both full-time academics and part-time, casual, or sessional staff, often recruited especially for in-school supervision tasks) indicated considerable variation in practice. Most courses used both university and school staff to support and supervise students. Assessment of teaching performance appears to be undertaken mostly by classroom teachers, with some involvement from university staff, and sometimes from students.

During the final in-school experiences, and especially in an internship, the "supervision" role becomes more collaborative, with a focus on reflection and analysis of key teaching and learning issues. When teachers act as "mentors" there is normally no formal assessment role. However, given the apparent variation in the definitions of "mentor" across courses it seemed that some "mentors" acted in a supervisory, rather than mentoring role.

Several universities indicated that all academic staff with teacher qualifications or teacher registration were encouraged or required to assist in the supervision process. However, because of the large number of students requiring supervision, and because of staff members' range of academic and research responsibilities, most universities employed additional "sessional" or "casual" staff to help support and supervise students during in-school experience.

Typically, these additional staff were practising teachers currently on maternity, Long Service or other types of leave, retired teachers and principals, retired academics, and academics from neighbouring universities seeking part-time work. Some respondents mentioned that supervisors were only recruited from 'exemplary' teachers or ex-teachers.

Most programs reported offering some training for supervisors recruited from outside the University. Few programs provided professional development programs for teachers who hosted and mentored students in schools, but all provided written guidelines.

Several respondents commented that the role of the supervising teacher was complex and time consuming and suggested that more effort was needed to support teachers, so that they in turn could support students. Several indicated, that while professional development for teachers was desirable, they were unable to fund teacher release days or academic time to run workshops in the current funding climate. One respondent highlighted the conflicting professional interests and responsibilities of teachers and indicated that exemplary teachers, the ones who make the best student supervisors, tended to be the busiest and hence had the least time to support students. Several respondents commented on the difficulty in sourcing good classroom teachers willing to host a student. Some commented on the lack of incentives for teachers to be involved in professional experience programs, let alone engage in additional professional learning.

Respondents across a range of programs, suburban, regional and rural, commented on the difficulty in obtaining professional experience placements for student teachers. They indicated several major factors contributing to schools' reluctance to host students. First, there was often no financial incentive for teachers. In some schools, the daily remuneration paid by the university went to the school rather than the classroom teachers. Others pointed to the increased workload for teachers (assessment, guidance and mentoring) at a time of increasing internal school demands and lack of recognition and incentive for effort.

Most university programs indicated that university-employed staff visited schools at some point during the professional experience period, but the nature and number of these visits varied. Table 5 shows that the number of visits to schools by university-employed staff ranged from none to 27 over the course of professional experience. Typically, most programs encouraged at least one visit to the school during each block period of professional experience. Some students were visited daily for the first two weeks, other visited weekly or fortnightly during the blocks periods. Most respondents noted that students who were having difficulty or were deemed "at risk" would be visited by university employed staff a number of times to provide support to both the student and the classroom teacher.

Some programs have adopted a "liaison" model of visits, where the university staff member makes initial contact with the school, sometime via telephone and/or email and then makes periodic contact to monitor student progress. In other programs, university-employed staff visit students regularly and participate in assessment of students' professional experience.

The number and nature of visits by university-employed staff were generally related to the assessment methods employed during professional experience and to availability of funding. Where classroom teachers assume the major responsibility for assessment of student performance, university-employed staff may not be required to participate in assessment processes and their visits become more supportive and facilitative – and less frequent. Variations in assessment methods and respective roles of university staff and classroom

teachers appear to be a function of the philosophy and structure of the programs as well as funding.

Several primary and secondary respondents commented that they would like to increase the supervision or mentoring roles of University-employed staff but were prevented from doing so by funding constraints. For example, one respondent said. "More money would enable close links between University and School. Currently lecturers only visit when students are in difficulty. Isolated schools make travel expensive." Some also commented they would like to visit schools more often to provide support for the classroom or mentoring teacher, but again, indicated that workload pressures and related funding constraints prevented this.

Most programs offered some training or briefings for University-employed staff prior to professional experience supervision or liaison. Some meetings were dedicated professional experience workshops, others were incorporated as part of general staff meetings or curriculum meetings. Several respondents indicated that because most academic staff were already qualified teachers, written guidelines and "shared documentation" were sufficient to guide their supervisory or liaison visits. One university indicated that new University-employed staff accompanied an experienced supervisor on their first professional experience visits. Two others indicated that briefings were provided only for new staff.

Most universities provided written guidelines to school-based staff involved in supervising or mentoring students. Few provided face-to-face training. Several respondents commented that greater Professional Development would assist school staff in supporting and mentoring students but that financial and industrial constraints hindered initiatives to provide more support to teachers.

Partnerships

Recent previous reports on teacher education and related issues have highlighted the importance of "effective partnerships" between employing authorities, universities, teacher unions and other stakeholders, and teacher education students. "Field education experiences should be planned, conducted and evaluated in close collaboration with appropriate school based personnel and developed within the framework for collaborative arrangements and partnerships of the course as a whole" (Australian Council of Deans of Education, 1998, p. 20)

Several teacher education programs indicated they had established productive "partnerships" with schools. Partnerships tended to be more enduring and collaborative than the traditional practicum models where schools are recruited on a semester-by-semester basis and may take student teachers from a range of universities and programs.

Two universities that had established strong, collaborative partnerships with schools were Avondale College and the University of Central Queensland. At Avondale College students were paired with a mentor teacher from their first semester and worked with the teacher for a range of activities throughout their course. At UCQ, professional experience developed in cooperation with the school and was embedded in all aspects of the teacher education program.

Placement shortages, territorial and industrial issues

While most teacher educators reported they were generally satisfied with professional experience, many commented on the difficulty of obtaining placements for students, especially in smaller rural and regional communities and also in large cities where there were several universities competing for places. One respondent in a large metropolitan university commented that universities had little control over selection of schools and placement of students within schools. "They had to take what's on offer and more schools and better teachers are needed". Another said universities needed "greater access to exemplary teachers". Several claimed that the shortage of places was exacerbated by industrial and funding issues. Articulating the view of several teacher educators, one respondent said: "Industrial requirements to pay individual teachers for supervision of teachers is an old

fashioned, anti collaborative and outdated view of what school experience should deliver and thus restricts opportunities for improving linking. Schools should benefit professionally from their commitment to inducting students into the profession and act as links between theory and practice".

Several respondents mentioned the need for stronger emphasis on developing partnerships and collaborative relationships with schools and school communities and building a school culture that valued supporting and nurturing pre-service teachers, but indicated that this was difficult to achieve because of the funding and industrial issues. A number of respondents indicated that funding constraints actively prevented them from pursuing such collaborative initiatives.

Changes needed

The most recent report on teacher education *Australia's Teachers: Australia's Future* (2003) suggested that it is "time to rethink practical experience, particularly for end-on courses - seeing practicum, internships and induction as a single developmental phase with a continuing partnership between schools, universities and employers" (p. 142). While there was no wholesale call for review and reform by respondents in this study, there were certainly many calls for changes to individual programs and most importantly calls to increase funding and/or change the funding model for professional experience.

Generally respondents reported that graduates were adequately prepared for teaching roles, but there were many suggestions to improve practice.

Most secondary respondents wanted some changes to their professional experience programs. Nearly all mentioned scarcity of placements and the difficulties of obtaining suitable placements and supervising students due to industrial and funding issues. Two indicated the need to strengthen partnerships with schools and better professional development for teachers. One highlighted the need for schools to share the "burden" of preparing teachers, saying that at present universities were carrying most the responsibility. Several respondents commented on the limited time for professional experience, especially in end-on courses and urged that professional experience should commence early in the program so that students could make informed decisions about their futures early in their degree. Restructuring courses to enable professional experience outside the University teaching semester, and/or on a weekly basis are also useful ways to maximize practicum times within an academic year

Most primary respondents indicated they would welcome some changes to their programs. Most wanted more time in schools, more visits to schools, better communication with schools, and more professional development for schools. There was some concern about the industrial and funding issues that are perceived to limit initiatives to increase professional experience, establish mentoring programs, and strengthen partnerships. Several respondents commented on the difficulty of obtaining placements for students in schools and the need to provide teachers with financial and professional development incentives.

Typical of responses highlighting the need to increase professional experience quality and urging greater funding were the following:

> Both the work of academics and general demands placed on them are intensifying. This is particularly the case in education where there is a substantial professional experience component. A commitment to additional funding for professional experience would assist us in providing quality induction for our students. We would also like to see this commitment to professional experience translated into innovative models where there are considerable connections between teacher educators, schools and the Faculty.

> It is critical that school teachers… see a professional responsibility to induct and mentor students into the teaching profession… Teachers, ideally, should be inducted into this process themselves, so that they get accreditation as a mentoring teacher… This needs time and funding…

> More money for teaching practicums both for schools and the supervising classroom teachers. Also, more funding for the university to pay experienced staff to assess students on their teaching practicum.

> More funding is required to encourage more and better teachers to participate in practicum supervision. Greater funding … for the organization and supervision of practicum/internships.

> Funding and limited access to schools limit professional experience opportunities ...

Summary and further research

Results from this study, as in previous studies, confirm that professional experience sits at the heart of teacher education programs as a key link between theory and practice but indicate that there is considerable variation in its structure, management and outcomes. While students are reported to be adequately to well prepared for beginning teaching roles, most respondents indicated that graduate quality and competence would be enhanced by longer experiences in schools that were more embedded in school communities and with closer mentoring by school and university staff. Most respondents indicated it was difficult to organize, fund and manage professional experience and that all stakeholders would be enriched by closer relations between schools and universities.

Of greatest concern was the high cost of running professional experience programs (especially the administration costs, payment of teachers and schools, and payment of supervisors), difficulties in providing adequate supervision and mentoring of students, difficulties in finding enough schools and classes willing to host students, and schools' reluctance to participate as partners in the development of new teaching professionals. A major problem for many respondents was that structure and organization of professional experience programs seemed to be governed more by financial and organizational constraints than the needs and interests of students and the future of a high quality teaching profession.

Many respondents were extremely concerned about the stress that shortages of placements and funding pressures placed on program management and individual staff members. They highlighted the need to publicise the benefits to school communities of being involved with teacher education programs and to work with school, teachers and other stakeholders, especially those most reluctant to host students, to increase access to places. However, most acknowledged that convincing schools to offer more places required time and money and stressed the need to better resource initiatives between teacher education programs and education authorities to forge closer partnerships with school communities. A major focus of such partnerships would be aimed at increasing opportunities for professional experiences and mentoring throughout the duration of the teacher education course and building a shared understanding of the need to support pre-service teachers' professional growth.

The issues raised by teacher educators in this study are not new, but they appear to be increasingly problematic and causing genuine stress within courses. The quest for "quality" permeates most responses, yet there is little evidence on what constitutes "quality" in professional experience. Given these findings and the valid and heartfelt concerns about the value and direction of professional experience, it is timely to explore its many complex dimensions and the factors that affect professional experience outcomes for students. Clearly, there are many models of professional experience, and varying durations and approaches to supervision and assessment, but little is known of what works best in which context and for which students. Research to document and clarify the impact of practicum experiences and to

identify effective models and practices is needed if universities are to deliver quality professional experience programs.

B. COURSE CONTENT AND STRUCTURE

The brief for this study asked for an outline of the structure of teacher education courses for primary and secondary teachers to be included. It also asked for information about the key components of courses and the percentage of time spent on each. For example, the time spent on subject knowledge, pedagogical skill and knowledge, curriculum planning, and knowledge about human development.

Pathways in teacher education

Teacher education in Australia has a relatively simple structure. There are three main routes by which teachers are prepared:

1. Three to four year undergraduate single bachelor degree courses (E.g. B.Ed.)
2. Four to five year undergraduate double bachelor degree courses (E.g. B.A./B.Ed. - two testamurs)
3. One to two year postgraduate diploma or degree courses (E.g. Dip.Ed; B.Teach.)

Table 6 shows the numbers of students who completed each type of course in 2001. It is adapted from data reported in Ballantyne, Bain and Preston (2002), but does not include courses in Early Childhood or Adult teacher education. It may be worth mentioning that graduates from Bachelor of Early Childhood degrees are highly likely at present to teach in the early years of school, rather than in the preschool sector. The main route into primary teaching is still the single undergraduate degree, but increasing numbers of primary teachers are being prepared through postgraduate degrees or diplomas. Numbers in the undergraduate (B.Ed.) route into secondary teaching have declined in recent years, but it remains the main route for teachers in several specialist areas such as physical education and for teachers using RPL for TAFE qualifications as a pathway into teacher education.

Table 6 Types of teacher education courses and course completions 2001

Courses	Undergraduate Single degree	Undergraduate Two degrees	Postgraduate diploma or degree	Total
Primary	3526 (29.9%)	601 (5.1%)	1240 (10.5%)	5367 (45.5%)
Prim/Sec or middle	266 (2.3%)	49 (0.4%)	320 (2.7%)	635 (5.4%)
Secondary	1188 (10.1%)	924 (7.8%)	3674 (31.2%)	5786 (49.1%)
Total	4980 (42.2%)	1574 (13.4%)	5234 (44.4%)	11,788 (100%)

The main route into secondary teaching is still the one-year graduate diploma in education in NSW, Victoria, WA and SA, though some universities in those states have moved from diploma to bachelor or masters programs requiring two years (or 1.5 years in accelerated programs). Teacher registration authorities in Queensland and Tasmania now require all teacher education programs to be at least two years in length, with at least 80 days of school experience (though optional paths to complete in 1.5 years are common). The recent introduction of double degrees has proved popular with students and increasing numbers are choosing this path each year.

Table 7 provides a more detailed picture of the trend in completions over the past three years. .

Table 7 Types of teacher education courses and course completions 2000 - 2002

Field of Education		2000				2001				2002			
		Level				Level				Level			
		Double degree	Graduate	Under graduate	All	Double degree	Graduate	Under graduate	All	Double degree	Graduate	Under graduate	All
Teacher Education-Schooling	Early Childhood	107	115	1,018	1,240	3	106	1,201	1,310	27	118	1,358	1,503
	Primary	335	586	3,298	4,219	353	865	3,328	4,546	451	807	3,643	4,901
	Secondary	626	2,279	1,277	4,182	473	2,489	954	3,916	423	2,864	1,237	4,524
	Sub-total	1,068	2,980	5,593	9,641	829	3,460	5,483	9,772	901	3,789	6,238	10,928
Teacher Education-Other areas	Adult	0	68	116	184	0	134	241	375	1	124	263	388
	Librarianship, Special Education, ESL	0	1	112	113	0	18	53	71	0	41	113	154
	Teacher Education (not defined)	379	776	576	1,731	225	1,129	1,201	2,555	443	929	1,211	2,583
	Sub-total	379	845	804	2,028	225	1,281	1,495	3,001	444	1,094	1,587	3,125
TOTAL		1,447	3,825	6,397	11,669	1,054	4,741	6,978	12,773	1,345	4,883	7,825	14,053

Source: Higher Education statistics DEST (Author: L Doherty)
(a) Initial Teacher Education courses were identified using the special course indicator code 22--courses providing initial teacher training.
(b) Graduate courses include Bachelor's Graduate Entry, Postgraduate Diploma, Graduate Certificate levels and Masters courses
(c) Double Degrees include any combined courses (ie. ones that lead to 2 qualifications)

The fastest rate of growth is in the number of students entering teaching through postgraduate teacher education programs.

Components of teacher education courses

The focus here is on the units of study within teacher education courses and the relative amounts of time allocated to different components of the teacher education curriculum. The brief made it clear that a major, in-depth analysis of the content of teacher education courses was not expected, including gathering and reading course handbooks and the like. We were uncertain how best to gather data relevant to questions about course content in the brief time available. The questionnaire did not seem a practical way to gather the data, nor did we want to increase the already heavy burden that the study was placing on respondents any further. In visiting university websites, however, we found that they had reached the stage of development and detail that made it possible to gather quite a lot of information about course content and structure relatively easily. In fact, many websites had very detailed information about each unit of study within each course that the university provided, including timetables, list of lectures and topics, reading lists, assignment tasks, chat rooms, and so on. It was clear from the quality and detail of the information that university lecturers had put a great deal of work into making their websites a centre of activity as well as information.

The length of the present study precluded a detailed compilation of data about teacher education courses from these websites, but we experimented with some methods that could be used if such a study were to be conducted. An example of this analysis can be found in Table 8 and Table 9. Table 8 provides a summary of the course structure for the Bachelor of Education degree for primary teachers at Deakin University. Table 8 shows the progression of units of study that students undertake over four years, as well as the timing and length of school experience.

While it would be inaccurate to say the Deakin course is typical, it does have several elements in common with many pre-service courses we examined. Students are expected to undertake a sequence of units from other university faculties in subjects related to the Key Learning Areas. This represents about 20 per cent of course time and gives the students a good opportunity to participate in the wider academic life of the university. This integration of teacher education with other faculties was a common feature of B.Ed. courses, a result perhaps of the amalgamations of colleges of advanced education and universities in the late 1980s, and the lengthening of courses to four years. Table 8 shows the Education Studies units moving from understanding child development and learning in the first year to curriculum and assessment and on to wider professional issues in the final year.

