Submission 158 TE Inquiry

## Curtin University of Technology Department of Education

## Submission to the Standing Committee on Education and Vocational Training Inquiry into Teacher Education

## Public Hearing 25<sup>th</sup> October 2005.

A team from the Department of Education at Curtin University of Technology prepared the following set of responses. The responses address the Committee's Terms of Reference. Illustrations and examples of excellence from Curtin are provided for each Term of Reference as it is under discussion.

The Department of Education at Curtin University has previously made a submission in writing to the Committee via its membership of the Australian Technology Network of Universities, and the Australian College of Deans of Education.

The first part of this written submission will be a brief overview of some issues identified by the Department of Education, which, with permission of the Chair of the Committee, will act as a preliminary presentation to the Public Hearing.

### **Overview of teacher education at Curtin University**

In the ten minutes or so available I wish to consider on behalf of the Department of Education at Curtin University the following points in relation to teacher education:

- The false notion that teaching is easy and, by implication, that educating novice teachers is also easy;
- The idea that teaching as a career is a journey of learning and development;
- The suggestion that more time spent in school is always better; and
- The strengths of the teacher education programs at Curtin University.

### The false notion that teaching today is easy

It was W. B. Sellar, I think, who observed that 'for every person attracted to teach there are thirty not wanting to be taught'. Any member of the public meeting a group of 15 year olds from a 'bottom set' on Friday afternoon might agree to this statement. On the other hand, thirty excited 5 year olds exploring clay and paint present quite a different challenge. These situations and others require highly knowledgeable, skilled and thoughtful teachers.

The recent fashion to refer to teacher education courses at University as teacher training suggests that preparing novice teachers for the classroom is no more than a transmission of a list of skills for teaching children. The production of a 'bag of tricks' is appealing at the outset, but experience in the complex area of the modern classroom soon shows its limitations as novice teachers have nothing to return to when they meet a situation not found in their bag. We reject this idea, and suggest strongly that teaching and teacher education is a complex, highly skilled, and ever changing undertaking.

### Teaching as a journey of learning and development

The staff in the Department of Education at Curtin University see part of their job is to prepare novice teachers to start this journey. A major part of the preparation is to develop 'thinking teachers' who are able to make informed decisions about what to teach, how to teach it, how to tailor it for children in the class, and how to know if it has been effective in helping children learn. Furthermore, it is expected that novice teachers will develop habits of seeking answers to questions about their practice and their children in the particular context with the aim of constant improvement, personal learning, and professional growth.

Once novice teachers leave their teacher education course at Curtin University as excellent, 'classroom ready', beginning teachers they are starting the next phase of their career and the next part of their learning to become an effective teacher.

#### More time in school is better?

Novice teachers in the undergraduate programs at Curtin University spend a minimum of 100 days in school. In reality, more time is spent in schools interacting with teachers and children. Our tertiary students are often required to work with children in an educational context as part of their assessment work. Others visit schools on a voluntary basis to gain experience with a different age group of children or to assist with Sports Day or school camp. Working with children in real contexts is a vital part of learning to be an effective teacher and forms a central part of programs at Curtin University.

Time in school is a complex issue and a simplistic suggestion that more time in the classroom per se will produce better teachers is questionable. Feedback from teacher education students returning from extended school placement will provide a variety of reactions ranging from it was really great and they learned a lot to it was the worst time of their life and they are thinking of withdrawing from the course. Much depends on the preparation for the time in school, the quality of the experience and the learning that is gained from it. Some tertiary students are placed with a teacher who is willing, able and competent to work with them to help them learn and make the most of the time in schools. Others are left to 'get on with it' with a philosophy that if they survive they will be all right. Most do survive but learn little about effective teaching, ways of managing classrooms, and children's learning. More of the latter is not better.

Availability of quality mentor teachers, availability of a range of schools, and availability over extended periods of time of tertiary students are other factors that need to be added to the discussion. Not all schools, teachers and classrooms are the same. At Curtin University we strive to offer novice teachers a range of experiences and in some cases we insist on it. We have school placements in rural and regional areas available. Many novice teachers are unable to take advantage of these, even though these are most likely to be the areas that will be offering their initial teaching placement. The reality of family commitments, part time employment and limited finances restrict many novice teachers from gaining experience in schools that are distant from their home.

