NSW Education and Training Portfolio

Submission to

The Australian Parliament's

House of Representatives

Standing Committee on Education and Vocation Training

Inquiry into Teacher Education

Table of Contents

EXECUTIV	/E SUMMARY1
SECTION	1 – RECOGNITION4
1.1	RECOMMENDATION FROM SECTION 1
SECTION	2 – RELEVANCE
2.1	More relevant to workforce planning6
2.2	More relevant to curriculum content11
2.3	RECOMMENDATIONS FROM SECTION 2
SECTION	3 – RESOURCING13
3.1	INCREASE FUNDING FOR THE TEACHING PRACTICUM
3.2	Abolish Fringe Benefits Tax on State teacher training initiatives14
3.3	PEG HECS PAYMENTS FOR MATHS AND SCIENCE AT THE SAME LEVEL AS FOR
	EDUCATION
3.4	RECOMMENDATIONS FROM SECTION 317
CONCLUS	5ION

EXECUTIVE SUMMARY

New South Wales (NSW) welcomes this national inquiry into teacher education and the opportunity to participate in it. NSW believes that greater input by State and Territory governments and employers into the management of teacher-training courses is required as well as realigned resourcing structures that strengthen these courses.

The following submission is divided into three sections:

- 1. Recognition;
- 2. Relevance; &
- 3. Resourcing.

Section 1: Recognition

There is a need to formally assess and then, if appropriate, recognise Australia's many teacher-training courses against national standards.

NSW supports the role of the National Institute for Quality Teaching and School Leadership (NIQTSL) to lead a national accreditation process that ensures a consistent base standard of quality for teaching graduates. But the legitimate interests of States and Territories must also be recognised. If genuine coordination and collaboration is to occur in a national accreditation of teacher-training courses, then the State and Territory bodies authorised with regulating teaching standards (such as the NSW Institute of Teachers) must be directly involved in setting and supervising those standards.

Recommendation from Section 1

i) That any Commonwealth approach to the accreditation of teacher education courses recognises the role of State governments expressed through their regulatory body (which in NSW is the NSW Institute of Teachers).

Section 2: Relevance

State governments have a legitimate interest in the provision, mix, allocation and content of teacher education courses. School education consumes almost a quarter of the NSW State budget and is one of the largest and most important areas of State government responsibility. Yet the State currently has little formal input into the training of its teaching workforce.

National investment in teacher education (including Commonwealth and student contributions) is approximately half a billion dollars each year. Yet this investment occurs without adequately consulting the needs of the groups that rely on its outcomes; namely, State governments and employers. Regular, formal consultation with the end users of this investment would benefit everyone. School students would benefit from high quality teaching,

graduates of teaching courses would be better prepared for the realities of teaching in contemporary classrooms, Governments and the community would have greater assurance of the quality of teacher preparation, employers could avoid shortages and over-supply in workforce planning, and the State and the nation could maximise government resources. These are achievable goals if the graduates that universities produce were more aligned to the needs of the profession and employers.

The nation's investment in teacher education would be made more relevant and cost effective by increasing the formal involvement of State employers and the teaching profession. NSW believes that student places should be distributed to universities on the basis of strategic consultations with States and Territories and linked to systems' recruitment and teacher development needs. Formal mechanisms should also be introduced to link teacher course content more closely to State Boards of Studies requirements.

Recommendations from Section 2

- i) That regular and formal consultation between the NSW Government, the Commonwealth Government, State government and nongovernment teacher employers, universities and the NSW Institute of Teachers be established to consider the most appropriate allocation of government resources to ensure the adequate supply of quality teachers in NSW.
- ii) That greater consultation between universities and the NSW Board of Studies occurs to ensure that graduates of teacher education courses are equipped with adequate knowledge and familiarity with school curriculum and syllabuses.

Section 3: Resourcing

The resourcing of teacher education currently has dysfunctional elements that must be changed as a matter of priority. NSW believes that three features of the current resourcing regime for teacher training should be changed:

- 1. The Commonwealth must increase funding for the teaching practicum, the crucial, practical component of teacher education courses, while also ensuring the best use is made of this funding.
- 2. The fringe benefits tax (FBT) that currently applies to State teacher training initiatives must be abolished as a matter of urgency. It is untenable for the Commonwealth to fund university teacher training courses without reference to State needs and then for the Commonwealth to impose FBT on State initiatives to re-train teachers in areas that it does need.
- 3. Pegging HECS levels for undergraduate maths and science students to the current level for education may increase the supply of maths and science teachers, especially if the discount is linked to student

commitment to enter teaching. The Commonwealth can also assist government and non-government sectors staff schools in the State's areas of greatest need by reducing the HECS debt of graduates who agree to teach in these areas.