Table 8 COURSE STRUCTURE: Deakin University: Bachelor of Education (Primary) (E359) B. Ed. PRIMARY

Course duration: Four Years full time. Course structure: 32 course units (1 unit = 3 hours per week for 1 semester)
24 course–grouped (Compulsory six unit major sequence in Education Studies; 12 units related to Key Learning Areas; 6 core discipline units in language and Literature
Students must take major discipline sequence of 6 credit points related to one of the Key Learning Areas from another faculty + 2 units related to another KLA or an extension of to the major discipline sequence

		Units of study	School experience
Year 1	Semester 1	1. Education Studies Major 1: Understanding children and adolescents 2. Language core discipline unit 1a: Reading children's literature 3. Science core discipline unit 1a: Ecology and the environment 4. Level 1 Unit from approved major discipline sequence	
	Semester 2	1. Education Studies Major 2: Understanding learners 2. Language and core discipline unit 1b: Exploring texts 3. Mathematics core discipline unit 1a: Number and chance 4. Level 1 Unit from approved major discipline sequence	Primary School Experience 1 {5 days (half day per week for 10 weeks orientation)}
Year 2	Semester 1	1. Education Studies Major 3: Creating effective learning environments 2. Mathematics core discipline unit 1b: Patterns in space 3. Primary Language Education 1: Language and literacy: The early years 4. Level 2 Unit from approved major discipline sequence	Primary School Experience 2A (10 days)
	Semester 2	1. Education Studies Major 4: Curriculum, assessment and reporting 2. Science core discipline unit 1b: The physical environment 3. Primary mathematics education 1: Developing numeracy concepts 4. Level 2 Unit from approved major discipline sequence	Primary School Experience 2B (5 day block & 5 days)
Year 3	Semester 1	1. Primary Language Education 2: Developing Language and literacy: The Middle Years 2. Primary Mathematics Education 2: Creating an Inquiry-based Classroom 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	Primary School experience 3 (10 day block & 5 days
	Semester 2	1. Primary Social Education 2. Primary Science Education 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	Primary School experience 3B (10 day block & 5 days
Year 4	Semester 1	1. Education Studies Major 5: Professional relationships 2. Teaching the Arts in Primary Schools 3. Primary Physical and Health Education 4. Primary Technological Education	Primary School experience 4A (10 days)
	Semester 2	1. Education Studies Major 6: Transition to beginning teaching 2. Primary Arts Education: Focussed study 3. Primary Language Education 3: The literacy teacher: The profession and the community 4. Primary Mathematics Education: Professional practice and Mathematics: Designing an inclusive curriculum	Primary School experience 4B (20 day block)

Students undertake 80 days of school experience

Table 9 represents a framework for analysing the content of teacher education courses. We decided to base our analysis on a framework of standards for beginning teachers. There are many such sets of standards or competencies and the standards listed across the top of Table 9 are common to most. The standards reflect what research and professional judgment suggest beginning teachers should know and be able to do, no matter where or how they are trained, in order to establish classroom conditions conducive to learning and therefore provide a suitable basis on which to analyse course content.

Table 9 provides an analysis of the same units of study as in Table 8 for the Deakin B.Ed, this time using teaching standards. In conducting the analysis, we went to the Deakin website, which contains detailed information about each unit of study within the course. After reading the description for the unit of study carefully, we made a judgement about the extent to which the unit emphasised each standard. It was very clear, for example, from the description of the unit, *Education Studies Major 1: Understanding children and adolescents,* that this unit placed a major emphasis on the standard, "Knowledge of students and how they learn". Major emphasis is represented in Table 9 with a XX, and minor emphasis with an X. (It is important to say that this is our own judgment – we did not have time to check our interpretations with those who actually developed the units).

What can be said about Table 9 with confidence is that the Deakin B.Ed. course for primary teachers places strong emphasis on content or subject matter knowledge. Reading the unit descriptions also reveals that strong emphasis is placed on the need for student teachers to be familiar with research on how children learn and how concepts develop in particular subject areas, such as mathematics, literacy and science. Study of curriculum and curriculum frameworks was also strongly emphasised together with high expectations for students to engage in curriculum development themselves. We were surprised at the emphasis on content, student learning of the content and curriculum. The blanks in Table 9 should not be interpreted as "no emphasis" necessarily, rather it means that no concrete evidence could be found in the unit description that the course contributed to the standard. It does seem, for example, that the emphasis on assessment and direct training in teaching skills through modelling and feedback was light.

Appendix A contains similar tables providing analyses of the following courses:
    Undergraduate B.Ed:
        Edith Cowan University –. (ECE & Primary)
        University of Tasmania – undergraduate B.Ed. (ECE & Primary)
    Post-graduate degree courses:
        Graduate Diploma in Education - one year Secondary (Clayton)
            Monash University
        Bachelor of Education (Secondary: Internal Students)
            Queensland University of Technology
        Master of Teaching (Primary and Secondary)
            University of Sydney
        Bachelor of Teaching (two schedules: one for primary; one for secondary)
            University of Tasmania
    Double Degree
        Monash University — Secondary Stream

Observations

Although we have no sound basis for the claim, we suspect that teacher education programs have made significant shifts in recent years toward ensuring that units of study directly link to and contribute to the acquisition of beginning teaching standards. The Central Queensland University website for the course *Bachelor of Learning Management*, for example, provides a detailed description of the specific teaching standards to which each unit of study contributes. The university has adopted the Education Queensland's professional standards. Every unit of study is described in terms of its relevance to the standards.

While this method of displaying course content can provide a rough guide to the content that students have the opportunity to learn, it of course gives no guide as to the quality of the opportunities they have to learn how to teach. However, one of the few findings from research about teacher education is that opportunity to gain deep and accurate understanding of subject matter is related to the competence of graduates, as is the opportunity to study content-specific teaching methods courses.

Table 9 COVERAGE OF TEACHING STANDARDS - DEAKIN UNIVERSITY B.Ed (Primary)

Deakin University: Bachelor of Education (Primary) (E359)   **B.Ed. PRIMARY**

Year	Semester	Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: (communication, questioning, discussion, engagement, challenge, feedback)	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: communication with parents, etc	ICT
Year 1	Semester 1	1. Education Studies Major 1: Understanding children and adolescents 2. Language core discipline unit 1a: Reading children's literature 3. Science core discipline unit 1a: Ecology and the environment 4. Level 1 Unit from approved major discipline sequence	XX XX XX	XX	X					
	Semester 2	1. Education Studies Major 2: Understanding learners 2. Language and core discipline unit 1b: Exploring texts 3. Mathematics core discipline unit 1a: Number and chance 4. Level 1 Unit from approved major discipline sequence	XX XX XX	XX X X	X					
Year 2	Semester 1	1. Education Studies Major 3: Creating effective learning environments 2. Mathematics core discipline unit 1b: Patterns in space 3. Primary Language Education 1: Language and literacy: The early years 4. Level 2 Unit from approved major discipline sequence	XX XX XX	X X	X		X			
	Semester 2	1. Education Studies Major 4: Curriculum, assessment and reporting 2. Science core discipline unit 1b: The physical environment 3. Primary mathematics education 1: Developing numeracy concepts 4. Level 2 Unit from approved major discipline sequence	XX XX XX	X X	X			X		
Year 3	Semester 1	1. Primary Language Education 2: Developing Language and literacy: The Middle Years 2. Primary Mathematics Education 2: Creating an Inquiry-based Classroom 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	X X XX XX	X X	X X		X	X		
	Semester 2	1. Primary Social Education 2. Primary Science Education 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	X X XX XX	X	X X					
Year 4	Semester 1	1. Education Studies Major 5: Professional relationships 2. Teaching the Arts in Primary Schools 3. Primary Physical and Health Education 4. Primary Technological Education	X X X		X X X	X X X			X	X
	Semester 2	1. Education Studies Major 6: Transition to beginning teaching 2. Primary Arts Education: Focused study 3. Primary Language Education 3: The literacy teacher: The profession and the community 4. Primary Mathematics Education: Professional practice and Mathematics: Designing an inclusive curriculum	X X		X X X	X X X	X	X	X X	

There is no research comparing the effectiveness of the three different teacher education pathways into teaching. It is unlikely that structure per se would relate strongly to the relative competence of graduates, compared, for example, with the quality of opportunities to learn subject matter and targeted opportunities to practice models of teaching with "at the shoulder" feedback from expert mentors. There is considerable room for more rigorous research on the effectiveness of pre-service teacher education courses. Such research will not advance far without further research into methods for assessing beginning teacher knowledge and performance against standards for competent beginning teachers.

C. INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN TEACHER EDUCATION

The changing context of Information and Communication Technology (ICT) use in the community and in schools has given teacher education programs an important role in preparing future teachers to use ICT in pedagogically appropriate and enriching ways. Questions about the most effective ways to prepare teachers for a digital world and to facilitate students' learning with and about ICTs have been explored extensively over the last 20 years. ICT is a dynamic area and keeping abreast of technological advances is a major challenge for education and for educators, including teacher educators. Barriers and enablers for effective ICT learning within teacher education have been highlighted in several contexts (eg. Downes et al. 2001; Ramsey, 2000) and calls for national ICT standards, greater institutional support and infrastructure, and stronger partnerships have been addressed to varying degrees in varying programs.

This section presents a snapshot of current practices to develop ICT competencies in pre-service teacher education programs in Australia and indicators of graduates' ICT competency as reported by teacher education staff.

Given the variety of practices to build students' ICT capacities, skills and pedagogies, and the variability in reported preparedness of graduates to incorporate ICTs in their teaching, research is needed to develop a better understanding of the effectiveness of various approaches to ICT development. In particular, little is known about "what works" from a graduate's perspective, or about relationships between graduate competencies, exposure to ICTs during professional experience, ICT foci and experiences within teacher education courses, and adoption and incorporation of ICTs in teaching. Efforts on the part of government, education authorities, and teacher education institutions to strengthen institutional capacity to deliver and support programs and to make all beginning teachers "ICT ready" must be informed by clearer evidence on "what works".

For nearly two decades major education systems have had ICT policy frameworks and syllabus documents to guide processes of learning with and about technology. Teacher education programs began to include ICT subjects as part of their programs from the early to mid 1980s. Initially, preparation for using "computers in education" was in stand-alone subjects and focused most on understanding digital technologies and gaining ICT and pedagogical competence. As digital learning technologies developed through the 1990s and ICT use in schools became more widespread and embedded in curriculum, teacher education programs grappled with how to prepare graduates for a digital world. Changing perceptions about the best ways to prepare for ICT roles in schools resulted in many specialised ICT subjects being replaced by ICT modules within curriculum and pedagogy subjects and by a more integrated and embedded view of ICT within teaching and learning.

The impetus for ICT use to enhance teaching and learning across Key Learning Areas has been supported and promoted by education authorities in each state. ICT is more than a discrete body of knowledge and set of IT skills. It is now widely recognized that knowledge building, problem-solving and capacity building must underpin ICT teaching and learning foci. Today, ICT use is a normal part of everyday life for most students- in their communities and at home, and to varying degrees at school (Elliott, 2004; Ramsey, 2000). The importance of developing ICT competence through targeted ICT teaching or through information management, knowledge creation and pedagogical support across the curriculum is well accepted. But as in many other areas of teacher

education, deciding on the most effective ways to prepare teachers to enhance students' learning in a digital era has been the subject of considerable discussion and debate for some twenty years.

Implications of an information intensive, knowledge rich world, and increasing focus on ICT in school curricula affect both practising teachers, and what is expected of beginning teachers. Hence, the recognition and focus on ICT in teacher education programs.

Shaping the ICT in education agenda in recent times have been recommendations of the *National Goals for Schooling in the Twenty First Century* (1999) and *Learning in an online world*: *The school action plan for the information economy* (2000) proposing that:

> All students will leave school as confident, creative and productive users of new technologies, particularly information and communication technologies, and understand the impact of those technologies on society, and that,
>
> All schools will seek to integrate information and communication technologies into their operations, to improve student learning, to offer flexible learning opportunities and to improve the efficiency of their business practices.

Learning in an online world provides an agreed national framework to ensure that all young people have the school education "needed for the knowledge society and the knowledge economy". Responsibility for monitoring progress against its goals and strategies lies with the MCEETYA ICT in Schools Taskforce.

In the next decade or so, the rapidly expanding use of ICT in the community and the growing use of ICT in schools is likely to have a profound effect on teachers' work. But education departments' policies and curricula, and digital content and services, while critical, will not ensure integration of ICT into the school curriculum. Teachers must also be prepared, resourceful and adaptive if ICTs are to enhance teaching and learning outcomes.

MCEETYA (2002) has emphasised the importance of supporting "the professional learning of teachers so they have the confidence to exploit the new technologies to expand, extend and modify their practice" (p. 4). Importantly, graduate teachers need to be confident and competent to integrate ICTs, including on-line learning, into their pedagogy.

Two relatively recent Commonwealth funded projects have focused on ICT in teacher education. *Raising the Standards*: *A Proposal for the Development of ICT Competency Framework for Teacher* outlines an ICT Competency Framework to inform the work of teacher education programs, education authorities and professional associations concerned about developing ICT competence. Relatedly, *Making Better Connections: Models of professional development for the integration of ICT into classroom practice* (2001) investigated effective initial teacher education in ICT practices and professional development for the existing teacher workforce. It highlighted "the need for closer relationships between teacher education faculties and employing authorities in taking forward the ICT agenda and the need for more collaboration and networking nationally on issues associated with ICT and teacher quality".

State and Commonwealth emphases on ICT in schools have resulted in a growing confidence that Australian schools have made "significant progress" in the development of ICT policies, online content, infrastructure and curricula but to maximise the benefits of their investments MCEETYA urges that all education authorities must promote "pre-service teacher education and in-service professional development programs that focus on the integration of ICT into classroom practice, across all curriculum areas" (MCEETYA, 2002, p. 17).

It is four or five years since the research for *Making Better Connections* was conducted and some four or five cohorts of teacher education graduates later. This section of the report reviews some approaches and practices that are currently in place within courses to facilitate development of

ICT skills and pedagogies for classroom use. Findings from this mapping exercise suggest that most teacher education programs continue to make sound efforts to prepare graduates for ICT use in schools and have a strong commitment to developing pre-service teachers' ICT competencies. However, the competing demands within courses, the shortage of funding, limited opportunities for partnerships with ICT rich schools, and the rapidly changing technological environment, continue to limit capacity to prepare beginning teachers to make the most of ICT opportunities.

A continuing challenge for teacher education courses is recognition of distinctions between students' acquisition of ICT skills and the use of ICT to facilitate university teaching and student learning, and the ICT classroom and pedagogical processes and experiences that students need for effective ICT use in *their* classroom teaching.

Generally, most respondents in this study seemed to believe that development of teacher education students' own ICT skills (such as email, Power Point and information retrieval and management skills) together with lecturers' use of ICT to deliver their teaching via on-line learning systems such as WebCT, and/or use of Power Point presentations and the like, would enable students to make the transition from lecture room to classroom. As one respondent explained: through "the use of Web CT … and operating solely within the web environment …they learn how to educate using ICT".

Most encouraging was almost universal confidence that ICT was used to a "moderate" or "major" extent to facilitate teaching and learning within university courses. Only one respondent claimed that lecturers used ICTs in a "minor" way. Universities' extensive use of ICT in teaching programs should not be surprising given major investments in on-line subject delivery system such as WebCT and BlackBoard and high-tech teaching spaces and lecture rooms.

Despite this confidence there were wide ranging interpretations of "moderate" and "major", varying ICT uses and outcomes between and within programs, varying interpretations of "innovative" ICT use, and apparently limited opportunities for students to experience ICT use during in-school experiences.

Four questions focused on ICT use in teacher education courses. The first asked for nomination of an innovative use of ICT, the second focused on opportunities for students to incorporate ICTs in their teaching, the third probed monitoring of students' ICT use in teaching, and the final question asked for an assessment of students' preparedness to incorporate ICTs in their teaching.

"Innovative" uses of ICT

The question probing innovative uses of ICT drew a range of responses. Interestingly, "innovations" in some programs (such as use of on-line teaching support or subject delivery through programs such as Web CT, or dedicated core ICT units) were considered routine in others. Similarly, practices such as "embedding ICT" within teaching and learning, "ePortfolios" and "using digital cameras" were considered "innovative" in some programs but "everyday" in others. One respondent commented that the focus in their courses was "responsiveness" on "what needed to be done" rather than "innovation". Another observed that there "was no time" and "no capacity to use innovative ICT."

Table 10 shows the range of initiatives considered "innovative". "Innovations" that were mentioned only once - "virtual mentoring of year 10 students", "a technology-based prac", "students gaining IT Certificate 2", "modelling good practice", an "authentic competency based approach" - are included in the category "other".

Of these, three innovations stand out as unique. The first, at the University of Central Queensland involved students, university staff and staff in schools engaging in collaborative on-line discussions to negotiate school curriculum and teaching opportunities for students using a "group support tool". The second, engaged students at the University of Tasmania in "authentic competency based" ICT programs in partnerships with schools. A third, at Avondale College

required students to work with teachers to document their ICT uses and then develop ePortfolios illustrating ways ICTs were integrated across the school curriculum.

Table 10 Reported Type of "Innovative use of ICT" in teacher education courses

	Primary 4 year	Primary 1 and 2 year graduate entry programs	Secondary 4 year	Secondary 1 and 2 year graduate entry programs	Total
Web CT, BlackBoard On-line teaching	17	4	6	5	32
Student research & presentations- eg using PowerPoint	3	3	3	1	10
Core ICT unit/s within program	1	2	4	10	17
Students developing own curriculum resources, including Web pages	4		2	4	10
Discussion groups; bulletin boards; information exchanges; forums	2	2		3	7
ePortfolios	5		2	5	12
Virtual Classrooms, including wireless classrooms	3	3	1	4	11
ICT embedded within core and other teaching and learning units	4		2	1	7
Other*	2		2	3	7

Incorporating ICT across the school curriculum

Responses to the question probing students' opportunities to "incorporate ICT into their teaching across the school curriculum" revealed a wide range of practices and varying opportunities to incorporate ICT in teaching. As can be seen in Table 11, most respondents reported ways they assisted and guided students to learn about ICT applications that could be incorporated in their teaching, rather than the actual opportunities students had to experience ICTs in their teaching.

In several programs teacher education students appeared to have few opportunities to gain direct experience using ICTs in classroom contexts to facilitate learning. Table 11 shows that there is little evidence that students were able to experience ICTs in school classroom settings. Further, several respondents added the comment that students were not able to be placed in schools with "sufficiently" developed ICT capabilities to enable them to experience ICT first hand and that this hindered universities' capacity to prepare students effectively.

The difficulty of providing students with exemplary ICT classroom experiences was raised by several respondents and considered a major factor impeding the linking of ICT theory and practice. They commented that teacher education students needed better in-school experiences with ICT, to see a repertoire of ICT pedagogies modelled by their cooperating teachers, and to incorporate ICT experiences in their teaching. As one respondent said: "The critical test of what students have learned is their ability to put it into effect" in the classroom context.