### Teacher education at Curtin University

At Curtin University there are three undergraduate courses for teacher education (B.Ed Early Childhood, Primary and Secondary) and one postgraduate course (Graduate Diploma in Education — Secondary). The B.Ed courses are four years in length while the Graduate Diploma program lasts for one year. School experience is undertaken in local schools, schools in rural areas, and for a limited number of students, in Canada and Thailand as part of Study Abroad offerings.

The development of the 'thinking teacher' and the induction into the profession of teaching begins on the first day with the first class in the first unit. Units, apart from specialist content units, relate theory and research to practice in classrooms, and all practice in the classroom is related back to theory and research.

The initial teacher education programs at Curtin University have a similar structure and are underpinned by similar ideas. The structure has four major parts:

- Core education
- Curriculum and learning areas
- Electives, and majors and minors
- School experience

All programs are embedded with the principle of excellence in literacy and the use of Information and Communication Technologies (ICT). The teaching of children with Special Educational Needs (SEN) also has a priority status within programs. For example, all courses have a mandatory unit on teaching children with special educational needs, other units have SEN issues integrated into them, and there are elective units in the area and some novice teachers opt to specialise by taking a number of them in a SEN theme. There is a deliberate and planned emphasis on the teaching of literacy, mathematics, and ICT in the Early Childhood and Primary courses. Here, along with two and a half mandatory units in each of literacy and mathematics, novice teachers may also opt to study in a specialist pathway in teaching literacy, or teaching mathematics, or teaching with ICTs.

There is an underlying aim in all courses of preparing our graduates to be life-long learners. Units throughout the courses are used to develop such skills as reflective practice, autonomous learning, and participation in professional organizations and activities.

Within the Department of Education, novice teachers are exposed to high quality teaching and the latest writing and research in many areas. For example, Professor Ric Lowe is an international leader in learning technologies and graphicacy, and Associate Professor Heather Jenkins in the area of special educational needs, especially ADHD. Excellence and Innovation in teaching awards at the university and national level have been given in recent times to Dr Rozz Albon, Dr Sandra Frid and myself. Many of the Department staff have had excellent careers in school settings, and most of the sessional staff are either teachers at present or have recent classroom experience.

We welcome the chance to discuss the highly complex, intellectually demanding, and wonderful world of teaching and teacher education.

### Terms of Reference for the Committee

The next section of this document will expand on the issues raised earlier as it discusses the Terms of Reference established for the Committee.

# Examine and assess the criteria for selecting students for teacher training courses

Curtin University relies on the Western Australian Tertiary Education Rankings (TER) to select most students for the Department of Education Secondary, Primary and Early Childhood courses. However, mindful of equity issues, and at the same time wishing to attract a broad range of student teachers, Curtin has a number of alternative routes for entry into teacher education, which while allowing broad access also maintain an entry standard that will ensure student success. These include mature age entry via the (STAT) test, TAFE diploma, and entry for indigenous students via the Centre for Aboriginal Studies. Graduate entry course applicants for the Graduate Diploma in Education (Secondary) program are accepted subject to their Bachelor's degree matching the teaching major offered, the demand for the teaching area, their academic record, and a personal statement.

# Examine the extent to which teacher-training courses can attract high quality students, including students from diverse backgrounds and experiences

Curtin University is committed to maintaining high academic standards and selects from a range of eligible applicants. For undergraduate courses, Year 12 applicants' rankings are based on the Tertiary Entrance Rankings (TER). In 2004 the TER cut off scores were ECE (85), Primary (86), Secondary, (84). Thus, many students entered their degree course with a TER ranking above 85.

Curtin University is also committed to equity and access and accepts non-Year 12 entrants with diverse experiences including those who are returning to study after raising a family or changing career paths, people from rural locations, and people from overseas and Indigenous Australians. These students complete the approved STAT test.

There is a particular focus on prospective students from an Indigenous Australian background who are encouraged to apply for entry through TER or STAT scores or alternatively they may enter Early Childhood and Primary courses via non-standard entry access agreement with Curtin's Centre for Aboriginal Studies. In addition to these pathways an innovative program for Indigenous students has been operating through a partnership between the Department of Education and Training, Western Australia (DETWA) and Curtin's Centre for Aboriginal Studies. In this program Aboriginal and Islander Education Officers (AIEO) who are currently employed in Western Australian schools upgrade their qualifications as they combine their 'in situ' everyday work and university study.