Recommendations from Section 3:

- i) That the Commonwealth provide additional and dedicated funding of professional experience components of teacher education programs to cover the true cost of universities providing a sufficient amount of quality professional experience within programs.
- ii) That Fringe Benefits Tax be abolished on State teacher scholarships and sponsorships.
- iii) That HECS be pegged for undergraduate mathematics and science students at the current level for education (\$3,847), in order to increase the number of students undertaking mathematics and science degrees who might enter graduate entry teacher education courses in these areas. The maintenance of HECS at this level could be linked specifically to student commitment to enter teaching.
- iv) That the HECS debt of teacher education graduates who agree to teach in hard to staff areas should be reduced.

SECTION 1 – RECOGNITION

The quality of the teaching workforce is crucial in providing excellent education. The significance of teacher quality is highlighted by research conducted by Dr Ken Rowe, Research Director, Australian Council for Educational Research (2003) which shows that the quality of teaching and learning provision are by far the most salient influences on students' outcomes, regardless of their gender or backgrounds.¹ Other research indicates that teacher quality is the single greatest factor in explaining student achievement.²

Creating quality teachers is not the exclusive responsibility of teacher education providers. Yet teacher training plays a significant role in the preparation of teachers and consumes considerable taxpayer funds each year.

Australia must have a process to recognise its many teacher-training courses as having met a national standard. The national endorsement of teacher education programs would raise the status of these programs and of the teachers who graduate from them. Consistent quality as measured by a national standard would also increase Australia's competitiveness in an increasingly international teacher education market.

It is timely for a national approach on this issue as there is currently no way of judging consistency in the standard of initial teacher preparation programs across States and Territories. There is no single framework that underpins initial teacher education in Australia and consequently, no way of judging consistency in the outcomes of initial teacher preparation programs. The Australian Universities Quality Agency (AUQA) plays a role but its primary responsibility is to audit the existing quality assurance arrangements of higher education institutions. Specific standards are required to ensure consistency in the quality of graduate teachers and hence student outcomes.

These standards would clarify the basic requirements and expectations for newly trained teachers. It is suggested that minimum standards be set for graduate teachers. This would ensure that universities will be free to plan their particular courses to meet these minimum standards and that the diversity of teacher-training programs is not compromised.

The National Institute for Quality Teaching and School Leadership (NIQTSL), chaired by Dr Gregor Ramsey, is well placed to lead this national recognition process. NSW also notes that NIQTSL supports a national system but

¹ Rowe, K. J. 2003. *The Importance of Teacher Quality as a Key Determinant of Students' Experiences and Outcomes of Schooling*. Discussion paper prepared on behalf of the Interim Committee for NSW Institute of Teachers, Sydney.

² Lovat, T. J. 2003. *The Role of the Teacher: Coming of Age?* Discussion paper, Australian Council of Deans of Education, Victoria. p 2.

believes any national system should recognise the States' accreditation frameworks. $\!\!\!^3$

NSW believes in national coordination and collaboration in the important task of accrediting pre-service teacher education programs. But NSW strongly believes that the legitimate interests of the different levels of government must be respected. The State of NSW recognises that any regulatory framework for school teachers – such as accreditation of higher education courses – needs to include Commonwealth involvement but this accreditation process would be weakened if it was solely Commonwealth based and did not also involve all States and Territories.

1.1 Recommendation from Section 1

ii) That any Commonwealth approach to the accreditation of teacher education courses recognises the role of State governments expressed through their regulatory body (which in NSW is the NSW Institute of Teachers).

³ NIQTSL. March 2005. "Report on Fifth Meeting of the National Institute for Quality Teaching and School Leadership," Canberra, 4 March 2005.

SECTION 2 – RELEVANCE

Two elements requiring greater relevance in teacher training are:

- 2.1 workforce planning, and
- 2.2 course content.