Table 11 Opportunities for students to incorporate ICT into their teaching across the school curriculum

	Primary 4 year	Primary 1 and 2 year graduate entry programs	Secondary 4 year	Secondary 1 and 2 year graduate entry programs	Total
Web CT, BlackBoard On-line teaching	4	2	6	5	17
Students developing/authoring own curriculum resources	2	1		1	4
Students demonstrating ICT skills through EPortfolios, assignments & presentations eg. PowerPoint	13	6	8	12	39
Students completing core ICT units and modules	11	5	11	7	34
Students experiencing ICTs embedded within core KLA and other pedagogy and curriculum units	14	6	13	12	45
Students' ICT use during in-school experiences	4	2		2	8

That there appeared to be little opportunity for teacher education students to engage in school-based ICT experiences was concerning, but not unexpected. Previous researchers (Downes, 2001; Elliott, 1999; 2002) have reported few opportunities for teacher education students to observe and use ICTs in classrooms. Some respondents commented that it was very difficult for students to apply their university-developed ICT learning during professional and other school experiences because cooperating or mentoring teachers, either did not have the technology in their classrooms or did not use it. Yet, unless teacher education students can see and use ICT in classrooms they have little chance of developing effective ICT teaching strategies or for developing foundations to build future ICT strengths to support, motivate and enrich students' learning and problem-solving. This is another area where research is called for - the documentation of exemplary and effective ICT use in schools.

Assessing ICT competency

The third ICT-focussed question probed ways that teacher education students' ICT knowledge and competency was assessed. ICT assessment approaches tended to fall into one or more of the categories shown in Table 12.

Table 12 Frequency of reported approaches to assessing students' use of ICT in their teaching

	Primary 4 year programs	Primary 1 and 2 year graduate entry programs	Secondary 4 year programs	Secondary 1 and 2 year graduate entry programs	Total
Demonstration and assessment during professional experience and in other school-based contexts	13	2	6	7	27
Assignment and tutorial presentations using Power Point, ePortfolios, other multimedia; Skill competency assessment and mapping against specific ICT criteria	12	4	4	9	29
Use and demonstration of ICT use during regular assessment tasks in core and other subjects	14	7	9	19	49

Of interest here was the variation in foci of ICT in programs and hence the variety of assessment approaches. Some universities appeared to focus mainly on developing basic ICT skills- the "computer literacy" approach. For example, one respondent reported that the main way of assisting students to incorporate ICT into their teaching across the school curriculum was through a "Core IT skills unit incorporating word processing to information presentation". Students were "encouraged to use these skills in classrooms and see computers as a medium for information dissemination". Students used Power Point presentations "as a way to stretch the boundaries with what can be done to incorporate ICT in the primary classroom".

In programs with this skill-building focus, there seemed to be an assumption that teacher education students had poor ICT skills and that having developed appropriate skills, they would then make the leap to using ICTs as knowledge building tools in classrooms. There was no mention of helping students construct an understanding of ICT as a pedagogical partner. At the other end of the continuum, some teacher educators considered students had basic to good entry skills and focused on developing classroom oriented ICT understandings and competencies. Typical of comments in this category was the following: "The use of ICT is incorporated in

(students') units of work and lesson plan assessments. As well as this, they are required to demonstrate ICT in their teaching and opportunities for learning in their professional experience placements". Illustrating how advances and changing school requirements both impact on teacher educators' efforts, one respondent explained. "Graduates … are increasingly better prepared in relation to ICT. As the skills and knowledge of teachers change and develop we endeavour to incorporate the necessary modifications to courses to ensure graduates are capable and competent in utilising current technologies in schools."

Another respondents said: "The assessment of students is designed so that no matter what units they take, the ICT tools they have used as a learner will also work for part of what they do as a teacher. For example, if the unit is about communication, student assessment … will focus on the variety of communication tools a student uses including ICT tools in preparing materials for teaching."

Preparedness for ICT use across the curriculum

The final ICT question asked about preparedness of graduates to incorporate ICT in their teaching across the curriculum. Table 13 shows that graduating students were generally assessed as "well prepared" to incorporate ICTs in their teaching, but with one mediating factor- the willingness of the schools in which they might work to encourage and support ICT use. A few respondents said that their students graduated with ICT skills that exceeded those of many practising teachers. Most remaining respondents indicated considerable variability in ICT skills and preparedness amongst graduates and noted that variability depended on personal aptitude and interest as well as prior experience.

Not surprisingly given rapid technological advances in the community, one respondent commented on the "vastly increased" student entry ICT competence over the last five years as a result of both general community involvement in digital technologies, school learning and previous non-school studies or work. This meant that courses needed to spend less time on developing basic ICT skills and could focus more on pedagogical matters. As mentioned earlier, however, others highlighted the wide range of tertiary entry-level ICT skills. In some courses, particularly postgraduate ones, many students had high levels of ICT competence developed in previous degree work and/or through employment. Teacher educators were then able to readily build pedagogical foci within ICT modules and during in-school experience.

Table 13 Programs indicating students' preparedness to incorporate ICT into teaching across the school curriculum

	Primary 4 year	Primary 1 and 2 year graduate entry programs	Secondary 4 year	Secondary 1 and 2 year graduate entry programs	Total
Well prepared, confident users of ICT	8	6	8	8	30
Well prepared but implementation in schools depends on ICT availability and access and/or school attitudes to ICT	12	3	7	5	27
Much better prepared than most current teachers	3	2	4	1	10
Variable preparation. Some well prepared, others not	3	3	3	9	18
Not well prepared	0	0	0	3	3

Several respondents indicated that variability in preparedness was dependent on a range of factors including entry-level ICT skills, ICT aptitude and interest, ICT focus within teacher education courses, and access to opportunities for in-school modelling and experiences. While some graduates were deemed "more ready than others to use ICT in their teaching", their understanding of the "importance of ICT competence" and the need to "look more broadly for professional learning opportunities" once they were in the school sector was considered critical. Elaborating on observations about graduates' varying ICT competencies as a function of their previous tertiary, work or other experiences, as well as the current course work and professional experience, one respondent said the key issue was to ensure that students had "sufficient coursework to be aware of the expectations placed upon teachers and the need to develop their own skills to meet these at an advanced level". Once again, this appears to call for development of standards for exemplary teaching with ICT, examples of ways in which teachers are implementing them, and their impact on student outcomes.

Increasingly, variability of entry-level ICT skills for school leavers starting teacher education programs depends on their home as well their school experiences. Today's 17 and 18 year olds have grown up in a digital world and teacher education programs need to capitalize on students' own skills as starting points to build ICT experiences. Concomitantly, they must ensure graduates have the ICT skills and capabilities as well as the pedagogical competencies to keep abreast of school students' ICT interests, skills and knowledge and in the light of changing curriculum imperatives.

Illustrating the complexity of technological change and the processes of preparing teachers for a digital educational environment, another respondent commented: (Preparedness) "is difficult to demonstrate, as although we could state they are well prepared, teachers will always tend to teach in modes that are most comfortable for them. They need to be challenged to go outside their comfort zone for teaching and for some (and this is always true of any teaching population) ICT is outside their comfort zone. However, their preparation means they are well prepared to use these tools".

As in other areas of teacher education, it should not be expected that graduates have complete ICT competence. Rather, they should have a strong foundation on which to progress from beginning teacher competencies. Several respondents indicated that their graduates were now poised to build on the ICT skills developed in their course, but cautioned that "as students go into different schools and these schools have different approaches to ICT" and different ICT infrastructures, so will opportunities to incorporate ICT in their teaching vary.

The self assessments of ICT use in teacher education in this study show awareness of the importance of developing graduates' ICT competencies, varying progress toward preparedness for teaching with and about ICTs and considerable variation in assessment and interpretation of ICT experiences within courses and institutions.

The considerable variation in interpretations of "innovation" and the range of indicators and examples used to demonstrate students' ICT use in their teaching, highlight the complexity of the ICT area within teacher education, and indeed in the wider education context. Clearly, ICT issues do not stand alone. They are connected to the broader issue of teacher preparation for the knowledge age, and to issues of teacher education quality and standards, the nature and extent of professional experience, conceptions of pedagogy, to learning outcomes and classroom management issues, and to school renewal and revitalization. Importantly too, teachers' and academics' perceptions about the value of technology in the community and in education affect adoption. Unless teachers hold positive attitudes toward technology they are not likely to use it in their teaching (Becker, 2000).

D. WHAT METHODS ARE USED TO BUILD LINKS BETWEEN THE THEORETICAL AND THE PRACTICAL COMPONENTS OF COURSES?

This question is subject to a wide range of interpretations. There may be an unwarranted assumption behind it that all teacher education courses are driven by a strong theoretical or

research-based foundation, which students are expected to demonstrate they understand and apply. Theoretical components could conceivably include theories about ability, learning, motivation, cognitive, emotional and physical development, and behaviour management, to name a few, though specific theories such as these were rarely mentioned by respondents. The need to build linking mechanisms that enable students to move from understanding theory to applying it appropriately shows the complexity of the task that teacher educators face.

Respondents generally, more often primary teacher educators, interpreted this question pragmatically as referring to tasks that enabled students to undertake "authentic" teacher type work, rather than the incorporation of theory into their knowledge and practice. The main methods they mentioned, in order of frequency, included:

- Assignments

- Developing units of work

- School experience

- Tasks that promote reflection on practice, journal writing, etc.

- Modelling and observation of expert teachers

- Feedback on practice

The most commonly mentioned method was through assignments, especially assignments that students undertake as part of the practicum, such as preparing a portfolio entry. These responses indicate how two universities bring several elements together to support students in building links:

> Professional experience, direct application of university based learning and review and reflection after professional experience, guided observations and review and reflection in lectures tutorials, data gathering at schools for University based tasks, for example, gathering assessment information when studying assessment techniques, and planning learning experiences based on that material, gathering data relating to a child with special needs and planning an individual program for that child, gathering unit planning material. Internship, *Griffith University*

> Developing integrated units of work for teaching sessions/practicums in conjunction with staff in schools; use of formal and informal reflective teaching approaches. *Australian Catholic University*

Some respondents seemed to believe that building links between theory and practice was mainly a question of increasing the amount or length of school based experience, as if "experience" in itself was sufficient to build the capacity to understand what is effective and why.

Students are involved in 105 days of continuous school-based professional experience offering increasing responsibilities within a variety of school settings, for periods of two to six weeks at a time.

Others recognised the need for a theory about how the theory students learn in courses links to practice. These theories, which have emerged mainly from research on professional development, emphasise the need to bring together theory, modelling of the theory in practice, practice, coaching and feedback. These are the core elements involved in acquiring the ability to implement new models of teaching. While modelling was mentioned by several respondents, it was rare to find reference to the creation of settings that enabled students to practice specific models of teaching and to receive "at the elbow" feedback on their progress from experts in those models.

Many respondents viewed this theory-practice question from a different perspective from the "application" approach. The preparation of a teacher was seen from a constructivist perspective that encouraged students to build their personal theory and philosophy of teaching through learning how to analyse and evaluate their practice. Theories about teaching and learning

emerge from reflection on practice, one's own and that of others. Here are two examples of this perspective:

> It is important in understanding the teaching/learning relationship that students can have the opportunity to experience situations as learners since their own learning experiences have been seen through the eyes of a student. They need to experience being a learner through the lens of a teacher so that they can bring their experiences to bear in their own teaching. Hence there are lots of opportunities for students to experience situations as learners themselves throughout the course. They experience good models of practice through their university lecturers as units are specifically designed to allow for these opportunities rather than just lecture/tutorial experiences. Students are given the opportunities to reflect on their experiences so that they can make sense of what they are experiencing and learning. The opportunity to reflect on your own practice is fundamental in terms of becoming a responsible, independent, life-long learner. Students are asked to keep journals/learning logs etc to track their progress and develop professional teaching portfolios based on their theoretical understandings and their practical experiences. Students are encouraged to undertake research that involves reading current research literature, planning a research project and undertake the project by collecting and analysing data. These research opportunities are varied but certainly assist students in developing necessary skills to research their own practice. Students are encouraged to develop a personal philosophy of what it means to be a teacher, of what it means to be a teacher of a particular subject and what it means to be a professional teacher. Assessment of students is diverse as it is important to model that assessment must be suited to its purpose. We also give students the opportunities to undertake different learning situations such as problem-based learning, professional learning communities and peer review to name a few. In the final year, the core units focus on the teacher as a professional both within the classroom and as a member of a profession. *Monash University*

> Very explicit addressing of the issues surrounding the theoretical and practical divide. The course is designed around the belief that teachers are 'enquirers into professional practice' (Reid & O'Donoghue, 2001) and students come to understand that learning, teaching and research are closely intertwined. We focus on the idea that theory is embedded in all our practice whether we realise it or not! Students spend five observation days in schools very early in the course. These observation visits and the questions they raise form the base of considerable work at university from an analysis of practical issues, to discussion about deeper theoretical and philosophical issues. We have a unit Teaching Practicm Seminars, which runs throughout the year with the explicit purpose of linking school and university learning. *University of Ballarat*

These are good examples of a view that is widely held among teacher educators today that emphasises the need to place students in very active roles in learning to teach, developing their own theory of teaching and learning and learning how to justify it.

To do justice to the range of current methods for linking theory to practice would require a major in-depth study of a sample of teacher education courses – much more than the quick survey reported here. An accurate indication of the nature and extent of the theoretical and research-based components in current teacher education courses would require detailed content analysis of courses and units, observations, interviews with lecturers and students, together with reading lists and assignments and examinations would be needed.

> The schedule of topics in the fundamental pedagogical unit, Teaching and Learning Perspectives, is closely tied to the sequence used in the curriculum

units. This means that the students are exposed to theoretical positions and then provided with opportunites to see how these relate to their particular curriculum area. We also have an Introduction to Teaching unit which provides the students with a series of lectures, workshops and school visits so that they can make connections between the theory and the reality of classrooms. Video sequences are integrated into appropriate classes for analysis. The students are also required to analyse a video of their own teaching and to reflect on the theory related to certain aspects of teaching and how this might inform their practice and assist them to become problem solving teachers. Our course is built around reflective teaching practices and we provide opportunities for the students to develop these through keeping a journal about their experiences and writing evaluations of their teaching. They are encouraged to make connections between their practice and the theory in these entries. Problem based learning and case study approaches enable the students to make connections between theory and practice and to reflect on how they can apply, modify or consider these perspectives in their own teaching. One of our asessment tasks involves the preparation of a professional portfolio. This provides the students with an opportunity to demonstrate how they have made connections between theory and practice in showcasing their competencies. *University of Western Australia*

In a time when there is much discussion and increasing use of teaching standards in educational circles, it was interesting that no respondents mentioned the potential role of standards as a vehicle for linking theory to practice. Standards for beginning teachers (e.g. for registration) codify what research and best practice indicates they should know and be able to do. In this way standards can form a bridge between research and practice. Asking student teachers to demonstrate how they can meet teaching standards is a way of building links between theory and practice that is being used increasingly by universities and state licensing authorities (See QBTR, Pankratz, Renaissance Project; VIT: Connecticut; ETS; CCSSO/INTASC.)

Overall, how well are these methods working to build links between the theoretical and practical components of this course?

Respondents were given a choice of estimating whether methods were working "Very well", "Well", or "Not Very Well". Roughly 50 per cent said methods were working very well and 50 per cent said they were working well. The few who felt methods were not working well thought it was more to do with the conditions they faced on entering the profession:

Teaching is a difficult and complex art/science. They emerge well enough equipped to cope but ripe to be socialised as they adapt to the flawed system rather than modify that system.

Very little school sector induction related to continuing professional development for teachers.

It is difficult to get school personnel to accept students for practice teaching. It is difficult to get each supervising teacher to attend briefing meetings and it is difficult to get some faculty members to see the benefit of liaising with schools during practicums.

Those who said they were confident that links were strong often referred to evidence such as the following:

Demonstrated by successful public exhibitions of student work. UQ

Monash University has as one of its values to research our own practice and this applies to its staff and students. There have been many instances of research being reported on parts of our teacher education courses which support the assertion that our methods are successful. *Monash University*

We are impressed with the way in which the students become reflective practitioners and are keen to ask questions about how they can solve problems and what the theory on a particular aspect might suggest they try. The students frequently comment in unit evaluations that they have appreciated the way in which we model approaches to teaching by way of demonstrating the practical application of theoretical positions and that the structure of the course enables them to make strong connections between theory and practice. *University of Western Australia*

The trend towards longer school experiences as assistant teachers or interns toward the end of the university courses was seen as a means of enabling stronger links to be built:

The experiences build in complexity culminating in the internship – a full term teaching as co-teacher rather than student – with attached portfolio and reflective assessments to guide engagement. *Griffith University*

These consolidating experiences were difficult to provide in one-year graduate diploma courses.

What would enable the course to further strengthen links between theory and practice in the future?

Possibly conduct school-based teaching sessions by both University and school staff. *Australian Catholic University*

At least half of the assessment in every course is conducted in schools. *Central Queeensland University*

Funds to fully fund supervision of experienced and in-service teacher mentors. *Charles Sturt University*

Time is a very strong constraint; many schools and teachers do not welcome what they see as too much 'intrusion' into their contexts. *Christian Heritage College*

More and easier access to schools, better avenues of negotiating what happens on teaching practice in schools. *Curtin University*

Stronger links between schools and the University such as partnerships - Swan partnership and Joondalup Compact. *Edith Cowan University*

Stronger integration of on-campus work with school experience.

Induction program for beginning teachers in schools.