Potential teachers in rural and regional areas of Western Australia are able to access University Teacher Education Early Childhood and Primary courses via Curtin College for Regional Education (CCRE). The College makes the Curtin (Bentley) degrees available in their regional centres in Western Australia, for example Kalgoorlie, Esperance, Geraldton, and, in a new collaboration with the University of Western Australia, in Albany. Males are in a minority within the Early Childhood and Primary degrees, typically less than ten students per hundred. Within the secondary programs the gender balance remains skewed to female (B.Ed secondary 68% female and 32% male, Graduate Diploma secondary 64% female and 36% male). Attracting sufficient numbers of good quality male teachers continues to be an issue for the Department of Education, as it is for many teacher education courses and employing agencies in Australia.

Curtin University endeavours to attract the best quality students to the teacher education course and mentor or support systems are in place to aid all students with their transition to academic work and university life and eventually into the profession of teaching. Generally, we find students entering the courses to be genuinely interested in children and being an integral part of their development and learning.

#### Examine attrition rates from teaching courses and reasons for that attrition.

Attrition from teacher education courses at Curtin University is low. Rates of attrition over a four-year course are typically in the range of 5 to 10%.

The Department of Education at Curtin University has a relatively small number of students, and excellent staff student relationships are developed over four years. High student retention rates can, to a certain extent, be attributed to the excellent pastoral care given by Course Coordinators and Department staff in general, and to the flexibility that a small department has. In other words students can work with staff to ensure they adjust their study load during difficult times. Department of Education staff model 'best practice' regarding the value of knowing one's students, their needs, strengths, and weaknesses.

Specific strategies have been implemented to boost retention rates. These include:

- a dedicated orientation to Education at the beginning of each year of study;
- student mentors assigned to first year students;
- explicit teaching of study skills needed for University study in first year, first semester units;
- an open access to Course Coordinators and all teaching staff;
- designing flexible study loads, where needed; and
- early, supported involvement in school and classroom contexts.

Where students do leave the program it is normally for one or a combination of the following reasons: health, family commitments, and to earn money to support university study (these students often return to study). Sometimes students decide that teaching is an inappropriate career for them. The Department places students into schools in Semester One of their course so that they can make an informed decision as to their ability and inclination to be a teacher. A few students transfer to other university studies at the end of the first semester. On rare occasions a Board of Examiners may terminate the enrolment of a student who does not meet the necessary standards, either academic or practical, to be a novice teacher graduating from Curtin University.

# Examine and assess the criteria for selecting and rewarding education faculty members.

Selection criteria for staff positions have, among others, essential criteria of a Ph.D., excellence in teaching in schools or tertiary settings, personal research, supervision of

higher degree students, and publication. When these criteria are combined with other factors such as the relative isolation of Western Australia, and a starting salary of \$61 000 at Lecturer B level (a classroom teacher after 7 years has a similar salary), the pool of available new staff in the area of teacher education is limited and diminishing.

Extensive use is made of practising teachers to provide sessional teaching and guest lectures. This is a planned strategy of the Department as a way to add expertise of current classroom teachers to the delivery of a unit.

Tenured staff at Curtin University can apply and are encouraged to apply for promotion. Promotion is assessed against criteria for performance and excellence in three general areas – Research and Development, Teaching and Learning, and Leadership and Community Involvement.

Over recent years the number of full time, tenured staff in Education at Curtin University has reduced. This has resulted in increased teaching loads and a decrease in time available to apply for research opportunities and to design and conduct worthwhile and relevant research and consultancy. This appears typical of many Australian University Education faculties.

Examine the educational philosophy underpinning the teacher training courses (including the teaching methods used, course structure and materials, and methods of assessment and education) and assess the extent to which it is informed by research.

Sound educational research, both Australian and international, underpins programs in the Department of Education and informs the continuing development and evaluation of programs. Relevant pedagogical and curricula innovations are incorporated into the course to ensure that students have access to up-to-date research-based programs.

The Department of Education has developed a list of Graduate Outcomes for its students. These outcomes are derived from Curtin University's Graduate Attributes, an earlier list from the Department, and the Department of Education and Training of Western Australia's (DETWA) list of competencies for a beginning teacher. All units and courses aim to develop students in these general areas over the four years of their course.

The Department of Education graduate outcomes are as follows:

### **Disciplinary Knowledge in Education**

On completion of studies in education graduates:

- 1. make informed decisions regarding teaching and learning based on a comprehensive understanding of the development of the learner;
- 2. are self-motivated, critical and reflective in their approach to teaching and learning;
- 3. can plan, implement and evaluate a range of teaching, learning and assessment practices;
- 4. analyse and apply appropriate practices based on a sound knowledge of learning area content;

5. create and manage learning environments;

- 6. understand the development and application of curriculum;
- 7. can integrate the socio-cultural contexts and values of education within their educational scholarship and practice.