2.1 More relevant to workforce planning

School education providers in NSW have a very limited role in the preparation of their future teachers. The consequence of this lack of voice is reduced relevance for courses and lost opportunities for the prospective teacher, the State and the nation.

Background

The interests of teacher employers are generally not heard in the teaching programs conducted by universities. Yet the sole provision of pre-service teacher education by Commonwealth funded universities, rather than the State, is a fairly recent phenomenon.

For most of the last century a dual system of teacher training existed in Australia. State controlled Teachers' Colleges, which were absorbed in the 1970s by Colleges of Advanced Education (within which teacher education remained the most significant element), coexisted with Commonwealth controlled university-based teacher training. State education departments had a close association with Teachers' Colleges and Colleges of Advanced Education with respect to course design and delivery, school experience and relationship of courses to teacher workforce priorities.

In the late 1980s, Commonwealth Government policy reforms abolished this dual system, resulting in the merging of some Colleges of Advanced Education with existing universities as well as the amalgamation of other Colleges of Advanced Education to form new universities. Faculties or Schools of Education within universities were established and were responsible for the delivery of teacher training.

In this way, teacher training became the sole domain of universities that were funded by and accountable to the Commonwealth Government. It became largely a responsibility of each university, as independent institutions with the discretion to make decisions on internal resource allocation including the distribution of student places across courses, to decide the mix of courses they offered. One consequence of this greater autonomy was that universities cut resources for teacher education by approximately 50% from the mid 1980s to the mid 1990s.⁴

⁴ The NSW Ministerial Council on the Quality Report *Initial and Continuing Education for the 21st Century* stated that the proportion of higher education load attributable to teacher education declined from more than 20 per cent of load in 1983 to just over 11 per cent of load in 1997.

Previous Consultation

The transition to Commonwealth funded university based teacher training made the link between the needs and priorities of State governments and the provision of teacher education more tenuous. However, even within this context, State and Commonwealth governments did engage in some discussion about State needs. In 1991, a Ministerial-level agreement on higher education responsibilities between the Commonwealth and States and Territories came into operation. Among other provisions, this set up a Joint Planning Committee (JPC) between each State and Territory and the Commonwealth for bilateral negotiations on university funding and policy matters, allowing formal expression of expected graduate needs to the Commonwealth.

However, the 1991 agreement progressively weakened and was abandoned by the Commonwealth without consultation with States and Territories in 2004. There is now no formal process for State and Territory input to the Commonwealth on the nature and extent of teacher training, or any of the other State workforce planning needs. University decision-making around resource allocation continues to be driven by student demand and Commonwealth Government guidelines.

The NSW Department of Education and Training (DET) regularly informs Deans of Education in all NSW and ACT universities of teacher workforce needs. This has led to some new courses and initiatives being implemented. The DET will continue to encourage universities to provide additional teacher education places in areas of shortfall. However, such consultation has not always translated into teacher education courses reflecting those needs.

As a consequence, the DET often has to collaborate with individual universities to develop teacher-training initiatives that are specifically designed to address the shortage of teachers in particular curriculum areas. These initiatives have been at significant State expense and are described in more detail below (under 3.2).

Despite being the largest employer of teachers in Australia, the DET has limited influence over the decisions taken within NSW universities concerning the provision of teacher education courses, the allocation of places in courses and the mix of undergraduate and postgraduate courses provided. DET's only influence is to determine the minimum academic requirements for teacher employment and refuse employment to those graduates who don't meet these requirements. As the Ramsey report observed in 2000, "this is a weak power that comes too late."⁵

Significant inefficiencies result when major employers have such a restricted voice in the teacher education that universities provide. This lack of input can

⁵ Ramsey, G. November 2000. *Quality Matters*. Report of the Review of Teacher Education, New South Wales. p. 167.

lead to an inevitable mismatch between the graduates that universities produce and the needs of a major employer like DET.

Supply and Demand

DET has more than 50,000 permanent teachers and more than 30,000 casual and temporary teachers. As at 1 February 2005, there were 21,114 persons seeking employment as teachers in NSW government schools (12,760 primary and 8,354 secondary). This represents approximately 40 per cent of the permanent teaching workforce, a substantial reserve on which to draw. Further, a major source of teacher supply for the DET is the pool of new graduates who have completed teacher education courses. Under the Graduate Recruitment Program, up to 1,000 new graduates will be appointed to schools each year while over 4,500 applications were received for the 2005 Graduate Recruitment Program.