Not being tied to the industrial requirements to pay individual teachers for supervising students. - old-fashioned, anti-collaborative, and outdated view of what a SCHOOL experience should deliver and thus restricts opportunities for improving the linking process. Schools should benefit professionally from their commitment to inducting students into the profession (acting as links between theory and practice). *Flinders University*

More tightly integrated prac and cousework, live streamed classrooms into lectures for particular purposes - eg behaviour management, motinoring particular lessons. Capacity to choose not to use particuar teachers as prac supervisors. Assurance that students are able to have experiences as per prac guidelines that school contingencies do not always allow - although because of close working relationships most school co-ordinators make great effort to students. *Griffith University*

Some early observations in program, more theory basis in some methodology units. *Macquarie University*

Successful outcomes of current PPL work. Continued professional development of school experience supervisors so they are better informed about - and can in turn inform - campus based courses. *Murdoch University*

Seconded staff; greater breadth of teaching prac exposure (e.g. remote schools). *University of Notre Dame*

Continuing the Professional Practice mentor Program but being able to provide more support and recognition to our mentor teachers both monetary and in the form of professional development. *RMIT*

UNE is relatively isolated from schools and it cannot afford to send significant numbers of lecturers into schools. More money would enable closer links between lecturers and teachers and students to be developed. Currently lecturers only visit schools when a student is in difficulty and this is often an unsatisfactory way to promote closer relationships. *University of New England*

In the best of worlds, pre-service teachers could be interns in classrooms where essential learnings and critical inquiry predominated. *University of Ballarat*

There has been extensive work done by the BEd developmental team to conceptualise and construct this new degree and as such we feel that we now have stronger ties between theory and practice than has been the case in the past and possibly even in the near future. *University of Southern Queensland*

Increased time in schools. *University of Tasmania*

Release from schools for teachers to attend meetings. Recognition by employers both monetary and promotion for practicum mentoring/supervision. Less restrictions for non-payment of teachers for practical experiences (by unions). *University of Wollongong*

If you had more resources available, what would be the area of this course where you would make the greatest changes and why?

Responses to this question reinforce the message in the section of this report on the practicum and school experience. These are the areas of greatest stress in Australia's teacher education system and the greatest threat to providing quality courses. Improving the amount and quality of school experience and supervision would be the first priority for respondents if more resources were available. These responses are representative:

Increased supervision of professional experience and more professional development available for mentors. *Charles Sturt University*

In school activities and experiences in the areas of both teaching and research. *Central Queensland University*

Increase the number of days on professional practice. *Edith Cowan University*

More training of school-based staff in clinical supervision to improve the quality of feedback to students whilst on practicum. The development of an in-school training model based on collaboration between partner schools and universities. *University of Notre Dame*

(Greater opportunities for) lecturers to be able to visit schools during professional experience periods. As stated earlier it is difficult to see students apply the theory in pedagogical units. Visits would also allow lecturers to be aware of current changes and their implications and it would also benefit the teachers through lecturers being able to formally or informally do inservice work to update teachers in current research trends in teacher training and children's learning. It would also make it easier for teachers to confidently fail students who were not demonstrating expected outcomes of the professional experience. It is an impression that teachers are reluctant to fail teacher trainees. *University of New England*

If more resources were available I would use it to facilitate greater links between schools and the courses undertaken by the students I teach. The benefits of such partnerships are extensive and build goodwill and shared understandings between both sectors of education leading to enhancement of education today and in the future. *University of Tasmania*

The practical placements with a greater emphasis on mentoring rather than supervision. Training and support to school personnel. *University of Wollongong*

Difficulty in gaining scarce school experience placements which limits the opportunities to meet student needs. *Murdoch University*

Internship for 4th year students/ an expansion of the literacy and numeracy opportunities in schools so that more specific experiences could be used for reflection. *University of Ballarat*

Extend the links with schools and give students greater access to a wide range of exemplary teachers. The nature of teaching is a personal one and so students need to have examples of a range of teaching styles in order to develop one that works for them. *University of South Australia*

The following comment from Monash University provides a long term perspective on the issue of practicum funding. While the importance of school experience in preparing quality teachers is widely recognised, it is rather strange that this is the area of teacher preparation that is most poorly resourced.

Building the three-way relationship between students/universities and schools is expensive and time-consuming. While more federal money has been made available for the costs associated with practicum, this does little but recover some of the funding that has been seriously eroded over the last two decades. While Monash University still visits its students while on placement, this means that all our non teacher education programs are actually supplementing our teacher education programs. While the costs associated with placing pre-service teachers in schools are accounted for, the costs associated with Monash staff visiting schools, building the necessary relationships with schools etc is at the cost of the Faculty. This is a high expense that is not factored in. It is no wonder that smaller, less diverse Faculties have no option but to cut this out of their programs. There needs to be adequate resourcing so that educational professionals can support the profession and this includes the development of staff in schools. In clinical models, the professional needs to be "trained" before they can mentor/induct new people into the profession. This is not the case for teaching. *Monash University*

A few respondents indicated that ICT would be a priority for them:

> More ICT in all classrooms so that it can be more readily integrated within each course. More access to ICT for our students. *RMIT*

> An increase in staffing to match the identified needs of the curriculum, increased availability of modern ICT to be integrated into more of the units. While we are using ICT in our units we are struggling to keep up with new products and improvements for example we wish to help our students become proficient with the use of interactive white boards but there are no funds to buy even one example for use. *Curtin University*

> Build better teaching facilities eg some primary schools have better computer labs. Establish smaller workshop groups to improve student teacher ratios. Specific and targeted resources allocated to developing and maintaining relationships and partnerships with schools. *Murdoch University*

> Greater emphasis on the use of ICT; broader specialisation pathway selection (currently have maths, science, Italian Teaching Method, ICT, theology). *University of Notre Dame*

> Greater use of ICT; international practicum experiences. To further address global, pedagogical and technological perspectives and advancements. *Australian Catholic University*

Staffing was a third area mentioned by several respondents:

> Resourcing university teaching - smaller tutorials, more face to face. Tight funding puts teaching staff under great pressure. *Griffith University*

> Provide funding for extra staffing. Staff are doing an excellent job but are stretched to the limit with myriad responsibilities of lecturing, research, administration, etc. Extra staffing would provide more quality time for each staff member to further develop and expand their current pedagogical approach to lecturing.

> This would also allow us to reduce class sizes for some subjects which are getting too large for the interactive approach mentioned in Q57. (These are the classes where all of our primary and secondary students of one year level meet as a group). *Avondale College*

> Expand the resource base available to students; expand range of units through the provision of extra staff. *Christian Heritage College*

> Smaller classes to optimize the effects of problem-based learning, more staff. *Flinders University*

> Greater teaching spaces and refurbishment so that our classrooms reflect our vision of educational spaces of the future. More tutorial hours for each course and compulsory attendance. This is difficult in a physical environment that does not resemble teaching spaces required for educating students in the 21st century. *RMIT*

> Offering a 3 year option to students to complete their studies in the BPMU program rather than 4 years by utilising semester 3 and creating course materials in various modes to allow students to undertake their studies in initial teacher education anywhere in the state (and possibly even interstate). *University of Southern Queensland*

E. IN WHAT WAYS DO PRACTISING TEACHERS AND SCHOOL LEADERS CONTRIBUTE TO TEACHER EDUCATION COURSES?

Primary

All respondents indicated that practising teachers and school leaders are actively involved in their courses. Respondents listed the following types of contribution that practising teachers make currently. They are listed in order of how frequently they were mentioned.

- Supervisors of students during school experience

- Sessional staff teaching curriculum and methods units in the pre-service courses, often as part of a team

- Guest presenters/specialised lecturers

- Members of course review committees

- Teaching demonstration lessons

- Guest assessors of students' portfolio work

The most common contribution is as supervisors of students while they are in schools and in their classrooms:

> Practising teachers are involved in supervision and assessment of students block practicum sessions. As part of the assessment process supervising teachers provide detailed written reports on student performance, including feed-back on possible at-risk students.

The next most common contribution was as sessional lecturers and tutors. Most respondents listed several types of contribution:

> Many as supervisors of students out on practicums, others as sessional staff teaching in pre-service units, including sometimes as part of a team. Membership of course review committees. *Australian Catholic University*

> Supervision of practicum, guest presenters, members of course committees, part time tutors and representative members of course management committee, and membership of course review committees. *Charles Sturt University*

> Course Advisory Committee includes membership of teachers and school leaders. Through the Professional Practice Mentor Program, teachers actively contribute to course content and evaluation of the program. *RMIT*

For some universities, the involvement appears to have become much more of a partnership in all aspects of the program.

> Practising teachers and school leaders are employed as tutors/markers for units offered within the course. Practising teachers and school leaders are employed as Learning Managers to supervise students who are undertaking embedded professional practice in a school. Practising teachers are not only involved in the delivery of the course but integrally part of its planning and development and of its evaluation. Our most recent major formal evaluation was in late 2002. *Central Queensland University*

> Overall, given that the BPMU is a new degree, the involvement of practising teachers and school leaders has been at the initial development phase. However, in the future especially with the commencement of an internship in year 4 (2007) then there may be opportunities for school leaders and practising teachers to interact and work closer with the Faculty of Education at the USQ than has been the case in the past. *University of Southern Queensland*

The extent to which teachers contribute to teacher education clearly varies and a focus for a later research study would be to understand how some universities allocate their resources to enable arrangements that lead to more formal and extensive contributions from the profession than others.

Responses indicate a general desire for close and cooperative working relationships with practising teachers, but, as responses in other sections of this survey indicate, university staff believe that both they and school teachers operate under time and resource constraints that limit opportunities for stronger forms of collaboration. There should be no doubt from the responses that universities want to move in this direction.

Secondary

Respondents for secondary teacher education programs listed similar ways in which practising teachers contributed to courses. As might be expected, practising teachers were heavily used in subject-specific methods courses:

> Many of the methodology units are taught outside school hours by practising teachers. Guest lectures are also given on occasion by school personnel *Macquarie University*

> Teaching, particularly in method areas, guest lecturers, Principals from across the state are involved in mock interviews with final year students, sit on management committees, involved in stakeholder feedback surveys etc. *Monash University*

> Practising teachers participate as mentors for our students during school experience. Coordinators of the school experience in the schools also provide professional development and orientation for the students. Within each learning area practising teachers are invited to present to the curriculum classes on matters related to, for example, curriculum development, assessment, learning strategies, global education, citizenship education, etc. each of the staff in the learning areas has had recent school experience. *University of Western Australia*

> Teachers from schools are responsible for the following curriculum/methodology courses: music, English, languages, business studies, accounting, economics, geography, physics, biology, and chemistry. The curriculum branch of the State Dept of Education presents a major core course on curriculum frameworks. *University of Adelaide*

> Eight staff teaching in the course work full or part time in schools. We have an open invitation to schools to provide feedback to us about the course and the preparation it provides. When the course is formally reviewed we seek more formal advice from school leaders and local DET leaders for feedback and input. *University of Ballarat*

Almost all universities also indicated that some or many of their staff are involved in schools through providing professional development, doing research, working with teacher associations, curriculum and assessment authorities and working as part-time teachers.

6. ACCREDITATION AND QUALITY ASSURANCE

COLLECTION AND ANALYSIS OF INFORMATION FOR THIS SECTION

Information for this section of the study was collected from two sources. First, contact was made with the statutory bodies who have responsibility for accrediting university courses in several Australian states, with employers of teachers (e.g. state education systems' Human Resources personnel) and teacher union officials. Information was gathered from these sources via telephone and email responses, and documentation that they provided. Second, data about universities was gathered from the relevant sections of the survey instruments that are the main information source for the study.

All information was collated and analysed in relation to the main research questions for this section:

- How effective are the various course accreditation systems in assuring the 'quality' of the course?

- What other quality assurance methods do institutions use, and how effective are these methods?

EXTERNAL ACCREDITATION AND QUALITY ASSURANCE/SELF EVALUATION: THE DISTINCTION

For the purposes of this report a distinction is made between 'accreditation' and 'self-evaluation/quality assurance'. '*External accreditation*' with reference to university courses means an endorsement by a professional, regulatory body external to the university that a course has been through an assessment process determined by the external professional body, and has been approved by that body as meeting its standards for accreditation.

Australian universities also undertake processes of '*self-evaluation*' or '*self-accreditation*' to satisfy their own internal quality assurance purposes and, importantly, to meet the *Quality Assurance* requirements of the Australian Universities Quality Agency (AUQA: see below).

External accreditation

Assessment and approval of teacher education programs in Australia is currently a state responsibility. Four Australian states, Queensland, South Australia, Tasmania and Victoria, now have teacher registration bodies that play a role in approving teacher education courses. The Victorian and Queensland bodies have a direct, legislated, accreditation function. This aspect of the work of the Tasmanian and South Australian bodies is less direct, but both bodies have an influence over university education courses, because course graduates need to satisfy their requirements to be registered in those states.

In New South Wales, an Interim Committee for the proposed New South Wales Institute of Teachers (NSWIT) has developed extensive guidelines for the Institute's proposed role in accrediting teacher education courses. When the legislation for the establishment of the NSWIT has been passed, this body will have an accreditation function similar to that of the Victorian Institute of Teaching and the Queensland Board of Teacher Registration.

In the Northern Territory, legislation is being prepared for the establishment of a Teacher Registration Board. It is expected that the Board will become operational in 2005. In Western Australia, legislation to establish a College of Teaching is being debated in the current session of Parliament. The College is expected to become operational in 2005. In the ACT, the establishment of a teacher registration body is still at the discussion stage.

Self-evaluation/Quality Assurance: the Australian Universities Quality Agency (AUQA)

The Australian Universities Quality Agency (AUQA) is an independent, not-for-profit national agency that promotes, audits, and reports on quality assurance in Australian higher education.

AUQA was formally established by the Ministerial Council on Education, Training and Youth Affairs (MCEETYA) in March 2000. It operates independently of governments and the higher education sector under the direction of a Board of Directors. AUQA is owned by and receives core, operational funding from the Commonwealth, State and Territory Ministers for higher education, who are members of MCEETYA.

AUQA's core role is to promote quality assurance procedures in universities and to audit their quality. AUQA arranges and manages periodic audits of Quality Assurance arrangements relating to the activities of Australian universities. Under current procedures, universities may require course providers to show they work with and meet the standards set by registration bodies. There is thus a complementary relationship between external state accreditation bodies and AUQA. Self evaluating quality assurance procedures within universities have a vital role to play in ensuring that university courses meet the standards set by state regulatory and professional registration bodies, (where they exist) but they can not be sufficient for safeguarding the public interest.

AUQA is not an accrediting body for professional teacher preparation courses. It does not assess and accredit individual university courses in terms of their ability to meet requirements for performance, or, like, for example, the state medical practitioner boards and professional associations of engineers, their ability to meet professionally defined standards. By contrast, State teacher registration bodies such as the Queensland Board of Teacher Registration and the Victorian Institute of Teaching have been established as statutory bodies with the central purpose of providing a public safeguard that graduates entering a regulated occupation such as teaching are both qualified and competent to be entrusted to practice their profession.

Within their relationship with AUQA, universities are self-accrediting, insofar as AUQA works in the context of their own 'mission.' AUQA is interested in the extent to which universities engage in evaluation of their own courses and the ways these evaluations are carried out. But their 'audits' do not extend to evaluation or approval at the level of individual courses. In this sense, AUQA occupies a position at the apex of a system of internal quality assurance, rather than acting as an external accrediting agency. It reports on the relative standards of the higher education system in Australia, its quality assurance processes, and international standing.

The first AUQA institutional audits were conducted in 2002, after which reports for eight universities were published. These reports provide a rich source of data about each institution.

No university surveyed in this study made mention of AUQA. This includes universities that have experienced an AUQA audit since 2002. However, it is reasonable to suppose that the internal processes reported on in the survey were influenced by AUQA requirements, given that the AUQA audits closely investigate and collect data from 'self-accrediting' universities' internal monitoring and evaluation systems.

CURRENT ACCREDITATION ARRANGEMENTS IN INDIVIDUAL STATES AND TERRITORIES

AUSTRALIAN CAPITAL TERRITORY

External accreditation

There is, as yet, no body that formally accredits teacher education courses in the Australian Capital Territory (ACT). Proposals for an ACT College of Education that are currently being discussed by stakeholders, envisage a role for the College in approving teacher education courses.

The small numbers involved in education in the Territory makes communication between the university, education providers and other stakeholders easier. Employers and others have good opportunities for input into teacher education. A joint 'liaison committee' with representatives from the Australian Education Union, the ACT Department of Education and the University of Canberra meets approximately once a month to share information and discuss current issues as they relate to teacher preparation courses.

Respondents from the University of Canberra, the only institution in the Territory that offers teacher education courses, named both the ACT Department of Education Youth and Family Services (DYFS) and the NSW Department of Education and Training (DET) as the bodies that accredit courses. One respondent (who named the NSW DET as the accrediting body) described the role of the external accrediting body as: 'They prescribe certain directions in which government policy in education needs to be followed at the university level.'

Self- evaluation/Quality Assurance

The responses from the University of Canberra stated that the university had recently been through the University's Quality audit program. Individual subjects were evaluated using a university wide program. Exit interviews, focus groups and exit surveys were some of the tools used to internally evaluate courses. CELTS (the Centre for the enhancement of Learning, Teaching and Scholarship) student surveys were a mandatory requirement for each subject in the secondary undergraduate teacher pre-service course. Those processes would be improved, it was suggested, by 'someone coming to the university to attend meetings, interviewing staff, looking at course documents, etc.'

Views on a national accreditation body for teacher education.

The responses from the University of Canberra were in favour of the idea of a single national accreditation body for teacher education. As the ACT only has one teacher education institution, a national body would increase opportunity for cross fertilization of ideas and reduce duplication of effort in meeting requirements of different jurisdictions.

NORTHERN TERRITORY

External accreditation

At the present time there is no external body that formally accredits teacher education courses in the Northern Territory (NT). Legislation is being prepared to establish a Teacher Registration Board in 2004. One of the functions of the Board will be to liaise with the providers of teacher education courses in relation to standards and the relevance of these programs to the teaching profession in the NT. The processes of accreditation and roles in relation to accreditation are still being developed.

Self-evaluation/Quality Assurance

The two NT universities that offer teacher education courses both have formal review processes. Charles Darwin University has an Internal Course Advisory Committee that reports to the university Courses Committee. The Batchelor Institute of Indigenous Education has a course monitoring committee consisting of academic staff from the school, industry representatives in the NT, and academic representatives from other tertiary institutions. This committee is convened every year for course review. The committee reviews assessment methods, course outcomes, delivery methods, student attrition, program modifications, continuing needs of the program and industry requirements. It reports to the Institute's Academic Committee. The recommendations of the committee have resulted in course modifications.

Views on national accreditation body for teacher education.

Both institutions agreed that the idea has merit. But the respondent from Charles Darwin University expressed concerns: 'We would be very reluctant to see a group of people with no knowledge of the Territory make decisions about what is right and what is not for our teaching context. It might, however, be possible to do this with a small representative group, which was supplemented by strong Territory representation. I can see the value of an agreed set of principles, minimum content and other such things at a national level.'