#### **Development as a Professional Educator**

On completion of studies in education graduates:

8.demonstrate the attributes of lifelong learners;

9. communicate effectively in contextually appropriate ways;

- 10. demonstrate autonomy and initiative to research and solve problems;
- 11. are able to work collaboratively in educational contexts;
- 12. value professional and community partnerships in education;
- 13. demonstrate leadership in education.

Teaching is a highly interactive and very complex undertaking. Notions of simplistic, skills-based applications are naïve, limited and inappropriate to the development of a professional ready to begin a teaching career in the 21<sup>st</sup> Century. Curtin University strives to produce thinking teachers who are able to assess and apply a range of teaching techniques, creatively design and develop curriculum, and use classroom management along with teaching strategies as needed at the time and specific to the context. Reflection on practice and reflection in practice form a further layer in developing the ability of the novice teacher. Integrated throughout the courses is the development of personal and professional values in the novice teachers. Teacher education at Curtin University is seen as a preparatory program, one that prepares teachers, not only for their first few years of working in schools and education contexts, but also for leadership and personal, professional development over their careers.

The following paragraphs illustrate how this philosophy is put into practice within the secondary teacher education programs. Other programs within the Department of Education emphasise similar important issues.

There are many skills a person needs in order to be a successful high school teacher. Examples of these are to gain the attention of a room full of teenagers, to prepare lessons that meet the needs of a range of students' abilities and interests, and to use questions appropriately to help teenagers learn. Of course there are many other things but these are useful examples.

#### Gaining attention

How does a teacher gain the attention of a room full of teenagers? And how do we help novice teachers to be able to it? There is not one answer to this: successful, experienced teachers will do this in many ways. So, as teacher educators, we can give the novice teachers ways to gain the attention of a room full of teenagers. We can provide them with a repertoire of ways that are successful for other teachers. But this is not enough. The novice teachers will need to find the ways that are successful for them, the ways that are consonant with what they believe and how they wish to act in a classroom. Further, to be successful, they will need to develop the judgement about when to use one method from their repertoire and when to use a different one. As teacher educators we need to help them to achieve this. This learning experience is a rich and complex one, and a personal one for each novice teacher. This learning experience is an intricate mix of theory and practice, of action and reflection, of collaboration and personal thinking. Some novice teachers are able to gain the attention of a room full of teenagers quite quickly, while others struggle with this for some time in ways that can be emotional and draining. At Curtin University we are committed to helping every novice teacher achieve this ability. This is just one of many particular abilities that successful high school teachers have and that novice teachers need to develop.

#### Lesson planning

When starting to discuss lesson planning we tell the novice teachers enrolled in our teacher education courses that they can find on the Internet a lesson plan on any topic for any age group of school students. But we also guarantee that if they download it and try to use it, the lesson plan will not work. The essential elements of lesson planning are in the process of doing it rather than in the product. At Curtin University we engage novice teachers with planning a range of learning experiences for their peers and for school students. Last year one novice teacher told us he took 16 hours to prepare his first ten-minute microteaching lesson to his peers. He was quite pleased with the way it went, but when he reflected about it after receiving feedback from us and from his peers he realised improvements could be made. This process again is a complicated interaction between practice, theory and reflection. At Curtin University we are committed to working with every novice teacher in this way.

An important part of planning a lesson is deciding on the learning strategies for the students: matching the learning activities to the content, to the intended outcomes, to the context and to the students in the class. We encourage novice teachers to consider that group work is sometimes appropriate, explanation to the whole class from the front is sometimes appropriate, and use of books and equipment is often useful. We suggest that over a period of time variety of teaching and learning approaches will lead to increased motivation in students, rather than doing the same thing over and over. At Curtin University we help novice teachers to become familiar with a variety of teaching strategies and models. They practise using these models and strategies in high schools and microteaching sessions at the University. Simplistic ideas about the use of 'group work' or 'teacher-centred learning' do not seem useful. Rather we help novice teachers to be able to use a variety of strategies, stressing that whatever they do they need to do it well. We try to help them develop the judgement about when to use particular methods, when to persist and when to change course. Like other aspects of high school teaching this involves reflection and discussion, the interaction between practice and theory.