However, DET's projections of net teacher supply indicate that for the period to 2011:

- there is an adequate supply of primary teachers except for a small number of positions in specific geographical locations
- there is an adequate supply of secondary teachers, except for teachers of mathematics, science, and technological and applied studies, English in isolated NSW, and some positions in particular geographical locations.

The number of graduates from teacher education programs in NSW has been increasing in recent years, as shown in the table below. (These data are estimated completions supplied to the Department by the universities each year).

Projected Completions from NSW Teacher Education Courses 1998-2004									
	1998	1999	2000	2001	2002	2003	2004		
Primary	1399	1412	1512	1634	1795	2136	2205		
Secondary	2087	1987	2018	2072	2392	2533	2712		
Total	3486	3399	3530	3706	4187	4669	4917		

Source: DET university special survey

As can be seen, from 1998-2004 primary teaching graduates increased by 37 per cent while secondary teaching graduates increased by 23 per cent. This is in a context where the major employer of teachers in NSW, DET, has an oversupply of primary teachers. NSW universities continue to offer places and admit large numbers of students to primary teacher education programs, despite the DET's teacher workforce projections over the next several years showing little change to recent trends in the oversupply of primary teachers. There needs to be a reduction in the numbers of pre-service teacher education programs in this area and an increase in the number of programs that prepare secondary teachers in the areas of mathematics, science, technological and applied studies, and English.

Teacher shortages in mathematics, science, and technological and applied studies are not limited to NSW. The shortage of students undertaking science (especially physics) and mathematics courses at tertiary level is of national and international concern. The 2003 MCEETYA report, *Demand and Supply of Primary and Secondary School Teacher in Australia*, reported shortages in these subject areas (ranging from minor to acute) in all States/Territories of Australia and also in New Zealand, the United Kingdom, USA, and many areas of Canada.

Yet universities continue to provide teaching courses as if in a vacuum. One result is that there is continued competition between universities for market share in curriculum areas of high student demand such as primary teaching, rather than specialisation by some universities in required curriculum areas. For example, all but one university in NSW provides primary teacher education, and until recently, few were keen to implement relatively resource intensive teacher education courses in areas such as industrial technology. Other programs in required curriculum areas (e.g. science) continue to be offered across universities that specialise in providing teacher education in required curriculum areas has not occurred to any great extent.

Demand-Driven Provision vs Supply-Side Planning

Universities invariably argue that supply-side solutions have minimal impact on uptake in critical areas and that the situation is a consequence of students' disinclination to enter teaching. But the student choice model of teacher training is not delivering the results that the State, with constitutional responsibility for schooling, requires. Situations where universities continue to train teachers in areas of oversupply rather than in areas of critical shortage are detrimental not only to Australia and NSW but, critically, to the teaching graduates themselves. A new approach is required that better serves the employment prospects of individual students as well as the interests of the State and the nation.

Greater Consultation Required

A formal consultation process is needed between the State and Commonwealth governments, the universities, employers and the teaching profession to maximise efficient spending of government resources in teacher training.

A NSW government taskforce commissioned in 2001 to respond to the Ramsey report found that almost all groups – teacher employers, individual universities and university representatives – recognised and supported the need for this type of consultation.⁶

⁶ McMorrow, J. September 2001. *Report of the Taskforce on the Review of Teacher Education in NSW*. p. 36.

There are cycles of over and under supply in a profession as large as teaching that are difficult to predict. As mentioned above, DET projections indicate an adequate supply of teachers up to 2011, except in some geographical areas and in critical areas of curriculum shortage in secondary schools. The 2003 MCEETYA report, *Demand and Supply of Primary and Secondary School Teacher in Australia*, also describes a similar story, suggesting that, at least for the near future, supply is currently in overall balance.





Source: DET statistics

The average age of permanent teachers in NSW government schools is 44.6 years. Fifty-nine per cent of teachers are aged 45 or older and thirty-six per cent are aged 50 or older. This means that over one third of the teacher workforce can be expected to retire in the next five to ten years.