Both the ACT and the NT responses point to the limited avenues open to small jurisdictions to compare and benchmark their teacher education programs.

NEW SOUTH WALES

External accreditation

Teacher Accreditation Advisory Panel (TQAP)

At the present time, the New South Wales Department of Education and Training Recognition Services' 'Teacher Qualifications Advisory Panel (TQAP)' assesses teacher education courses for employment purposes in New South Wales government schools, and determines the subjects or teaching areas for which all graduates of these programs will be accredited. The requirements of other major employers of teachers in NSW are generally consistent with the Department's requirements.

The (proposed) New South Wales Institute of Teachers

Legislation is currently being drafted for the establishment of the NSW Institute of Teachers. (NSWIT). No legislation has yet been enacted, though it is anticipated the Institute will have an accreditation function, replacing the role of the TQAP.

The Interim Committee for a NSW Institute of Teachers has carried out a considerable amount of preliminary work, including the development of teaching standards for graduates (and three levels beyond the graduate stage.) The Interim Committee has drafted a document *Guidelines for the Endorsement of Initial Teacher Preparation Programs* that outlines a framework for endorsing teacher education courses.

It is proposed that the NSW Institute of Teachers, through the Program Endorsement Sub-Committee (PES), will be the body with responsibility for endorsing teacher education courses.

The draft graduate teacher standards set out what the profession believes beginning teachers should know, understand and be able to do.

The Institute will require pre-service teacher education providers to demonstrate that their courses:
- reflect the agreed NSWIT professional standards for Graduate Teachers;
- have a sound conceptual base;
- are research based; and
- provide graduates with an in depth knowledge of subject matter.

Providers will be required to demonstrate that courses:
- are developed and delivered through partnerships with the profession;
- are adequately resourced and taught by those with appropriate qualifications and experience; and
- include structured professional experience.

The PES will establish Program Endorsement Panels (PEPs) for each course.

The proposed process includes:
- Preliminary discussions between the PES and the teacher education institution during the course development stage and the preparation of the required documentation.
- Formal submission of the course documentation to the Institute. The PES will establish a Program Endorsement Panel (PEP) to consider the detail of the application.
- A site visit
- Consideration of the panel report by the PES

The final decision on accreditation will be made by the New South Wales Institute of Teachers. The Institute will advise the Minister as to the adequacy of the program.

It is proposed that the PES will nominate the Chair of each PEP. The composition of the panel will be determined jointly by the NSWIT and the teacher education institution.

The proposed minimum membership of an endorsement panel is:

- A panel chair, independent of the teacher education institution

- Two NSW Institute of Teachers representatives, one of whom is a school principal

- An external expert from an equivalent teacher pre-service education program

- A teacher representative with understanding of professional experience programs but independent of the institution

- An independent expert in teacher education curriculum development

- A representative of the institution not directly involved in the program, its development or delivery

Where necessary, membership of an endorsement panel may be augmented by a person with specific expertise.

Extensive documentation from the institution will be required. This will include:
- Aims of the program

- A graduate profile which reflects the program aims and the Graduate Teacher Standards

- Duration of program

- Entry requirement

- Research base for the program

- Program content, structure and progression, including assessment criteria, policies and procedures

- Nature and practice of students' professional experiences

- Subject outlines for each subject or course unit

- Learning and teaching resources

- Quality management systems

- Student support services

It is not proposed to collect student outcome data.

Respondents from NSW universities identified TQAP as the external accrediting body. They were expecting changes after the establishment of the NSWIT.

Courses are accredited once every four or five years, or when significant changes are being made. Recommendations/requirements are implemented during the cycle.

Universities in NSW recognised the need for and usefulness of external review, but several said that the existing arrangements would be improved by clearer understanding on the part of DET TQAP officers, of the individual characteristics of each university, and of the constraints under which universities operate. One university pointed out that prescription about the mandatory units (e.g. universities are required to offer, and students are required to undertake courses in Special Education), caused limitations in other areas, particularly choices of electives. Another respondent reported staff and students receiving 'inconsistent advice' from DET officers. This respondent did not see the TQAP processes as monitoring actual course quality.

Self- evaluation/Quality Assurance

All NSW universities had processes in place for the internal monitoring of courses. These included subject evaluations, staff evaluations, and regular internal review of courses with the aim of continuing improvement.

Universities reported that they sought feedback and collected data from students, staff employers and other stakeholders about the quality of courses and the extent to which the courses met the needs of graduates, parents, children and employers. This feedback was obtained through surveys (e.g. career destination surveys, graduate course satisfaction surveys), working parties and reference groups (e.g. principal reference groups, review committees made up of community representatives, internal teaching and learning committees). Various survey instruments were used, including the Student Evaluation of Educational Quality (SEEQ) instrument developed and processed by the Centre for Learning and Teaching, University of Western Sydney.

One NSW university reported a formal five year internal review process for all courses. This process involves data collection from all stakeholders including teachers, students and lecturers. When the data are collected, the Dean of the Faculty convenes an external review panel consisting of a DET representative, academics from other universities and students. A report is produced which the course coordinator responds to and develops an implementation plan. The course also has an Advisory Committee that examines and responds to recognised deficiencies as an ongoing process. Additionally, all units in the course are reviewed at least every three years by the Teaching and Learning Centre of the university.

Respondents reported that internal reviews and monitoring of courses had led to major changes, e.g. in one university, change from a three year to a four year course, in another, the introduction of a primary double degree program. Other changes, adjustments and 'extensive re shaping' of course structure and content were the result of detailed, ongoing, internal course evaluation.

Views on a national accreditation body for teacher education

Opinions were divided on this issue. Some respondents believed that, with the establishment of the NSWIT, accreditation processes at the state level would be sufficiently rigororous and demanding. They were concerned about demands on the time and effort of university staff, though these demands would not be different, presumably, if the accreditation function was managed by a national body instead of a state body.

Others were supportive of the idea, and noted that since some of their students were drawn from other states and would possibly work in other states, a national accreditation system would be of value.

One respondent stated that such a system would enhance the professional status of teachers.

Some respondents, however, believed that, in the absence of a national school system and national agreement on curriculum, a single national accreditation body for teachers would face difficulties in gaining support from state authorities.

QUEENSLAND

External accreditation

The Queensland Board of Teacher Registration accepts teacher pre-service education programs for the purposes of teacher registration in Queensland. The process involves close collaboration between the institution and the relevant panel/subcommittee of the Board's Professional Education Committee (PEC).

The PEC is made up of registered teachers, the deans of education (or equivalent) from all Queensland higher education institutions that offer teacher education, and nominees of the following bodies and groups:
* Education Queensland

- The Queensland Catholic Education Commission

- The Association of Independent Schools of Queensland

- The Department of Employment and Training

- The Office of Child Care (Department of Families)

- The Crèche and Kindergarten Association

- The Indigenous Education Consultative Body

- The teacher unions

- Parent bodies

A Panel, or Program Consultative Committee, is established for each university. Members are mainly drawn from the PEC. Each panel of six or seven members includes:

- The Director of the Board;

- Two deans of education (or equivalent) from an institution other than the one under consideration;

- An employing authority representative;

- A teacher/teacher union representative; and

- A representative from other interest groups on the PEC, e.g. early childhood, indigenous.

In addition, each panel may include an external member, e.g. a person with specialist expertise.

The first, or 'initial' assessment is for purposes of Phase One Acceptance. This commences from when a course is first proposed and should be completed prior to commencement of the implementation of a course. It is a collaborative process, involving a series of meetings and visits.

Following the first full offering of the course (e.g. after two years in the case of graduate entry courses and after four years in the case of undergraduate programs), courses are assessed for purposes of Phase Two Acceptance.

Courses then continue to be assessed in a four yearly cycle. In addition there is a process of annual reporting involving a written report. This is discussed at a visit or meeting with the panel. The Board is advised of and considers any significant changes to programs as they occur.

Focus of the assessments

Under its current program acceptance process, which commenced in the second half of 2002, the Board has moved towards a standards and outcomes model. The Board publication: *Professional Standards for Graduates and Guidelines for Pre-service Teacher Education Programs* (www.btr.qld.edu.au/publications), describes:

- Professional standards for graduates of teacher education programs, defining attributes considered necessary for effective beginning teaching;

- Mandatory program components, to enable programs to be approved by the Board; and

- Guidelines on program consultation and acceptance;

Universities are asked to provide a full submission on the course, which includes:
- Course structure;

- Full outlines of units of study;

- Rational and research based for the program;

- Program development and review committees and processes;

- Consultation with interest groups;

- Physical facilities;

- Entry procedures; and

- Practical experience – amount, timing, assessment criteria.

Also required is a mapping of programs against the Board's Standards, to demonstrate the contribution of the different elements of the program/units of study to attainment of the Standards.

Outcomes data required by the QBTR

When the institution submits program documentation to the Board, it has to state how it will meet the requirements of the Professional Standards and Guidelines. Evidence includes 'products of student teachers' work' such as lesson plans and assessment materials. Evidence of performance will be drawn from professional experience and other relevant activities.

As the Board's new Standards and Guidelines only began to be implemented from the end of 2002, further consideration is still to be given to the output data to be collected about the competence of graduates. Currently, universities are requested by the Board's panels to share data from graduate surveys and the internal review of the program.

Universities identified the Queensland Board of Teacher Registration as the external accrediting body. Some were expecting changes as a result of the current Review of the Board.

Respondents reported that the QBTR requires yearly 'monitoring' reports. A more thorough review is conducted every four years, as the cohort passes through. One course, still on Phase One 'conditional acceptance' reports to the Board on a semester basis.

The Board also conducts site visits. It gathers evidence and documentation about courses and course delivery and effectiveness, as determined by the Board Guidelines. Universities inform the QBTR about all changes and improvements made to programs.

Personnel from the Board are often involved in the inception and monitoring of courses. They participate in planning days and other course activities with university staff. Respondents reported these processes as being 'collaborative', 'consultative', 'co-operative' and 'thorough.' One respondent described the Board as 'a valued critical friend.' Another said that the university would like more 'face to face' meetings with Board staff. It was noted that 'collaboration' includes working with staff of other universities as well as Board personnel, and that the Board arranges workshops for universities to share ideas and experiences.

Review processes were seen by most respondents as a stimulus for change and improvement, a 'two way process' to ensure high standards. No university reported having negative experiences with QBTR accreditation procedures, although one called for more 'flexibility.'

Self-evaluation/Quality Assurance

Queensland universities review courses regularly, at least once every five years. Data collected at one university includes: alignment of graduate attributes with industry requirements; alignment of generic skills with graduate attributes; alignment of course objectives and outcomes with graduate attributes; and evidence of course viability. Data, including information from surveys of graduates and other stakeholders, is collected internally and through market research.

All respondents reported that courses are monitored by teaching staff and improvements made as required. Different universities reported different formal monitoring processes, e.g. reporting review outcomes to an Academic Board, or following a particular review policy and/or an agreed set of review procedures. The process at one university, for example was described as: 'The process within the faculty involves a developmental team firstly working with Faculty staff on the structure/program being proposed. Then it must be approved by the Faculty's Board of Studies and then by Faculty Board. Then from the Faculty it passes on to the University Program

Management Executive Committee, then the Academic Board and finally the Vice-Chancellor for approval.' Reviews in this university have led to the development of new courses.

Views on a national accreditation body for teacher education

Responses to this question were mixed, but were, on the whole, in favour of the idea. One respondent noted the history of strong accreditation processes in Queensland, saying that this should not be 'compromised by any minimalist standards of a central body.' Most were happy with the 'collaborative' 'effective' and 'supportive' arrangements under QBTR. On these grounds, some saw no need for another accrediting body, fearing loss of regional input, loss of the collaborative arrangements of the Board and 'over standardisation' of processes.

Some Queensland universities saw national accreditation as being potentially 'very useful' and noted the need for national recognition and guidelines for teacher employment and mobility purposes.

SOUTH AUSTRALIA

External evaluation

The teacher registration body for South Australia is the Teacher Registration Board of South Australia (TRBSA).

The relevant Act of the South Australian Parliament does not provide for course accreditation procedures to be carried out by the TRBSA. The role of the Board with regard to the accreditation of pre-service teacher education courses is to confer and collaborate with institutions providing tertiary education to ensure that students registered as teachers by the Board are adequately prepared.

The Board has a Sub-Committee 'Teacher Education and Professional Issues' that considers a broad range of education issues that have the potential to impact upon the Board's regulatory role. It does not have formal processes for accrediting pre-service teacher education courses, but it does 'acknowledge courses as suitable for registration purposes.

There is also an Admissions Sub-Committee that would consider any application that does not meet prescribed qualifications as determined by the Act and regulations. The Board has a discretionary role to admit, on a case-by-case basis, applications that may not meet some requirements under the Act.

Universities reported having a good relationship with the Board, but noted that there were no formal external accreditation requirements.

Self-evaluation/Quality Assurance

All universities had internal processes for monitoring courses. These processes varied between universities. Most conducted regular course reviews that included the collection of course evaluation and employment data, gathered from surveys of graduates, university teaching staff, employers and other stakeholders. These reviews resulted in ongoing changes, development and improvement.

One university reported that, as part of regular monitoring, areas for improvement were 'highlighted' and addressed through appropriate actions. Major reviews of courses were undertaken in this university at least every three years. Another university said that 'topic audits' were carried out on an on-going basis, with major course reviews taking place every five years. This university reported input from the Examinations Board and from surveys of students, graduates, school and university staff. Teaching staff in this university were required to provide 'Statements of Assessment Methods ' for each topic.

TRBSA personnel acted in an advisory capacity to some universities as they undertook internal course reviews, providing feedback that was seen as valuable. University staff welcomed their

input and saw this involvement as being to the Faculty's advantage, given that their students would have to meet the requirements of the Board in order to gain registration.

Views on a national accreditation body for teacher education

The South Australian universities that responded to this question supported the notion of a single national accreditation body .

TASMANIA

External evaluation

The Teachers Registration Act 2000 requires the Tasmanian Teachers Registration Board to have approved courses for the purposes of teacher registration, but it does not define the approval process.

Only one university offers teacher education courses in Tasmania (three teacher education degrees for kindergarten to year 12 teachers). The Board approved all three courses in 2001, as teacher registration got underway.

The University's Education Faculty is aware of the Board's responsibility in this area and has involved it in a review of one of its degrees so far. The small size of Tasmania and the ease of communication and interaction have resulted in Tasmania having no formal process of accreditation at the moment. The Board is interested in work being carried out in other states and nationally.

The university did not respond to questions on external accreditation.

Self evaluation/Quality Assurance

The University reviews courses on a cyclical basis (every 3-4 years). The Review Panel includes representatives from other universities, other faculties from within the university and employer representatives. Internal review includes: Course Advisory Committees (these include representatives from employers, teachers, principals, recent graduates and students studying in the course), regular student forums, student representatives and internal course review on an annual basis by course staff. Formal student feedback comes through a regular 'SETL' schedule and graduate surveys.

Courses are continually being developed in response to feedback from students and schools and are in line with curriculum and school reform. The most notable developments are in the area of school experience (a much stronger partnership between schools and the University) and in the introduction of cross-curricular studies.

As a result of review processes, together with input from other faculties and employers, several new combined degree options have been developed in conjunction with the Bachelor of Teaching (secondary). These are in the areas of Science, Computing, Music and Information Systems. Currently a combined degree with Health Science is being developed.

Views on a national accreditation body for teacher education

The university did not comment on the view that there is a place for a single national accreditation body for teacher education such as there is for other professions.

VICTORIA

External accreditation

The Victorian Institute of Teaching (VIT) Act 2001 (Section 72) provides for an Accreditation Committee of the VIT to 'assess and approve teacher education courses for the purposes of registration under this Act'.

The Accreditation committee was established in 2003. It currently has 25 members:

- Two parents;

- Nine teachers;

- Four principals;

- Two employer representatives (one of whom is a principal); and

- Eight teacher educators.

Each course review panel includes only two or three Committee members, with assistance from an Institute staff member. If a pre-service course for primary education is being accredited, it can be expected that a teacher educator, a principal and a teacher with primary education experience will be on the accreditation panel. With the assistance of an Institute officer, they will make a recommendation to the Accreditation Committee as to whether a course should be approved or not. The Committee makes the decision, which is then noted by the VIT Council.

Reviewers make a judgement, on the basis of material available to them, as to whether or not graduates from a course will meet the outcomes desired, as outlined in the Guidelines for the Evaluation of Teacher Education Courses. Universities are asked to provide information on a pro-forma that follows the Guidelines. Information required to meet the Guidelines includes a course overview, evidence of providing for knowledge of content of the subjects to be taught, knowledge of literacy and literacy pedagogy, child development, resources, the Victorian Curriculum and Standards Framework and its relationship to educational goals, teaching strategies, classroom management, assessment and reporting, data analysis, program planning, record keeping and use of learning technologies. The Guidelines also require the university to specify the number of days of supervised teaching practice in the course, and to provide details of how the course is to be internally evaluated.

Outcomes data required by the VIT

In the past, the VIT has conducted 'course satisfaction' surveys. It is intended that this process will be continued, but probably not until 2005.

Courses are usually approved for a period of five years, although there may be special circumstances where they are approved for a shorter period of time.

In 2004, the Institute will review its guidelines, standards and processes for assessing and approving pre-service teacher education courses. The standards and processes established under the Standards Council of the Teaching Profession and Ministerial Advisory Committee for the Victorian Institute of Teaching will continue to operate for 2004-05, pending the outcomes of the *Future Teachers Project.*

The accreditation guidelines and processes are expected to change after 2005, following the outcomes of the Review.

The Victorian universities identified the Victorian Institute of Teaching as the external accrediting body. Universities had an expectation that courses would be externally reviewed every four or five years, but in one university the VIT was reviewing a course that had been introduced only two years ago. Universities were interested in the VIT's plans to develop standards for graduate teachers.

One respondent expressed the view that it is important that the accrediting body does not 'straightjacket' teacher education courses by setting stringent rules. 'Generally the relationship VIT (our accrediting body) has built up with universities in this aspect has been encouraging, although at times it tries to dictate what teacher education should be when it does not have the knowledge base to do this.'

This respondent also noted the advantages of articulating programs to 'external people'. 'This assists in the accountability of the courses and acts as a form of peer review, which can only strengthen what the program offers.'