#### Answering questions

What should a high school teacher do when a student in the class asks a question? Of course there is no one answer to this. It depends on many things such as the context, the question itself, the student's motivation and what the other students in the class are doing. Most novice teachers will try to answer the question immediately, but this is not always the best thing to do. The interactions going on in the classroom are complex: maybe the teacher needs to help the student form a clearer question, maybe the teacher can respond with a question, maybe there needs to be some quiet time so that all class members can think, maybe other class members should be invited to respond, and if so should this be volunteers or should the teacher ask a particular student. If you watch successful, experienced teachers they will make these decisions quickly and well, and the observer might not even realise that decisions were made. It

appears seamless. Experienced teachers themselves often do not know why they have taken a certain action: it was just 'the right thing to do'. There are hundreds of decisions like this one in a day and little time to reflect on them. Novice teachers need to engage with these situations, to think about the detail and to reflect about it. It may take a considerable amount of time thinking about and discussing an apparently small aspect of teaching. At Curtin University we are committed to helping each novice teacher with these processes and with the aspects of high school teaching that are personally important to them.

These three specific examples – gaining attention, lesson planning and responding to a student question – are three from hundreds that could be selected to make the point that supposed 'skills' are implemented successfully by experienced teachers within complex situations requiring sensitive judgements and decision-making. Development of these abilities in novice teachers requires a great deal more than just being 'provided' with the skills.

Of course high school teachers should know their content well and be good at spelling, at reading, at adding up and at other basic skills. But this is not enough. They need to be good listeners, they need to be good communicators, they need to be able to form positive relationships with young people and other adults, and they need persistence, patience and energy. Teacher education programs should help develop these abilities and a range of others. Beyond skills there is a range of moral dispositions that are associated with successful high school teaching, such as a concerned and caring approach to students and honesty in interactions. Time spent on consideration of these and helping novice teachers find their own positions regarding them is also important in teacher education.

A teacher education program does need to make a range of knowledge available to the novice teachers and help them to learn it. Knowledge about children and young people and their individual and group behaviours, knowledge about societies' expectations of schools and teachers, knowledge of the subjects they are to teach, knowledge of curriculum both generally and in specific terms and knowledge of the needs of special groups in our schools are all essential. But 'giving' the novice teachers the knowledge is not enough. Teacher education has the responsibility to ensure that people can 'do' teaching and not just know about it. The connections between the practice and the theory are used to achieve this. The novice teachers do need to know about it, they do need to think about it and to understand that they need to keep thinking about it as long as they are teachers: but they also need to be able to 'do' it.

Few would argue that high school teaching is easy. When we look at the array of knowledge, skills and dispositions that successful high school teachers possess we can see that it is a rich and complex set existing in demanding and ever-changing environments. Why then would it be an easy matter for a novice entering the profession to become good at it?

And why would it be 'easy' to work in teacher education helping these novice teachers? At Curtin University we reject completely the notion of 'teacher training', that teacher preparation should in some way be skills development as if teachers were technicians. The idea of 'providing' novice teachers with lists of necessary skills and knowledge, having them practise without thinking and reflection, and sending them out as if prepared is ludicrous; the research from the last 100 years should enable us to be certain about that. Courses must provide connections between practice and theory, both educational and personal theory, explore beliefs and different points of view, and help novice teachers to build on their successes and learn from their failures by engaging in reflective practice. Graduates need to be not only skilled in practice but also in making the necessary judgements and decisions relating to school students, schools and school communities.

Courses at Curtin University are structured towards the practical and applicable with a focus on theory into practice and informed decision-making. Emphasis is placed on the application, reflection and evaluation of research-informed methods and techniques for teaching, learning and managing children and classrooms. Hence, classroom-experienced members of the Department of Education teach the majority of units. The structure of degrees allows for the inclusion of expertise from other Departments of the University where this is needed and is appropriate. For example, University experts in mathematics, physics, English and art teach specialist content knowledge for the B.Ed (secondary) degree. Double degree structures also combine expertise from the Department of Education and the wider University. Early Childhood and Primary students have access to expertise throughout the University via the 'elective' units of the degree. Typically, the areas consulted are: Asian languages such as Indonesian and Japanese, speech and hearing, psychology and Aboriginal Studies. Access to other Western Australian Universities is available via cross-institutional credits. Recent examples that students have undertaken include Drama at Edith Cowan University, and human movement at the University of Western Australia.