Regular and formal consultation between the States and the Commonwealth will be needed so that States can advise the Commonwealth of their expected graduate needs. Teacher workforce planning is a complex issue, often involving consideration of conflicting trends such as, for example, the progressive decline of the nation's primary school-age population and policy initiatives to introduce smaller class sizes. Yet such planning is crucial for the continued relevance of teacher training courses. It cannot be left to universities to allocate their load as they see fit.

Policies that foster choice in schooling, and therefore of teachers, require a surplus of teachers to enable parents to exercise that choice. The opposite case also applies. Choice is impossible where there are shortages of teachers. The cost of choice will become prohibitive if the teaching workforce is not carefully planned. Universities operating in isolation cannot be left with the responsibility of anticipating and responding to the cycles of over and under supply that periodically affects the teaching profession.

Greater consultation between the States and the Commonwealth, the universities, employers and the teaching profession is urgently required to prevent such a situation from occurring. It is envisaged that this consultation would be regular and at a minimum cover the following areas:

- the analysis, monitoring of and advice on demographic trends in teacher supply and demand in the context of national and international developments
- supplying reliable information on the supply of teachers and providing projections of NSW actual and future needs for quality teachers
- identification of areas of need for development of new, or review of existing teacher education programs, to align provision to employer requirements
- advising on the most effective use of resources to prepare, deploy and maintain quality, high-performing teachers for NSW.

2.2 More relevant to curriculum content

The lack of input by State governments into university decision-making also affects the relevancy of course content taught to prospective teachers.

It is imperative that teachers understand the rationale, aims, objectives, content and outcomes of the syllabus/es relevant to their teaching area before they commence teaching. Also essential for newly trained teachers is a knowledge and understanding of assessment and reporting procedures set down by State authorities such as the NSW Board of Studies.

Teacher training should also involve a clear understanding of standardsreferenced assessment and reporting that is now applied to the entire K-12 curriculum and that flows from the syllabus and performance standards. All beginning teachers should have an understanding of the procedures for standards-referenced assessment across the curriculum as well as the general requirements in NSW for the School Certificate and Higher School Certificate. Also required is a general understanding of the role of the Board of Studies and its responsibilities under the Education Act.

Liaison between the Board and teacher training institutions does currently occur in NSW in a number of ways. But there is a need to establish a mechanism for more regular contact on matters such as Board curriculum changes, assessment requirements, new support materials being developed and ICT activities. Such information flow is essential for the production of high quality teachers with the knowledge and skills to teach the Board's curriculum and syllabuses.

2.3 Recommendations from Section 2

- i) That regular and formal consultation between the NSW Government, the Commonwealth Government, State government and nongovernment teacher employers, universities and the NSW Institute of Teachers be established to consider the most appropriate allocation of government resources to ensure the adequate supply of quality teachers in NSW.
- ii) That greater consultation between universities and the NSW Board of Studies occurs to ensure that graduates of teacher education courses are equipped with adequate knowledge and familiarity with school curriculum and syllabuses.

SECTION 3 – RESOURCING

Three elements require immediate action with regard to the resourcing of teacher training:

- 3.1 increase funding for the teaching practicum
- 3.2 abolish the fringe benefits tax that currently applies to State teacher training initiatives, and
- 3.3 peg HECS payments for maths and science at the same level as for education.

3.1 Increase Funding for the Teaching Practicum

The teaching practicum is crucial. Professional experience is a critical component of all teacher education programs because it provides for the practical demonstration of theoretical learning.

Through professional experience teacher education students demonstrate to the university and supervising teachers that they have an understanding of the curriculum, a capacity to successfully engage students in the learning process as well as the personal attributes to establish rapport with students.

More resources are needed for this critical component of teacher training. The Ramsey report on teacher education in NSW in 2000 estimated that the cost of the practicum in the State's universities to be 6% of total 1999 expenditure on teacher education.⁷ The 2005 report by the Victorian government on preservice teacher training found that "the overwhelming majority of stakeholders" believe the current time spent in practicum is largely inadequate.⁸ The report also found the main challenges to be the high cost of delivery and the difficulty in finding a sufficient number of quality teaching placements.

University faculties of education are constrained by internal funding arrangements to support professional experience and universities themselves are constrained by overall funding arrangements determined by the Commonwealth Government. The *Australian Higher Education Practice Teaching Supervision Award 1990* provides rates for the payment of teachers for practice teacher supervision in all Australian States and Territories. The award stipulates that teachers must be paid for undertaking practice teaching supervision. But most universities report that the costs of providing for the practicum are far in excess of those received from the Commonwealth, requiring them to reallocate resources at the expense of other aspects of their programs.⁹ Previous reports have also found that one reason universities

⁷ Ramsey, G. November 2000. *Quality Matters*. Report of the Review of Teacher Education, New South Wales. p. 172-173.