A process different from that of the VIT was suggested: 'Given the quality processes that all universites now engage in, it may be more useful for accreditation to take on a more verification of self-review process rather than rule setting process that currently exists. This means that teacher education courses would be required to self-assess against a determined set of terms of reference. The accrediting body would then verify what the teacher education self-review claims. It is important to remember that we need diverse teachers for diverse students, so we do not want all teacher education programs to be the same.'

While this point is important, there is one respect in which the public does want programs to be the same – that is in their capacity to graduate competent teachers. This outcome does not entail course uniformity, but it does entail that universities satisfy quality criteria to ensure graduate teacher competence.

Another response from the same university noted the importance of the accrediting body meeting national and 'global' as well as 'local' requirements. 'While there is never any disagreement about having to meet local requirements, it is important that these are not so stringent that they are out of step with other states and worldwide trends. An example of this is that while students need to be able to implement the local curriculum, it is important that they have a broader understanding of curriculum so that when curriculum review, innovation and change takes place, they are well equipped to critque and implement the new curriculum. So rather than 'know CSF, VCE, Vet in school and VCAL backwards' they can participate in the current debate of where should the Victorian Curriculum be heading. Beginning teachers do not have the benefit of a history of experience in such situations, but they will still be expected to implement it.'

Self-evaluation/Quality Assurance

Victorian universities reviewed courses in various, yet similar ways. Examples are Student unit evaluation, meetings with other faculties, collecting and using Course Experience Questionnaire (CEQ) data, employer surveys and cyclical formal course reviews. Quality assurance data collected included information on retention and progress, student and staff response, graduate response, and stakeholder response. Course and Curriculum Committees were 'canvassed' in one university. One response noted that, in that university, Course Experience Questionnaire (CEQ) data were reported for all faculties and referred to in the annual cycle of the performance assessment of the faculty. 'Staff are required to address issues arising through their annual performance appraisal. The course committee determines the balance of time committed to each subject area and ensures key content is included etc.'

The campuses of the Australian Catholic University follow the ACEDE's National Guidelines for Course Approval and Review when conducting internal course reviews.

Universities were generally satisfied with the rigour and potential of internal review processes to improve courses. One respondent pointed out that internal processes are related to the targets determined for the university, e.g. 'the high level of IT in this program reflects Teaching and Learning strategic targets that were set for the university as a whole. Our course development committees do consult with staff from schools when we are undertaking cycles of review and development.'

The effects of internal review were described as improved course structure, relevancy and quality of teaching/learning activities, improvements in the currency of knowledge and research underpinning formal units, better placement of field experience, addressing of graduate attributes, and reviewing and improving assessment practices. One university said that external and internal reviews provided an opportunity to assess how the themes and content were serving the students. 'There has been some rejigging of units as the Course evolved - richer assessment

tasks, efforts to link theory and practice, improve practicum, focus on lack of Aboriginal and Torres St Islander studies and non-integral role of the arts in learning.'

Views on a national accreditation body for teacher education

Several Victorian universities supported the idea on the grounds that such a body would be a means of ensuring the fostering of national standards, comparability of state standards and portability of qualifications for graduates.

One respondent supported the idea on the grounds that it would provide diversity as many state and territory 'agendas' came together.

WESTERN AUSTRALIA

External accreditation

Western Australia does not yet have an external body that accredits university teacher education courses. Legislation to establish the Western Australian College of Teaching is being debated in the Upper House in the current session of the Western Australian Parliament. According to this legislation, requirements for registration as a teacher with the College are that the applicant holds a qualification in teaching approved by the College.

The College will be established on a date to be determined by Proclamation after the Bill is passed. The College is expected to be fully operational by the end of 2005.

Internal Evaluation/Quality Assurance

All Western Australian universities conduct internal course reviews and individual unit evaluations. One university said that Program Advisory Boards carry out reviews and receive informal feedback. This university also canvasses graduates' views during a 'graduates muster' during their first school holidays in teaching. In another university, new units and courses are approved (or not) by a series of committees starting at the Department level, the Faculty then the Division before it moves to the University Courses Committee. There is also a Board of Study involving members external to the university that reviews and advises on a course before it is approved. This university gathers data from staff, students and teachers in schools as part of an annual cycle. This feeds into course team meetings for discussion and where appropriate, application. One university noted the importance of face to face interaction with reviewing personnel, rather than reliance on written reports and documentation. Respondents noted that internal monitoring resulted in ongoing improvement in all areas.

Views on a national accreditation body for teacher education

Responses from Western Australian universities noted the difficulties of establishing such a body in the absence of a national education system and national curriculum. One respondent commented favourably on the variety of teacher education courses in Australia, and noted the importance of retaining some 'unique characteristics' of individual institutions.

Another respondent, who described their university as 'self accrediting' commented: 'Autonomous accreditation is a sacrosanct university privilege. In order to consider forfeiting such a privilege, compelling reasons would need to be agreed upon by all of the nation's universities.' Another took a broader view: 'Given the very transient nature of our graduates I believe that this would enable teachers to take up positions much more easily than is currently the case. I have many requests from our graduates for various types of documentation to support their applications for registration in other states and overseas and it can be very confusing trying to meet the different requirements. It would also address the discrepancy between the interpretation of one year and two year post-graduate courses. Many of my graduates have commented that while they seem not to be eligible for registration because our Grad Dip is a one year course and the particular registering body (in other states) requires two years, that on close examination they believe that they have completed a more rigorous course than the two year. I

have not actually done a comparison and this is only based on feedback from graduates, so I am not sure how accurate the perception is.'

CONCLUSION

Across Australia, the picture of external accreditation of university teacher education courses is uneven. Some states have statutory bodies that attempt to regulate the teaching profession, some do not. In some states, these regulatory bodies are 'Registration Boards', in others they are 'Institutes' or 'Colleges'. Rationales for their existence vary, as do stakeholder perceptions of their core purposes. More variation is to be found in their relationships with stakeholders, the ways they carry out their key functions, and their standing in the wider education community.

Victorian legislation clearly gives the state teacher registration body, the VIT, power to accredit university courses, but in some other states, the legislation is silent in this area, or is open to different interpretations (e.g. the legislation currently before the WA Upper House provides the proposed WA College of Teaching with power to 'approve' qualifications necessary for a person to be registered as a teacher, but is unclear what actual power, if any, the College will have to accredit courses).

Most of the respondents from universities who had experience of external accreditation by a statutory body were satisfied with the processes. Some welcomed this kind of external scrutiny, saying that it helped them to develop their courses, gave them a broader focus and provided direction for improvement. This appeared particularly true of Queensland universities, which had the longest experience of this kind of evaluation. The overall impression gained from university responses was that universities in those states that had more developed external accreditation processes, such as Queensland and Victoria, also had more sophisticated understandings of how to carry out self-evaluation. (This was an impression, only. More detailed research would be needed in order to confirm or deny it.)

The responses from from Queensland universities indicated that the university course accreditation processes used by the QBTR are working well for them. Accreditation models such as the QBTR, if they prove to be effective in terms of graduate outcomes, could readily be "scaled up" to operate nationally. All universities would benefit from the cross-fertilization and benchmarking capacities of a national approach especially for those in the smaller jurisdictions (ACT, NT, Tasmania) in which there are only one or two universities. However, in the absence of any valid measures of the quality of graduating teachers, it is not possible to make any claims about the relative effectiveness of course accreditation systems.

Although no university mentioned AUQA in its responses, it is likely that the internal evaluation processes described were, to some extent, driven by AUQA requirements. Universities conducted internal evaluation of their courses in similar ways, using similar structures and evaluation instruments.

Only two arguments against the establishment of a national accreditation body were advanced by respondents from the universities who participated in this study. The first was that such a body would be unworkable as long as there is no national schools system – specifically, national curriculum. We doubt the soundness of this argument. There is, in fact, substantial interstate agreement on curriculum. Teacher educators generally take a broader view of curriculum than preparing their students to implement one model specific to a state or territory. All state and territory curricula have, or are moving to an outcomes focus and all follow the same eight KLAs. The differences are relatively minor and would not impede the development of standards describing what beginning teachers should know and be able to do in curriculum planning. The increasing mobility of teachers in Australia calls for teacher pre-service education programs that give graduates the knoweldge, skills and the flexibility to plan and teach well in all jurisdictions.

The second argument, advanced by several respondents, was that a national system of course accreditation could result in 'over-standardisation.' It was argued that courses need to reflect local customs and needs. This is true to an extent, not only on an interstate basis, but also for universities in different areas within states. (Metropolitan universities in different states, for

example, have more in common in terms of local context than metropolitan and country universities in the same states.) However, other universities pointed to the advantages of looking outward to avoid insularity and parochialism. They indicated that cross fertilisation and the sharing of ideas are essential in sustaining quality courses, especially for universities in smaller jurisdictions.

The prime purpose of accreditation systems for all professional preparation programs is to safeguard the public interest. Accreditation is a justifiable intervention by the state to ensure entrants to professions are qualified and competent to practice. Some university respondents seemed to confuse autonomy with licence. The trend in the way accreditation bodies work nationally and internationally is to provide less specification about the way in which professionals are prepared, but greater clarity about the capacities they should be able to demonstrate in their practice. This trend from inputs to outputs offers greater opportunity for diversity and experimentation in methods for preparing professionals.

Only thirty eight universities offer teacher education courses in Australia. All share the aim of graduating competent teachers well prepared to teach in a variey of contexts. However, the fragmented and uncertain nature of course accreditiation in Australia appears to hinder their ability to achieve this aim. And how will they know if it is achieved? In other professions (e.g. the medical profession through the Australian Medical Council) there are moves by national bodies to develop outcomes measures as part of course accreditation. In the USA, the National Council for the Accreditation of Teacher Education (NCATE) is also moving in this direction, as it develops performance assessments to evaluate the quality of the professional knowledge and skills of graduates from more than five hundred teacher education institutions. These achievements have been made possible, largely, because they have occurred in a national context.

Australian universities do not appear to have a problem with external accreditation, as long as the processes are seen to be effective, useful and sensitive to the individual needs and circumstances of the universities. Indeed, it seems likely that external accreditation helps universities to improve their own systems for self-evaluation. However, in the current absence of a national focus, course accreditation processes, even in those states that are leading in the field, do not create the conditions for large scale improvement of graduate teacher quality. Nor can they be relied upon to provide public assurances of the quality of graduates' knowledge and skills. Certainly, at the present time, no national guarantees of the quality of graduate teachers can be given by any institution, body or individuals in Australia. A national approach to teacher education course accreditation, like the AMC in medical education, would appear to have the potential to play a major role in assuring the quality of teacher education.

7. SUGGESTIONS FOR FURTHER RESEARCH

SELECTION

There is a clear concern in universities to ensure that only the most appropriate applicants are selected to undertake teacher education courses. This concern can be seen in the way in which universities put students into classrooms as soon as possible after the course starts so the student and the university can assess their suitability. There is implicit in this, an acknowledgement that selection procedures may not give fully valid results.

Selection into postgraduate courses seems to involve a richer array of information than that used for selection into undergraduate courses. In part this is needed since a pre-requisite for admission to postgraduate courses is the completion of an undergraduate degree, which presumably indicates an adequate level of academic ability. Put another way, the variance in ability is likely to be far less among the applicants to postgraduate degrees than to undergraduate degrees. This lack of variability may encourage the use of measures other than academic achievement to guide selection.

There is a considerable uniformity across Australia in the selection of students for undergraduate pre-service teacher education courses. Further investigation of selection into these courses might best be done by using case studies methods. These case studies should be with those (few) small institutions that use other methods to investigate the cost and validity of their selection methods. Such case studies could provide useful support to other universities seeking to improve their selection procedures.

For the further investigation of postgraduate selection, surveys might be considered, as there is a wider range of activities undertaken by universities. The focus of the research might best be upon the extent to which the current methods are efficient and valid for all educational settings. In attracting able students into teacher education, universities also need the kind of support from education authorities that ensures teaching is perceived as an attractive career and profession.

A survey-based approach could be used for the investigation of selection procedures for postgraduate courses. Here there is more variation in the procedures used and more chance, therefore, of finding differences that have an effect using survey data. Of particular interest could be an examination of the cost benefits of each approach. It is clear that one of the benefits of using Tertiary Admission Centres for selection into undergraduate courses is that they are very cost effective. Further, they deal with measures of academic ability that universities consistently see as one of the most important qualities needed in the students they select. If this is the case, then it is hard to imagine a more cost effective, efficient and valid system for selection. However if it can be shown that there are other factors, or that there are some contexts where this approach is not effective, efficient or valid, then these should be identified. A number of the small colleges seem to place much greater weight on personality, interest and motivation in their selection of students.

PROFESSIONAL EXPERIENCE AND THE PRACTICUM

Suggestions for research

- *Establish a joint review of professional experience by teacher education providers and state based education authorities, and other relevant stakeholders.*

- *Establish a working party with key stakeholders and education industrial bodies to explore the issues of commitment to professional development of teachers and payment of schools and teachers.*

- *Work with Governments and stakeholders to review commitment to existing approaches to professional experience and funding models.*

- *Forge closer links between pre-service teacher education professional experience programs and professional learning for teachers.*

- Consider creation of a new, formal specialist teaching/executive role (in schools that take student teachers regularly) that focuses on supporting, guiding and mentoring student teachers and classroom/cooperating teachers.

FACTORS AFFECTING THE QUALITY OF GRADUATES FROM TEACHER EDUCATION PROGRAMS

As academic institutions, universities believe it is appropriate to give priority to academic aptitude in selection decisions. Their preference to academic ability as a predictor is supported by research on characteristics of effective teachers (Darling-Hammond (2000) provides a useful summary of this research). This research also supports the practice in some states of setting subject matter background prerequisites for entry to certain courses, such as mathematics for primary teacher education. It seems plausible to use other indicators as well in selecting students for professional preparation courses, but the research cautions action in this direction, especially use of personality inventories or interview methods. A long tradition of research on the personality characteristics of effective teachers has found no relationship between personality characteristics and student achievement (Getzels & Jackson, 1963; Borich, 1996).

It would seem from the responses to this survey that universities recognise the limitations of interviews and personality or aptitude tests in selecting entrants to professional preparation programs. No universities reported using aptitude tests for selecting students into teacher education programs. While it is vital that selection into teacher education - and then into the teaching profession - is carried out carefully, universities appear to adopt a pragmatic approach currently: that is, to select on academic merit then provide early opportunities for school experience and quality supervision so that informed decisions about continuation can be made as soon as possible on the basis of experience and performance, both by students and supervisors. What matters finally in selection is what people can actually do and how well they can relate to students.

Interviews are notoriously unreliable as a method of selection and poor predictors of future performance. The most valid indicator of future performance is evidence of capacity to perform tasks closely related to the position in question. Most applicants for professional preparation programs cannot, of course, produce such evidence. The interview situation tends to provide extraneous information about applicants to interviewers that increases the likelihood that biases of various kinds will influence their decisions. Another factor is that universities simply do not have the resources at present to use selection methods other than ENTER scores and academic records when the number of applicants is so high.

While selection methods should be as fair and valid as possible, they are unlikely to make as much difference to the academic quality of entrants to the teaching profession as methods based on attracting and recruiting talented individuals. A longitudinal study of entrants to the teaching profession in Britain over thirty years found that relative salary was the single most important factor affecting the variation in the quality of graduates recruited into teaching.

Research on retention, or who leaves teaching, is also relevant to this discussion on selection. US research indicates that the quality of preparation and induction has an effect on decisions whether or not to remain in teaching probably more than methods of selection and that academically more talented beginning teachers are also more likely to leave the profession (Darling-Hammond, 1996). There is no doubt the new double degrees in teacher education in Australia are attracting more academically able students into teacher education courses. Double degrees give students a wider range of options in choosing a future career than the four-year undergraduate education degrees that were traditional in the Colleges of Advanced Education. Whether teaching is able to

attract and hold the graduates from these new double degrees to the same extent will be an important area for future research.

It is now well established that teacher quality and competence have an important influence on student learning opportunities. Academic ability is an important component of teacher quality. As Table 4 above indicates, ENTER scores for teacher education programs vary by as much as 20-25 percentile points between universities. Some university courses in teacher education attract significantly more academically able students than others. This degree of variation from course to course might be seen as an issue of concern in other professions, such as medicine. In the case of teaching, if it were considered desirable to ensure that academic quality remained high, one way to achieve this would be to increase the number of HECS places for teacher education courses that can attract students of higher academic ability and reduce the number of places allocated to courses that cannot.

Almost all Australian universities provide teacher education programs. In 2001, Australia had 38 universities with over 410 teacher education courses. 310 of these had less than 50 students who completed the course that year. Fifteen universities trained 70 per cent of the teachers who graduated in 2001. While size does not guarantee quality, this situation raises questions about duplication of resources and whether Australia needs so many courses.

NEEDED: RESEARCH ON THE DEVELOPMENT OF MEASURES OF THE OUTCOMES OF TEACHER EDUCATION PROGRAMS

There is a considerable amount of innovation and experimentation in teacher education in Australian universities, but the fact is that we have little evidence on which to judge whether or not these reforms are gradually increasing the effectiveness and efficiency of our investment in teacher education. For example, in 1998 the Australian Council of Deans, argued, in their report, *Preparing a Profession*, that initial teacher education programs should include at least two years of educational or professional studies beyond, or apart, from academic studies in content areas. While the arguments behind this shift may have been sound, we have not made the research investment to ensure we understand the conditions that need to be in place to ensure graduate teachers in a two year course are learning to teach more effectively.

In its brief for this study, MCEETYA indicated its interest in identifying features of course content and structure that might explain perceived variation in the quality of graduate teachers. The absence of valid data about the capabilities of graduate teachers precludes such a study at present. The report, *Australia's Teachers: Australia's Future* (2003) also makes the point that teacher education courses need to demonstrate overall quality and effectiveness in preparing high competent teachers (p. 119). However, for this to happen, there needs to be a much higher investment in teacher education research and greater use of carefully designed field trials with the capacity to test key propositions about the characteristics of effective teacher education programs.