Research underpins all units taught in the Department of Education. Members of staff are knowledgeable of recent research and development in their particular areas and use this to inform their teaching. Many are active researchers and developers and use results and innovations from their work with their students. Other department members are researching their own tertiary teaching and use this and the findings of fellow researchers in the delivery of their units. A number of the Department of Education staff, notably Dr Albon, Dr Frid and Dr Sparrow, have received awards for their excellence and innovation in teaching from Curtin University and the Australian University Teaching Committee.

Assessment of novice teacher learning again reflects a practical and applied philosophy. Assessment tasks are related directly to children, classrooms and the craft of teaching. They involve critical reflection and are supported by research. Specific examples, which also embed elements of personal professional development and a philosophy of life-long learning are the units of Critical Inquiry in the B.Ed (Secondary) and Action Learning in the Early Childhood and Primary degrees.

More detailed examples include the final Internship year action learning, mathematics education and integrated programming units that are directly aligned to real children in real classrooms. Curtin University students are required to prepare for action learning by identifying an area of need in their practicum class, undertaking a literature review in the area, designing a method to study the topic, and conducting the study in classrooms during their final, ten week practice. They are required to

report their data and analysis at a fourth year student conference that concludes their course.

The integrated planning unit requires students to spend time before their final practicum with their cooperating teacher and children so they can effectively program for their ten-week classroom experience. Students develop and justify a detailed written philosophy of teaching and learning based on their theoretical knowledge, beliefs about sound pedagogy, personal studies and classroom experiences over the previous four years. The philosophy explains the basis on which they will make future decisions about pedagogy, classroom management, and relationships with parents and the school community in which they will teach. In this unit Curtin University students also undertake study into the current policies and programs of the WA Department of Education in such areas as reporting and assessment, duty of care, child protection, *Making Consistent Judgements* in English and Mathematics and other curriculum initiatives.

Mathematics education has as its final piece of assessment a Professional Portfolio Presentation. This event involves approximately 80 guest interviewers from schools, parents, employing departments, other universities and professional associations. Final year Primary and Early Childhood students present their Mathematics Teaching Portfolio to guest interviewers.

In summary, teacher education students at Curtin University are prepared with the skills, experience, and knowledge needed for them to undertake four important roles of an effective teacher, not only as they work through their course at Curtin but also as they develop in their career as a teacher. The roles are:

- the *teacher as a teacher and learner*, where the teachers learn about their practice, effectiveness, and their students by thinking, reflecting and connecting what they have done to what is known about effective teaching;
- the *teacher as a leader*, where teachers work with others to develop and enhance the teaching and learning environment in classrooms, schools and districts;
- the *teacher as a designer*, where teachers design curriculum appropriate to their children and context and, in fact, become creative problem solvers; and
- the *teacher as a researcher*, where teachers research their own practice and resolve their own problems by using what is known and applying it to their context and then evaluating the results.

These generic roles are robust and applicable to different contexts, different times, and to different people. They are adaptable and form the basis of continued professional learning and development.

# Examine the interaction and relationships between teacher training courses and other University Faculty disciplines.

The greatest interaction between the Department of Education and other University faculties lies in the Secondary education courses. For example, in the B.Ed (Secondary) course all specialist content units are taught in the appropriate University Department. There are also a number of double degree courses, namely:

- BA/B.Ed English and Secondary Education
- BA/B.Ed Asian Languages and Secondary Education
- BA/B.Ed Social science and Secondary Education
- BSc./B.Ed Physics or Chemistry or Mathematics or Environmental Biology and Secondary Education

Members of the Department of Education also have research and development links and relationships with other Departments within the University, for example, nursing, psychology, Internet studies and business.

### Examine the preparation of Primary and Secondary teaching graduates to:

#### 1. teach literacy and numeracy

All students in the initial teacher education program at Curtin University demonstrate high levels of personal literacy in their academic and schoolbased work. Specifically, all students meet Curtin University's requirement in English to gain entry into the course. Furthermore, all students pass a Department of Education English Competency test in spelling and writing. This has been the case for the last ten years. Students who do not meet the pass mark are supported to develop their basic knowledge in a compulsory unit that addresses 'English for Teachers' before they are able to undertake their final teaching practice. The tests are taken early in the course and all tertiary students are supported in their endeavour to improve their English use.

All students in the Secondary programs complete a unit in 'Stepping Out', which provides literacy development strategies in English and in other learning areas of the curriculum.