⁸ Victorian Parliament Education and Training Committee final report. February 2005. *Step Up, Step In, Step Out: Report on the Inquiry into the Suitability of Pre-Service Teacher Training in Victoria*. p. xxiii.

⁹ Ministerial Advisory Council on the Quality of Teaching. November 1998. *Identifying the Challenges: Initial and Continuing Teacher Education for the 21st Century*. p. 4.

introduced a two year Masters of Teaching qualification to replace a one year Diploma of Education is the capacity to amortise the cost of the practicum over two years.¹⁰

The importance of the practicum dictates a compelling reason for the Commonwealth to provide additional and dedicated funding for it. NSW welcomes the additional funding the Commonwealth has recently provided for the practicum.¹¹ But there needs to be a guarantee that universities allocate all of the funding they receive for the practicum on the practicum. Universities must not divert practicum funds to other needy areas of the university.

The Commonwealth should work with the States and Territories in reviewing this key area of professional learning. Such a review could investigate whether all aspects of the professional experience component of teacher education are covered, including its effective administration, and not just the payment of supervising teachers; whether the best use is currently being made of the available funding; and the extent to which additional funding is required for professional experience. The practicum is such a critical area of teacher education that its resourcing base must be strengthened.

3.2 Abolish Fringe Benefits Tax on State teacher training initiatives.

As mentioned above (in 2.1), the current structure of teacher education may lead to a mismatch between the graduates that universities produce and the needs of a major employer like DET. One consequence of this situation is that the DET currently has to fund universities to retrain staff in areas of critical curriculum shortage.

From 1999 to 2004, 4,645 NSW teachers were retrained in the areas of technology, mathematics, science, vocational education and training, school counselling, special education, careers advising, teacher-librarianship, ESL and reading recovery tutors. All retraining programs are delivered by universities, which are awarded contracts after a competitive tendering process. This is occurring while universities continue to produce teaching graduates in areas of over supply.

The NSW government's Teacher Education Scholarships and Accelerated Teacher Training (ATT) program are two initiatives designed to increase quality teachers in specific subject areas. Both attract significant fringe benefits tax (FBT).

Teacher Education Scholarships are in the areas of mathematics, science, technological and applied studies and English and are designed to attract high

¹⁰ Ibid p. 67.

¹¹ Increased funding for the practicum was noted in DEST media release 1078/05, "\$139 million boost for quality teaching in Australia." However, it remains to be seen precisely how much money the Commonwealth will provide to support universities with the costs associated with the practical component of teaching.

⁽see http://www.dest.gov.au/Ministers/Media/Nelson/2005/04/n1078080405.asp).

quality people to pre-service teacher education programs. The scholarship program pays for each student's Higher Education Contribution Scheme (HECS) liability plus a \$1,500 per annum training allowance for the period of the scholarship. Scholarship applicants must agree to serve for at least three years either anywhere in the state or in three or more hard to staff areas.

From 2004, the number of scholarships offered each year was increased from 150 to 200, with at least 30 being offered to Aboriginal or Torres Strait Islander students. A further 200 scholarships have been awarded for 2005, which were successful in attracting a larger number of significantly higher quality teacher education scholarship applicants.

The ATT programs are of 18 months' duration conducted by universities targeting people with industry backgrounds who would make excellent teachers in the areas of technology (industrial technology, food technology, computing studies and agriculture), mathematics and science. The Department provides financial assistance to trainees by paying course fees, administration costs and a one-off training allowance of \$1,500. In return, students sign a deed of agreement committing them to teach in hard to staff areas of the state such as Sydney's western and south-western suburbs and western NSW.