We have reached the point where it is possible to design research studies with the capacity to measure important outcomes of teacher education programs and provide a basis for comparing programs. The time has come to start using these measures to develop a sounder research basis for our teacher education programs. Measures of outcomes need to be founded on standards for what beginning teachers need to know and be able to do to establish basic conditions for learning in their classrooms. These standards need to be carefully written so that they are realistic yet closely aligned with research on the main characteristics of effective teaching. There are several sets of quality teaching standards now in Australia with high levels of commonality that are starting to be used for this purpose.

These include, for example, sound knowledge of curriculum content and skills, such as literacy, knowledge about learning and how to promote learning in specific content areas, knowledge about how to analyse student understandings (and misunderstandings) and how to plan programs that will build on and further that development, ability to communicate ideas and concepts clearly, and development of core skills in pedagogical content knowledge.

A considerable amount of research has been conducted over the past fifteen years or so on reliable methods for assessing teacher knowledge and performance against teaching standards. These standards-based assessments include a diverse range of methods, from paper and pencil tests of teacher knowledge and pedagogical content knowledge to classroom observation and portfolio tasks based on student work over time and videotapes. While there would be a need for a large research program to develop these methods to the point where they could be used across most fields of teacher education from early childhood to secondary specialisms, the basic assessment technology exists and is steadily improving its reliability and validity, and most important, its credibility with teachers.

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State/Institution	Internal			External			Multi-modal			Gender		PERSONS
	Full-time	Part-time	Sub-total	Full-time	Part-time	Sub-total	Full-time	Part-time	Sub-total	Males	Females	
New South Wales												
Avondale College	0	48	48	0	0	0	0	0	0	19	29	48
Charles Sturt University	184	30	214	78	274	352	144	11	155	232	489	721
Macquarie University	90	44	134	5	36	41	117	57	174	47	302	349
Southern Cross University	71	36	107	0	5	5	72	31	103	75	140	215
The University of New England	165	2	167	98	190	288	0	0	0	116	339	455
The University of New South Wales	190	4	194	0	0	0	0	0	0	70	124	194
The University of Newcastle	621	41	662	0	0	0	0	0	0	229	433	662
The University of Sydney	418	60	478	0	0	0	0	0	0	112	366	478
University of Technology, Sydney	330	94	424	0	0	0	0	0	0	106	318	424
University of Western Sydney	387	75	462	1	1	2	0	34	34	84	414	498
University of Wollongong	440	52	492	0	6	6	0	0	0	123	375	498
Total New South Wales	**2,896**	**486**	**3,382**	**182**	**512**	**694**	**333**	**133**	**466**	**1,213**	**3,329**	**4,542**
Victoria												
Deakin University	169	43	212	10	36	46	187	42	229	96	391	487
La Trobe University	268	43	311	0	0	0	0	0	0	62	249	311
Monash University	453	45	498	8	95	103	67	10	77	165	513	678
Royal Melbourne Institute of Technology	119	21	140	0	0	0	0	0	0	20	120	140
The University of Melbourne	771	158	929	2	14	16	6	9	15	284	676	960
University of Ballarat	140	84	224	0	0	0	0	0	0	89	135	224
Victoria University of Technology	154	53	207	5	0	5	0	0	0	42	170	212
Total Victoria	**2,074**	**447**	**2,521**	**25**	**145**	**170**	**260**	**61**	**321**	**758**	**2,254**	**3,012**
Queensland												
Central Queensland University	58	8	66	103	59	162	267	34	301	112	417	529
Griffith University	420	23	443	12	26	38	78	1	79	143	417	560
James Cook University	224	32	256	11	15	26	0	0	0	49	233	282
Queensland University of Technology	383	83	466	55	118	173	307	92	399	216	822	1,038
The University of Queensland	205	6	211	1	0	1	23	0	23	73	162	235
University of Southern Queensland	130	25	155	11	18	29	41	17	58	50	192	242
Total Queensland	**1,420**	**177**	**1,597**	**193**	**236**	**429**	**716**	**144**	**860**	**643**	**2,243**	**2,886**
												(continued)

APPENDIX A*   Award Course Completions for All Students Enrolled in Courses for Initial Teacher Training by State, Institution, Mode of Attendance, Type of Attendance and Gender, 2002

*Source: Australian Government Department of Education, Science and Training Higher Education Statistics

APPENDIX A (cont'd.) Award Course Completions for All Students
Enrolled in Courses for Initial Teacher Training by State, Institution, Mode
of Attendance, Type of Attendance and Gender, 2002 (continued)

State/Institution	Internal			External			Multi-modal			Gender		PERSONS
	Full-time	Part-time	Sub-total	Full-time	Part-time	Sub-total	Full-time	Part-time	Sub-total	Males	Females	
Western Australia												
Curtin University of Technology	57	4	61	1	2	3	0	5	5	9	60	69
Edith Cowan University	685	117	802	3	13	16	136	14	150	243	725	968
Murdoch University	6	90	96	0	89	89	21	37	58	59	184	243
The University of Notre Dame Australia	0	12	12	0	0	0	0	74	74	21	65	86
The University of Western Australia	159	12	171	0	0	0	0	0	0	55	116	171
Total Western Australia	**907**	**235**	**1,142**	**4**	**104**	**108**	**157**	**130**	**287**	**387**	**1,150**	**1,537**
South Australia												
The Flinders University of South Australia	141	29	170	0	0	0	2	6	8	39	139	178
The University of Adelaide	127	8	135	0	1	1	0	0	0	51	85	136
University of South Australia	361	0	361	49	0	49	107	0	107	105	412	517
Total South Australia	**629**	**37**	**666**	**49**	**1**	**50**	**109**	**6**	**115**	**195**	**636**	**831**
Tasmania												
University of Tasmania	249	15	264	0	0	0	8	2	10	60	214	274
Total Tasmania	**249**	**15**	**264**	**0**	**0**	**0**	**8**	**2**	**10**	**60**	**214**	**274**
Northern Territory												
Batchelor Institute of Indigenous Tertiary Education	12	5	17	0	0	0	0	0	0	2	15	17
Northern Territory University	52	10	62	17	12	29	0	0	0	19	72	91
Total Northern Territory	**64**	**15**	**79**	**17**	**12**	**29**	**0**	**0**	**0**	**21**	**87**	**108**
Australian Capital Territory												
University of Canberra	235	73	308	0	0	0	0	0	0	107	201	308
Total Australian Capital Territory	**235**	**73**	**308**	**0**	**0**	**0**	**0**	**0**	**0**	**107**	**201**	**308**
Multi-State												
Australian Catholic University	671	208	879	0	0	0	0	0	0	228	651	879
Total Multi-State	**671**	**208**	**879**	**0**	**0**	**0**	**0**	**0**	**0**	**228**	**651**	**879**
TOTAL	**9,145**	**1,693**	**10,838**	**470**	**1,010**	**1,480**	**1,583**	**476**	**2,059**	**3,612**	**10,765**	**14,377**

APPENDIX B – COURSE STRUCTURE AND COVERAGE OF TEACHING STANDARDS PROFILES

COURSE STRUCTURE: DEAKIN UNIVERSITY: BACHELOR OF EDUCATION (PRIMARY) (E359)   **B.Ed. PRIMARY**

Course duration: Four Years full time. Course structure: 32 course units (1 unit = 3 hours per week for 1 semester

24 course–grouped (Compulsory six unit major sequence in Education Studies; 12 units related to Key Learning Areas; 6 core discipline units in language and Literature

Students must take major discipline sequence of 6 credit points related to one of the Key Learning Areas from another faculty + 2 units related to another KLA or an extension of to the major discipline sequence

Units of study   *School experience*

Year 1	Semester 1	1. Education Studies Major 1: Understanding children and adolescents 2. Language core discipline unit 1a: Reading children's literature 3. Science core discipline unit 1a: Ecology and the environment 4. Level 1 Unit from approved major discipline sequence	
	Semester 2	1. Education Studies Major 2: Understanding learners 2. Language and core discipline unit 1b: Exploring texts 3. Mathematics core discipline unit 1a: Number and chance 4. Level 1 Unit from approved major discipline sequence	Primary School Experience 1 {5 days (half day per week for 10 weeks orientation)}
Year 2	Semester 1	1. Education Studies Major 3: Creating effective learning environments 2. Mathematics core discipline unit 1b: Patterns in space 3. Primary Language Education 1: Language and literacy: The early years 4. Level 2 Unit from approved major discipline sequence	Primary School Experience 2A (10 days)
	Semester 2	1. Education Studies Major 4: Curriculum, assessment and reporting 2. Science core discipline unit 1b: The physical environment 3. Primary mathematics education 1: Developing numeracy concepts 4. Level 2 Unit from approved major discipline sequence	Primary School Experience 2B (5 day block & 5 days)
Year 3	Semester 1	1. Primary Language Education 2: Developing Language and literacy: The Middle Years 2. Primary Mathematics Education 2: Creating an Inquiry-based Classroom 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	Primary School experience 3 (10 day block & 5 days
	Semester 2	1. Primary Social Education 2. Primary Science Education 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	Primary School experience 3B (10 day block & 5 days
Year 4	Semester 1	1. Education Studies Major 5: Professional relationships 2. Teaching the Arts in Primary Schools 3. Primary Physical and Health Education 4. Primary Technological Education	Primary School experience 4A (10 days)
	Semester 2	1. Education Studies Major 6: Transition to beginning teaching 2. Primary Arts Education: Focussed study 3. Primary Language Education 3: The literacy teacher: The profession and the community 4. Primary Mathematics Education: Professional practice and Mathematics: Designing an inclusive curriculum	Primary School experience 4B (20 day block)

Students undertake 80 days of school experience

COVERAGE OF TEACHING STANDARDS

B.Ed. PRIMARY

Deakin University: Bachelor of Education (Primary) (E359)

		Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: (communication, questioning, discussion, engagement, challenge, feedback)	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: communication with parents	ICT
Year 1	Semester 1	1. Education Studies Major 1: Understanding children and adolescents 2. Language core discipline unit 1a: Reading children's literature 3. Science core discipline unit 1a: Ecology and the environment 4. Level 1 Unit from approved major discipline sequence	XX XX XX	XX	X					
	Semester 2	1. Education Studies Major 2: Understanding learners 2. Language and core discipline unit 1b: Exploring texts 3. Mathematics core discipline unit 1a: Number and chance 4. Level 1 Unit from approved major discipline sequence	XX XX XX	XX	X					N/A
Year 2	Semester 1	1. Education Studies Major 3: Creating effective learning environments 2. Mathematics core discipline unit 1b: Patterns in space 3. Primary Language Education 1: Language and literacy: The early years 4. Level 2 Unit from approved major discipline sequence	XX XX XX		X		X			
	Semester 2	1. Education Studies Major 4: Curriculum, assessment and reporting 2. Science core discipline unit 1b: The physical environment 3. Primary mathematics education 1: Developing numeracy concepts 4. Level 2 Unit from approved major discipline sequence	XX XX XX		X			X		
Year 3	Semester 1	1. Primary Language Education 2: Developing Language and literacy: The Middle Years 2. Primary Mathematics Education 2: Creating an Inquiry-based Classroom 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	X X XX XX	X	X X		X	X		
	Semester 2	1. Primary Social Education 2. Primary Science Education 3. One Level 3 Unit from approved major discipline sequence 4. One elective discipline unit at level 2 or higher	X X XX XX		X X					
Year 4	Semester 1	1. Education Studies Major 5: Professional relationships 2. Teaching the Arts in Primary Schools 3. Primary Physical and Health Education 4. Primary Technological Education	X X X		X X X	X X X			X	
	Semester 2	1. Education Studies Major 6: Transition to beginning teaching 2. Primary Arts Education: Focussed study 3. Primary Language Education 3: The literacy teacher: The profession and the community 4. Primary Mathematics Education: Professional practice and Mathematics: Designing an inclusive curriculum	X X		X ? X	? ? X			X X	

COURSE STRUCTURE: EDITH COWAN UNIVERSITY   **B.Ed. PRIMARY**

Bachelor of Education (ECE and Primary)

Course Code B88
Course structure: Four years of study: 33 units plus 2 Assistant Teaching Experiences
The degree includes compulsory units studied by all students, foundation units taught outside the School of Education and the opportunity for students to focus on a choice of curriculum areas within customised units in the fourth year.

		Units of study	*School experience*
Year 1	Semester 1	1. Becoming a Teacher 2. Learning and Development 1 3. Social Influences on Learning 4. Science and Mathematics in our Environment	Practicum Experience 1 *(Full year 19 days of distributed practice across Semester 1 and Semester 2 and 2 week block practice in Semester 2)*
	Semester 2	1. Ecology of Children and Families 2 2. Learning and Development 2 3. Learning with Technology 4. Introduction to Language	
Year 2	Semester 1	1. Managing Learning Environments 2. Language and Literacy 1 3. Teaching and Learning Music 4. Health and Physical Education (K-7)	Professional Practice 1 *(two week block)*
	Semester 2	1. Drama as a Process for Learning 2. Mathematics and Numeracy 1 3. Science Education 4. Society and Environment	Professional Practice 1 *(two week block)*
Year 3	Semester 1	1. Assessment and Evaluation of Learning 2. Language and Literacy 2 3. Mathematics and Numeracy 2 4. Technology and Enterprise Education	
	Semester 2	1. Visual Arts in Education 2. Teaching Indigenous and Multicultural Children 3. Teaching Children With Special Needs	Professional Practice 3 *(four week block)*
Year 4	Semester 1	1. Analysing Planning, Teaching and Assessment Processes 2. Values in Education	Assistant Teacher Experience 1 *(eight week block)*
	Semester 2	1. Dilemmas of Practice 2. Teaching English as an Additional Language	Assistant Teacher Experience 2 *(eight week block)*

COVERAGE OF TEACHING STANDARDS   **B.Ed. PRIMARY**

Edith Cowan University

Year	Semester	Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: Reflection, records, , communication with parents	ICT
Year 1	Semester 1	1. Becoming a Teacher 2. Learning and Development 1 3. Social Influences on Learning 4. Science & Maths in our Environment	 XX	 X X 	 X 				X 	
	Semester 2	1. Ecology of Children and Families 2 2. Learning and Development 2 3. Learning with Technology 4. Introduction to Language	 X	X X 	 X 	 X 				 XX
Year 2	Semester 1	1. Managing Learning Environments 2. Language and Literacy 1 3. Teaching and Learning Music 4. Health and Physical Education (K-7)	 X X X		X 		X 			
	Semester 2	1. Drama as a Process for Learning 2. Mathematics and Numeracy 1 3. Science Education 4. Society and Environment	 XX XX XX		X X X X	X 	X 	X 		
Year 3	Semester 1	1. Assessment and Evaluation of Learning 2. Language and Literacy 2 3. Mathematics and Numeracy 2 4. Technology and Enterprise Education	 XX XX XX		X X X X		 X 	X 		
	Semester 2	1. Visual Arts in Education 2. Teaching Indigenous and Multicultural Children 3. Teaching Children With Special Needs	XX 	 X X	X X 				 X X	
Year 4	Semester 1	1. Analysing Planning, Teaching and Assessment Processes 2. Values in Education	X 	X 	X X	X 	X 	X 	X X	
	Semester 2	1. Dilemmas of Practice 2. Teaching English as an Additional Language		 X	X X	X X	X 	X X	X 	

COURSE STRUCTURE: **B.Ed. PRIMARY**

University of Tasmania: B.Ed. (Early Childhood and Primary Specialisations)
Course code: E3A
Normal university entrance requirements apply
Course structure and sequence: Four Year full time or equivalent part-time. 26 weeks staff student contact
Core Elements in structure: **Liberal studies** with a major study or equivalent; **education studies**; **school experience**; and **curriculum studies**

	Units of study	*School experience*
Year 1	1. Liberal studies unit/s (Semesters 1&2) (50%) 2. Curriculum studies 1 (Semesters 1&2) 3. Education 1 (Semesters 1&2) 4. School experience (Semesters 1&2)	10 consecutive days Observations of teachers & students Work with small groups of children. Inform decision about entering the teaching profession.
Year 2	1. Liberal studies unit/s (25%) 2. Curriculum Studies 2A (English, Maths, LOTE(Semester 1) 3. Curriculum studies 2B (Science and Technology- by internet) (Semesters 1&2) 4. Curriculum Studies 2C (SOSE Health and PE) (Semesters 1&2) Curriculum Studies 2D (Arts Education) (Semesters 1&2) 5. Education 2 (Semesters 1&2) 6. School experience (Semesters 1&2)	15 consecutive days Students undertake individual small-group and whole class teaching activities under supervision. - complete a range of specified tasks in behaviour management and the non-teaching elements of teachers' work as well as classroom teaching.
Year 3	1. Curriculum Studies 3A (English, Maths) (Semester 2) 2. Contemporary Curriculum Developments A (Semester 1) 3. Curriculum Investigations A (Semester 2 or Summer) 4. Modes of Curriculum Inquiry A (Semester 2) 5. Education 3 (Semesters 1 &2) 6. School Experience (Semesters 1 & 2)	Students undertake a total of 35 days of in-school teaching experience in two separate blocks, at the beginning and towards the end of the first term of the school year. Increasing levels of responsibility, culminating in 80% of a full-time load in a supervised context.
Year 4	1. Curriculum Studies 4A (English , Maths) Semester 1 2. Contemporary Curriculum Development B (Semester 1) 3. Curriculum Investigations B (Semester 1) 4. Modes of Curriculum Inquiry B (Semester 2) 5. Education 4 (Semesters 1 & 2) 6. Education 5 (Semesters 1 & 2) 7. School Experience	35 days, including a 25 day internship.Iincreasing levels of responsibility, undertaking a minimum of 80% of a full-time teacher's load, including all non-teaching duties. Unit is divided into three phases: Phase 1: In which the student undertakes the planning and preparation for uni and school staff. Phase 2: In which the student operates, under direct colleague teacher supervision. Phase 3: The internship, in which supervision is indirect.