Early Childhood and Primary students complete two and a half units in teaching literacy where they learn and implement specific strategies for teaching oral language, listening, spelling, writing, reading and viewing. The units are designed to provide sound theoretical knowledge as well as opportunities for the practical application of this knowledge. The units are updated annually to ensure they reflect current research-based information, meet the expectations of the profession in terms of providing essential teaching expertise in literacy, and reflect the Western Australian curriculum documents. In addition, all other learning area curriculum units address the possible literacy focuses and teaching opportunities. This provides Curtin graduates with a sound understanding of the need to teach literacy in all learning areas.

Students may also elect to complete some or all of four literacy electives that provide a pathway to prepare them for leadership in the literacy area in schools.

Students entering the B.Ed (Primary) course must also achieve Year 12 mathematics or its equivalent before they are able to gain a place. Students in the Early Childhood and Primary programs also have to demonstrate an exit level of competence in Mathematics. The Department of Education Mathematics competency test is completed towards the end of the first year of

the course. Any students who do not meet the 80% pass mark are supported to develop their basic knowledge in a compulsory unit that addresses 'Mathematics for Teachers'.

Within the B.Ed Early Childhood and Primary courses there are two and a half units on teaching mathematics. All students take these units. There is also an elective pathway of four extra units in teaching and leading in mathematics that some students take.

#### 2. teach vocational education courses;

Students in the B.Ed (Secondary) and Graduate Diploma (Secondary) programs are able to enrol in a unit that will provide background knowledge, strategies and experience in assessment and workplace learning. Further discussions and development for the Secondary programs into this area are planned.

### 3. effectively manage classrooms;

Curtin University students undertake four professional practice units that are a combination of theory and practice in managing classrooms and children. Students must pass both the theoretical and practical components of each unit. All school practices are assessed in part on the student's ability to manage, organise and control the classroom environment.

Specific strategies are introduced and evaluated for strengths and weaknesses in university units. These strategies are applied in the reality of school classrooms where they form a focus for conversations between cooperating teachers, the teacher education student, and the university supervisor. Reflections and examples from the reality of the school are brought back to the university class for further discussion.

Behaviour management strategies and methods are an integral part of Curtin University's program. Reflective practice units pay explicit attention to these and they are also a focus of time spent in school. Other units, such as those in Educational psychology and Special Educational Needs, also have a particular emphasis on behaviour management.

#### 4. successfully use information technology;

Along with literacy and numeracy, information and communications technology (ICT) is seen as an essential element of Curtin University's preparation of Secondary, Early Childhood and Primary teachers.

All first year, first semester Early Childhood and Primary tertiary students (second year in Secondary) take a core unit *Technology in Education*. This unit prepares them not only for using and effectively managing ICT in an educational context but also develops their personal use and knowledge. The use of ICT is central to students' own work and learning via WebCT, for example, iLectures, podcasting as well as being integrated into other learning areas and school placement.

The *Technology in Education* core unit also enables students to design and develop an electronic portfolio that they will continue to use throughout their four-year degree. E-portfolios will encourage and allow students to reflect upon and make judgements about learning and professional development. From the Department of Education's point of view this will provide a valid accountability process in that it allows the lecturers throughout the four-year course to chart student development against the Department of Education's graduate outcomes.

Many tertiary students, approximately a third, opt to take a specialist pathway in ICT to establish them as highly competent users and leaders in educational contexts. A feature of units in learning technologies at Curtin is that they are innovative, often groundbreaking and are taught by leaders in the field. The approach to ICT at Curtin goes well beyond usual approaches. It has a crucial extra dimension in that it prepares novice teachers to design and develop their own tailor-made technology-based learning materials.

Tertiary students in secondary courses also undertake an introductory unit that provides basic and advanced knowledge and application of ICTs. Secondary courses also develop specialist ICT teachers.

#### 5. deal with bullying and disruptive students and dysfunctional families;

All novice teachers address these issues in the first year of their course. Specific time is given to working with students with social and emotional needs. This includes students who bully or are bullied. There is an optional assignment on bullying, and tertiary students who take this option prepare a workshop for their colleagues and lead them to a greater understanding of the issues and management techniques and strategies available for issues of bullying.

There are also lectures and workshops related to students with special behavioural needs. These cover general management techniques suitable for the whole class as well as more difficult students. References are provided for further resources. Again there is a workshop topic that covers students with autism spectrum disorders and students with attention disorders (ADD and ADHD). All students therefore engage in learning activities focussing on the characteristics of these students and on effective teaching strategies, and have fact sheets and further resources made available.