Teaching scholarships and ATT programs provided by the NSW Government are an effective incentive to encourage students to take up teacher education programs. However, for every dollar of NSW funding provided in HECS payments for scholarship holders and sponsorships, the NSW Government pays an additional 94.2 cents to the Commonwealth for FBT. In 2002/2003 and 2003/2004, the NSW Government allocated approximately \$7 million for teacher education scholarships in mathematics, science and technology and approximately \$7.8 million in sponsorships for relevantly skilled workers to complete ATT programs. Of the total \$14.8 million, over \$6.3 million was paid in HECS and fee payments, approximately \$5.9 million in FBT payments back to the Commonwealth and \$2.6 million for student training allowances, university development costs, student mentoring costs and administrative costs.

Without the current requirement of paying FBT payments back to the Commonwealth, the Department would have the funding to offer 110 additional scholarships and sponsorships. Scholarship and sponsorship application data show that there is plenty of demand from high quality applicants for these programs.

It is untenable for the Commonwealth to fund university teacher training courses without reference to State needs and then for the Commonwealth to impose FBT on State initiatives to train teachers in areas that it does need. NSW is, in effect, paying twice to obtain the teachers it needs. The FBT should be abolished as a matter of urgency and the money reinvested into additional scholarships for students.

3.3 Peg HECS payments for maths and science at the same level as for education.

The Commonwealth government has quarantined teaching and nursing, as national priorities, from recent HECS increases. However, this in itself is not enough to increase maths and science teachers.

Content knowledge is a central element of teacher quality. Many teachers first undertake a degree program, for example a Bachelor of Science, and then pursue a graduate teaching qualification. These graduates are central to maintaining a qualified pool of teachers. While the Commonwealth has quarantined teaching degrees, HECS increases in other disciplines impacts on the supply of quality teachers with required skills.

HECS contributions for undergraduate mathematics and science students are higher than for students taking general education degrees.



Figure 3

A student at the University of Sydney who studies maths or science will pay \$6,849, which is a 78 per cent increase from the HECS rate that applies to a teaching undergraduate course at the University of Sydney (\$3,847). This difference is significant and constitutes a strong disincentive for students to embark on a career as a maths or science teacher.

Specifically, HECS should be pegged for undergraduate mathematics and science students at the current level for education (\$3,847) for those students who commit to teacher training, in order to increase the number of mathematics and science students entering teacher education courses.

HECS levels influence patterns of student demand. The current levels of HECS for the disciplines of maths and science should be reconsidered to

provide incentives to encourage maths and science graduates to pursue careers in teaching. To ensure the effectiveness of this measure, the incentives could be provided only to those students who commit to undertake a teaching degree.

Further, the Commonwealth can assist government and non-government sectors to staff schools in the State's areas of greatest need through the way it applies HECS. For example, the HECS debt of teacher education graduates who agree to teach in hard to staff areas could be reduced through a Commonwealth Government agreement. The Commonwealth review of teaching and teacher education, *"Australia's Teachers: Australia's Future – Advancing Innovation, Science, Technology and Mathematics"*, was released on 9 October 2003 and highlights strategies in addition to the payment of HECS debts that could be introduced to encourage teacher recruitment.

3.4 Recommendations from section 3

- v) That the Commonwealth provide additional and dedicated funding of professional experience components of teacher education programs to cover the true cost of universities providing a sufficient amount of quality professional experience within programs.
- vi) That Fringe Benefits Tax be abolished on State teacher scholarships and sponsorships.
- vii) That HECS be pegged for undergraduate mathematics and science students at the current level for education (\$3,847), in order to increase the number of students undertaking mathematics and science degrees who might enter graduate entry teacher education courses in these areas. The maintenance of HECS at this level could be linked specifically to student commitment to enter teaching.
- viii) That the HECS debt of teacher education graduates who agree to teach in hard to staff areas should be reduced.

CONCLUSION

Gregor Ramsey, in his review of teacher education in NSW in 2000, noted there had been more than twenty reviews of teacher and teacher education over the past two decades, all of them having very limited impact.¹² Part of the reason for this lack of impact is the complex mix of responsibilities for teachers and teacher education among and between Commonwealth and State and Territory governments, government and non-government school employers, universities, teachers' organisations and professional associations.

This National Inquiry has the potential to act as a possible catalyst for change in teacher education. The Inquiry provides the opportunity for a more collaborative approach to teacher supply as well as greater collaboration with State Boards of Studies on course content. NSW also hopes the Inquiry will lead to much needed improvements in the resourcing of teacher training.

¹² Ramsey, G. November 2000. *Quality Matters*. Report of the Review of Teacher Education, New South Wales. p. 14.