Notes: Honours program available - dissertation   No of students in 2003 223 (Intnl 2)   Tas Teacher Regn Board   HECS $3800

Liberal studies courses taken in other university faculties   Opportunity exists for one-semester exchange with approved universities around the world

COVERAGE OF TEACHING STANDARDS: B.Ed. PRIMARY
University Of Tasmania: B.Ed. (Early Childhood and Primary Specialisations)

	Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: Reflection, records, collaboration, communication with parents	ICT
Year 1	1. Liberal studies unit/s (Semesters 1&2)	XX							
	2. Curriculum studies 1 (Semesters 1&2)			XX					
	3. Education 1(Semesters 1&2)		X		XX	X			X
	4. School experience (Semesters 1&2)			X	XX	X		X	
Year 2	1. Liberal studies unit/s	XX							
	2. Curriculum Studies 2A (Eng, Maths, LOTE (Sem. 1)	X	X	XX	X				
	3. Curriculum studies 2B (Sci and Technology- by internet) (Semesters 1&2)	X	X	XX	X				
	4. Curriculum Studies 2C (SOSE Health and PE) (Semesters 1&2)	X	X	XX	X				
	Curriculum Studies 2D (Arts Edn) (Semesters 1&2)	X	X	XX	X				
	5. Education 2 (Semesters 1&2)		X		X	X			
	6. School experience (Semesters 1&2)				XX				
Year 3	1. Curriculum Studies 3A (English, Maths) (Semester 2)	X		XX	X				
	2. Contemporary Curriculum Developments A (Sem. 1)			XX					
	3. Curriculum Investigations A (Semester 2 or Summer)			XX					
	4. Modes of Curriculum Inquiry A (Semester 2)			XX					
	5. Education 3 (Semesters 1 &2)		XX			X			
	6. School Experience (Semesters 1 & 2)			X					
Year 4	1. Curriculum Studies 4A (English, Maths) Semester 1	X		X	X		X		
	2. Contemporary Curriculum Develt B (Semester 1)			XX	X				
	3. Curriculum Investigations B (Semester 1)								
	4. Modes of Curriculum Inquiry B (Semester 2)			XX					
	5. Education 4 (Semesters 1 & 2)							XX	XX
	6. Education 5 (Semesters 1 & 2)							X	
	7. School Experience								

COVERAGE OF TEACHING STANDARDS: Monash University
Graduate Diploma in Education – one year Secondary (Clayton)   **GRADUATE DIPLOMA IN EDUCATION**

		Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: communication with parents	ICT
Year 1	Semester 1	• Professional issues 1: a focus on the classroom • Communication, learning and assessment • First teaching methods, part 1A • Second teaching methods, part 2A		X	X XX XX	XX X X X	X			X
	Semester 2	• Educational contexts • Professional issues 2: a focus on the profession • First teaching methods, part 1B • Second teaching methods, part 2B			XX XX	X X		X	X	

* Practicum: A total of 10 weeks of school placements is required.

COURSE STRUCTURE: **POST-GRADUATE DEGREE COURSE**

Queensland University of Technology: Bachelor of Education (Secondary: Internal Students)
Course code: **(ED55)**
Course duration: 2 years; or, 1.5 years Summer Program Option.
Entrance requirements: Applicants must have completed a bachelor degree at least one-third of the undergraduate degree in the nominated first teaching area and one-sixth in the nominated second teaching area.
Students pursue two teaching areas that are offered in the secondary school curriculum

mode			*School experience*
Year 1	Semester 1	1. Human Development And Education 2. Secondary Professional Practice 1: Classroom Management 3. Learning Networks 4. Teaching and Learning Studies 1: Teaching in New Times	Includes 10 single days in a school
	Semester 2	1. Psychology Of Learning And Teaching 2. Secondary Professional Practice 2: Curriculum Decision Making 4. Curriculum Studies 1X (See List 1) 5. Curriculum Studies 1Y (See List 1)	Includes 20 days of practice teaching in a secondary school.
	Summer Program Option	1. Education Studies Elective 2. Education Studies Elective 3. Curriculum Elective 4. Secondary Professional Practice 3: The Inclusive Curriculum	Includes 20days of practice teaching in a secondary school.
Year 2	Semester 1	1. Understanding Educational Practices 2. Secondary Professional Practice 4: The Beginning Teacher 3. Curriculum Studies 2X 4. Curriculum Studies 2Y	Includes 30days of practice teaching in a secondary school

- Applicants who are required to attend an interview or audition for the teaching areas of Arts, Dance, Drama, ESL, LOTE and Music will be contacted by QUT; students for the Art teaching area must have a portfolio of new and recent work ready for submission at this interview.
- International fees 2004: A$7000; 2005: A$7000 (per semester

COVERAGE OF TEACHING STANDARDS: POST-GRADUATE DEGREE COURSE

Queensland University of Technology: Bachelor of Education (Secondary) –
Graduate Course: Internal Students Course code: (ED55)

		Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: Reflection, records, collaboration, communication with parents	ICT
Year 1	Semester 1	1. Human Development And Education 2. Secondary Professional Practice 1: Classroom Management 3. Learning Networks 4. Teaching and Learning Studies 1: Teaching in New Times		XX	X	X	X			XX
	Semester 2	1. Psychology Of Learning And Teaching 2. Secondary Professional Practice 2: Curriculum Decision Making 4. Curriculum Studies 1X (Subject method) 5. Curriculum Studies 1Y (Subject method)		X	XX XX XX	X X X X	X	X X	X	
	Summer option	1. Education Studies Elective 2. Education Studies Elective 3. Curriculum Elective 4. Secondary Professional Practice 3: The Inclusive Curriculum			X				X	
Year 2	Semester 1	1. Understanding Educational Practices 2. Secondary Professional Practice 4: The Beginning Teacher 3. Curriculum Studies 2X 4. Curriculum Studies 2Y			X XX XX	X X		X	X	

COURSE STRUCTURE: **POSTGRADUATE DEGREE**

University of Tasmania: Bachelor of Teaching Two Schedules: one for Primary; one for Secondary)

Course code: E3H:
Entrance requirements: A first degree. Requirements for secondary specialisations are specific to the subject areas. Students should have an adequate degree background in two of the key learning areas.
Course structure and sequence: 2-year postgraduate pre-service course. 26 weeks staff student contact

	Units of study	*Assessment mode*	*School experience*
Year 1	1. Professional studies (Semesters 1 & 2; 15 weeks) 1. Curriculum and method studies A (Semesters 1&2) Cross-curriculum studies: Multiliteracies 3. Curriculum and method studies B (Semesters 1&2) 4. School experience 1&2 (secondary)	-assignments, group and individual presentations, participation, attendance at lectures - e.g. Eng: written paper for Sem. 1 & 2 (60%), participation in workshops and seminars, demonstration of writing, reading, speaking and listening skills (40%) - participation and attendance; portfolio; 5 tests (ICT competencies, quantitative literacy), 1 written assignment - E.g. Sci: Seminar and workshop participation, group and individual presentations, 2 major assignments, resource file -Students receive a developmental report prepared by the school colleague teachers and University supervisor	School Experience 1 (8 half days and 10 full days (block) in an assigned school): introduction and orientation to the teaching profession. Students have a series of questions to focus observations and make connections between theory and practice. School Experience 2 (20 days full time in an assigned school): .builds on the structured observational studies of School Experience 1 with students taking an increased responsibility for planning specific lessons and teaching them to the whole class at planned intervals during the session.
Year 2	Professional studies 2 (Semesters 1 & 2; 13 weeks) (3 modules; Students and Learning; Curriculum, assessment & teaching; The practice of teaching) 2. Curriculum and method studies A (Semesters 1&2) 3. Curriculum and method studies B (Semesters 1&2) 4. School experience 3 (Semesters 1&2) 5. School experience 4 (Internship secondary)	- participation and attendance at lectures, group and individual presentations, essays - participation and attendance at lectures, action research project - demonstration of teaching professional standards through a portfolio. -E.g. Eng.:extensive unit of work in English curriculum (60%), participation in workshops and seminars, demonstrating writing, reading, speaking and listening skills (40%) -E.g. Sci: seminar participation, group and individual presentations, assignments - students receive a developmental report prepared by school colleague teachers - students receive a developmental report prepared by school colleague teachers; successful completion of phase 1 (after 5 weeks) required prior to the student's continuing with phase 2	School experience 3. 20 consecutive days Students required to plan specific lessons and teach these lessons to whole class groups in their specific curriculum areas - build ups to around 80% of the teaching time for the final two weeks of the session. School experience 4. Internship totalling 45. Students required to take full responsibility for teaching assigned classes during approximately 40 days of this session. A Pro Seminar is held following this unit.

No of students in 2003 125   Tas. Teacher Regn Board HECS Yes (Intnl $10,000)

COVERAGE OF TEACHING STANDARDS: **POSTGRADUATE DEGREE**

University of Tasmania: Bachelor of Teaching (Two Schedules: one for primary; one for secondary)

	Unit of study	Subject knowledge (Mainly in first degree)	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: Reflection, records, collaboration, communication with parents	ICT
Year 1	1. Professional studies (Semesters 1 & 2; 15 weeks) Two modules: Students and Learning; Teaching , Curriculum and Assessment.		XX	XX	XX	X	X		
	Cross-Curriculum Studies: Multiliteracies 1				XX	X			XX
					XX	X	X		
	2. Curriculum and method studies A (Semesters 1&2)	X	X	XX	XX	X	X		
	3. Curriculum and method studies B (Semesters 1&2)	X	X	XX	XX	XX	X		
	4. School experience 1&2 (secondary)				XX	XX	X	X	
Year 2	Professional studies 2 (Semesters 1 & 2; 13 weeks) (3 modules; Students and Learning; Curriculum, assessment & teaching; The practice of teaching)		XX	XX	XX		XX		
	2. Curriculum and method studies A (Semesters 1&2)	X	X	XX	XX	X	X		
	3. Curriculum and method studies B (Semesters 1&2)	X	X	XX	XX	X	X		
	4. School experience 3 (Semesters 1&2)				XX			X	
	5. School experience 4 (Internship secondary)				XX			X	

COURSE STRUCURE: UNIVERSITY OF SYDNEY – Master of Teaching (Primary and Secondary)   **POSTGRADUATE DEGREE**

Course components: Two parts: the coursework component (Phases 1 - 5), which runs over three semesters, and the Internship/Post-Internship conference phase (Phase 6), which runs for half of a semester in second year.

In-School experiences**:** consists of a program of observation visits to educational environments in Phase 1 and the first block practice-teaching period (First Practicum) in first year, and a second block practice teaching period (Practicum 2) followed by the Internship in second year. Candidates for the B. Teach exit the program before the Internship

Year	Phase	Theme	Courses & Units of study	School experience
1st year	Phase 1 (6 weeks)	Introduction to Teaching and Learning	• Study 1: Introduction to Teaching and Learning • Information technology for Education • Health & Sports units • Honours Preparatory Options	Observational visits: 5 days
1st year	Phase 2 (10 weeks)	Preparation for the First Practicum	• Study 1: Introduction to Teaching and Learning • Study 2: Specialised Curriculum areas • Information technology for Education • Health & Sports units • Options 1 (some) OR Honours Preparatory Options	
1st year	Phase 3 (4 weeks)	Preparation for the First Practicum	• Study 1: Teachers and Learners - Schools and Communities • Study 2: Specialised Curriculum areas • Information technology • Health & Sports units • Options 1(some) OR Honours Preparatory Options	3 Pre-Practice Days
1st year	Practicum 1 (4 or 5 weeks		.	Practicum 1 (4 or 5 weeks)
1st year	Phase 3 (6 weeks)	Post-Practicum Review and Development	• Study 1: Teachers and Learners - Schools and Communities • Study 2: Specialised Curriculum areas • Information technology for Education • Options 1 (most) OR Honours Special Study Design	
2nd year	Phase 4 (6 weeks)	Preparation for the Second Practicum	• Study 1: Schools in their Communities • Study 2: Specialised Curriculum areas • Special Education: Inclusive Schools • Options 2 OR Honours Special Study	
2nd year	Practicum 2 (4 weeks)	Practice Teaching session	.	Practicum 2 (4 weeks)
2nd year	Phase 5 (6 weeks)	Post-Practicum Review and Preparation for the Internship	• Study 1: Evaluation and accountability • Study 2: Specialised Curriculum areas • Honours Special Study	
2nd year	Internship (10 weeks)	Internship	.	Internship (10 weeks)
2nd year	Post-Internship Conf. (2 days)	Conference	Post-Internship Review and Preparing for entry into the profession	

COVERAGE OF TEACHING STANDARDS   POSTGRADUATE DEGREE
University of Sydney Master of Teaching (Primary and Secondary)

		Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: Reflection, records, communication with parents	ICT
Year 1	Phase 1 (6 weeks)	Study 1: Introduction to Teaching and Learning			X	X	X		X	
		Information technology for Education								XX
		Health & Sports units		X	X	X	X			
		Honours Preparatory Options								
	Phase 2 (10 weeks)	Study 1: Introduction to Teaching and Learning			X	X	X	X	X	
		Study 2: Specialised Curriculum areas			XX	X				
		Information technology for Education								XX
		Health & Sports units								
		Options 1 (some) OR Honours Preparatory Options								
Year 2	Phase 3 (4 weeks)	Study 1: Teachers and Learners - Schools and Communities		X	X	X	X		X	
		Study 2: Specialised Curriculum areas			XX	X	X	X		
		Information technology								
		Health & Sports units								
		Options 1(some) OR Honours Preparatory Options								
	Practicum 1 4 or 5 weeks	.			XX	XX	X	X	X	
Year 3	Phase 3 (6 weeks)	Study 1: Teachers and Learners - Schools and Communities		X					X	
		Study 2: Specialised Curriculum areas								
		Information technology for Education		XX	X	X	X	X		
		Options 1 (most) OR Honours Special Study Design								
	Phase 4 (6 weeks)	Study 1: Schools in their Communities							X	
		Study 2: Specialised Curriculum areas			XX					
		Special Education: Inclusive Schools		XX			X		X	
		Options 2 OR Honours Special Study								
Year 4	Practicum 2 (4 weeks)	.		X	X	XX	X	X	X	
	Phase 5 (6 weeks)	Study 1: Evaluation and accountability			X			XX	X	
		Study 2: Specialised Curriculum areas			XX	X	X	X		
		Honours Special Study								

COURSE STRUCTURE: **DOUBLE DEGREE**
Monash University – Double Degree – Secondary Stream - Course code: 1641 BA/BEd

Course structure and sequence: Four Year full time or equivalent part-time. Fifty percent Arts units; fifty percent education units. 26 weeks staff student contact
80 days of satisfactory teaching practice required for graduation

		Units of study	Proportion of time for education units	
Year 1	Semester 1	1. Perspectives on learning 2. First year Arts unit: Discipline A 3. First year Arts unit: Discipline B 4. First year Arts unit: Discipline C	25%	5 days education practicum
	Semester 2	1. Perspectives on teaching 2. First year Arts unit: Discipline A 3. First year Arts unit: Discipline B 4. First year Arts unit: Discipline C	25%	5 days education practicum
Year 2	Semester 1	1. Beyond the classroom 2. Second year Arts unit: Discipline A 3. Second year Arts unit: Discipline B 4. First or second year Arts unit in discipline A B, C or D	25%	5 days education practicum
	Semester 2	1. The Teacher's World 2. Second year Arts unit: Discipline A 3. Second year Arts unit: Discipline B 4. First or second year Arts unit in discipline A B, C or D	25%	5 days education practicum
Year 3	Semester 1	1. Assessing learning 2. Language and literacy 3. Third year Arts unit: Discipline C# 4. Second or Third year Arts unit: Discipline C#	50%	5 days education practicum
	Semester 2	1. Curriculum and pedagogy 2. Adolescent development 3. Third year Arts unit: Discipline C# 4. Third year Arts unit: Discipline C#	50%	5 days education practicum
Year 4	Semester 1	1. Methods and practice of teaching 1A 2. Methods and practice of teaching 2A 3. Professional issues 1: a focus on the classroom 4. Education Elective	100%	25 days
	Semester 2	1. Methods and practice of teaching 1B 2. Methods and practice of teaching 2B 3. Professional issues 2: a focus on the classroom 4. Education Elective	100%	25 days

Discipline A: Selection of another teaching method area is recommended

Discipline B: Any one of Anthropology, Behavioural studies, Drama, English, Geography, History, Jewish Studies, Linguistics, Politics, Psychology or Sociology

Discipline C: Any one of Ancient History, Anthropology, Behavioural studies, Drama, English, Geography, History, Jewish Studies, LOTE, Music, Linguistics, Politics, Psychology or Sociology

COVERAGE OF TEACHING STANDARDS   **DOUBLE DEGREE**

MONASH UNIVERSITY DOUBLE DEGREE: BA/BED

		Unit of study	Subject knowledge	Knowledge of students and how they learn	Curriculum planning: goals, activities, materials, resources	Teaching skills: communication, questioning, discussion, engagement, challenge, feedback	Classroom environment, organisation, management	Diagnosis and assessment of student learning, providing feedback to students	Professional responsibilities: Reflection, records, collaboration, communication with parents	ICT
Year 1	Semester 1	1. Perspectives on learning 2. First year Arts unit: Discipline A 3. First year Arts unit: Discipline B 4. First year Arts unit: Discipline C	XX XX XX	XX		X				
	Semester 2	1. Perspectives on teaching 2. First year Arts unit: Discipline A 3. First year Arts unit: Discipline B 4. First year Arts unit: Discipline C	XX XX XX	X		XX				
Year 2	Semester 1	1. Beyond the classroom 2. Second year Arts unit: Discipline A 3. Second year Arts unit: Discipline B 4. First or second year Arts unit in discipline A B, C or D	XX XX XX							
	Semester 2	1. The Teacher's World 2. Second year Arts unit: Discipline A 3. Second year Arts unit: Discipline B 4. First or second year Arts unit in discipline A B, C or D	XX XX XX							
Year 3	Semester 1	1. Assessing learning 2. Language and literacy 3. Third year Arts unit: Discipline C# 4. Second or Third year Arts unit: Discipline C#	XX XX		X			XX		
	Semester 2	1. Curriculum and pedagogy 2. Adolescent development 3. Third year Arts unit: Discipline C# 4. Third year Arts unit: Discipline C#	XX XX	XX	X	X				
Year 4	Semester 1	1. Methods and practice of teaching 1A 2. Methods and practice of teaching 2A 3. Professional issues 1: a focus on the classroom 4. Education Elective			XX XX	X X		X X	X	(X)
	Semester 2	1. Methods and practice of teaching 1B 2. Methods and practice of teaching 2B 3. Professional issues 2: a focus on the profession 4. Education Elective			XX XX	X X		X X	X	(X)