Another topic in the first year unit is dealing with parents, professionals and paraprofessionals such as teacher assistants. Although not covering dysfunctional families as such, students consider the nature of parent-teacher relationships, especially with difficult students, and strategies they can use to engage with and collaborate with parents. All these topics are covered in more depth and detail in some of the special needs electives that many tertiary students undertake.

#### 6. deal with children with Special needs and disabilities.

All Early Childhood, Primary and Secondary students take a compulsory unit that develops knowledge, skills and strategies for working with children with Special Educational Needs (SEN). Early Childhood, Primary and Secondary students can also elect to follow a specialist pathway in SEN. These students are able to gain accreditation with the Department of Education and Training WA (DETWA) to teach students with special needs in more specialist settings such as education support units, centres and schools. Other learning area units integrate aspects of inclusivity and apply principles to their content and teaching strategies.

#### 7. achieve accreditation;

All novice teachers graduating from Curtin University are able to gain accreditation with the newly formed Western Australian College of Teaching. The Curtin University B.Ed degree is recognised in other Australian states, the United Kingdom, North America, and many countries worldwide.

# 8. deal with senior staff, fellow teachers, school boards, education authorities, parents, community groups and other related government departments.

The School Experience team at Curtin University invite special guests representing various Government departments, for example the Western Australian College of Teaching, to provide information and advice sessions to keep novice teachers up to date with current trends and policies. These regular seminars help to keep the novice teachers as informed as possible and is the key to helping them relate and deal with others within their community.

# Examine the role and input of schools and their staff to the preparation of trainee teachers

Working with schools and teachers is central to the preparation of novice teachers at Curtin University. The role of schools and teachers, at present, involves supervision and development of teacher education students in educational settings, membership of Advisory and other Committees, working as sessional staff members, and as colleagues on action learning and other development projects.

Sessional staff members are often current teachers. For example, a school principal teaches on reflective practice units, a Year 5 teacher works on the primary society and environment unit, a Curriculum Consultant teaches part of the action learning unit, and a teacher recently in the classroom teaches the Early Childhood Literacy units. In the secondary programs, it is a deliberate policy in the Department to engage teachers with current or recent classroom experience to teach the subject specific Curriculum and Instruction units. Other units, for example in the Graduate Diploma (Secondary) course, use current teachers as guests to discuss behavioural scenarios and responses to discipline issues.

#### Issue

At present, the identification and successful acquisition of quality, and in some cases any, places in school for school experience, is becoming increasingly difficult. It is almost impossible to gain a place for every secondary novice teacher to undertake teaching practice in the area of expertise. The difficulty is less intense in Early Childhood and Primary courses but is already a growing concern. Generally, Curtin University is able to obtain places with supportive and excellent teachers. This is not always the case and at times students are placed with a teacher whose classroom practice is not an example of effective teaching. This is a continual and growing problem. The Department of Education is reviewing its use of placements in school, its relationships with teachers, and how it interacts with the major local employers with a view to improving both the quality of in-school and in-university learning.

# Investigate the appropriateness of the current split between primary and secondary education training

Curtin has courses specific to the normal years of schooling in Western Australia, namely, Early Childhood Years K-3, Primary Years 1-7 and Secondary Years 8-12. Some elective units and a number of core education units, where appropriate, are taught as a K-12 group with Early Childhood, Primary, and Secondary tertiary students in the same lecture.

# Examine the construction, delivery and resourcing of ongoing professional learning for teachers already in the workforce

At present Curtin University offers postgraduate courses at Diploma, Masters and Doctoral levels. There is also a B.Ed. Conversion program that enables teachers with two and three year qualifications to gain a four-year B.Ed. qualification. A number of units, especially those in Training and Development, are offered in modern, on-line formats and are particularly suitable for teachers who are working full-time or are in distant locations.

Many staff members within the Department of Education work with teachers in research settings in school while others engage in professional development activities. Novice teachers from Curtin University are often asked to run professional development sessions for the teachers. For example, on the recent final teaching practice Amy Arnold provided information and advice on WebQuest, while James Green spoke on assessment practices.

Submission prepared for the Standing Committee by Dr Len Sparrow from information and comment supplied by: Ms Jackie Becher Dr Susan Beltman Dr Yvonne Carnellor Dr Rich Coatney Professor Graham Dellar Mr Greg Dick Dr Kathryn Dixon Dr Sandra Frid Mr Robin Groves Department of Education Professor Ric Lowe Curtin University of Technology Dr Lina Pelliccione GPO Box U1987 Dr Glenda Raison Perth WA 6845 Associate Professor Sue Trinidad