9. Resourcing teacher education

9.1 Introduction

There are more than 80,000 teachers teaching in New South Wales. Over 55,000 are employed full-time by the Department of Education and Training, making it the largest single employer of teachers in Australia. Every year, the Department recruits some 4,000 teachers, who mostly are graduates of teacher education courses in the ten universities across the State and one in the Australian Capital Territory. The Australian Catholic University is a cross-state institution which prepares about 400 teachers annually in New South Wales. In addition, Avondale College, a non-government institution administered by the Seventh Day Adventist Church, prepares around 25 teachers each year to teach in their schools, both in Australia and overseas.

Teacher education stands out among university courses in that the State is the major employer of graduates. This remains true despite the rise in the proportion of students in non-government schools, where many teachers with some previous government school experience are employed. The critical first year of teaching remains largely a responsibility of government schools.

Despite the significance of the Department of Education and Training as an employer, the State has only a minor role in the preparation of its future teachers and a limited capacity to influence the outcomes of teacher education programs. Critically, the government and non-government employers can, under present arrangements, only marginally address issues related to quality in teacher education courses.

There has been a considerable reduction in the number of teachers both in training and required by the Department of Education and Training since 1973. This decline, both in terms of the level of resources provided and the quality of students entering teacher education courses comes from a complex set of causes, not well researched either by universities or employers. The number of people training as teachers bears little relationship to workforce planning in terms of State needs, but rather from ad hoc decisions of universities as they respond to a tightening resource environment and from the thousands of individual decisions of potential students in terms of their perceptions of likely employment prospects and financial reward in teaching as a career. The impact of the current funding arrangements on the education, quality and supply of teachers in New South Wales is a critical issue for this Review.

9.2 Historical context

Until 1973, teachers in New South Wales were trained mainly in institutions funded and managed by the State government, as were nurses, police and fire service personnel. The State had full control over its workforce requirements and the preparation of teachers. Teachers were given scholarships so that the required numbers were trained and subsequently bonded to teach in government schools for three years, in a sense to ‘work out’ the cost of their training. Nurses, to take another example, were employed at the same time as they were gaining a nursing credential, learning essentially on-the-job. Police and fire personnel are still trained, at least initially, in institutions funded by the State in a manner closely related to the expectations of their employers. Much of that training is also on-the-job.

The Commonwealth assumed responsibility for the funding of teacher education in Australia in 1973 when it became part of the dual system of higher education. Consequently, the previously State-funded teachers colleges became colleges of advanced education (CAEs) or were incorporated into universities. No agreements were negotiated between the Commonwealth and the States to ensure that State needs in terms of education, quality and supply of teachers could be met. The then chairman of the New South Wales Higher Education Authority, Jim Pratt, raised this issue forcibly in 1974.

Assuming that the Commonwealth were to acquire full financial responsibility for tertiary education, how can the Director-General be assured that there will be an output of trained teachers from tertiary institutions sufficient for his needs in relation to both the courses which have been undertaken and the numbers of students completing them?226

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There were State Grants adjustments as a result of the transfer of responsibility for teacher education to the Commonwealth. This is, however, not the issue: with this shift to the Commonwealth, the State’s responsibility for funding the training of teachers effectively lapsed.

Further changes were introduced in 1988 when higher education was restructured into a unified system of some 37 universities. The reorganisation had significant impact on teacher education, as it became then largely a responsibility of each university to decide the fields of study in which they would place their student intakes each year.

University funding from the Commonwealth comes in the form of a block allocation of student places based on each university’s course profile and historical distribution, including differential funding between universities.

Having secured its total block funding allocation, each university has a high degree of flexibility to allocate funds among fields of study, and is free to ‘shift load’ from one to another. In the case of teacher education, the priorities of the university determine the number and kind of teachers to be trained, the curriculum and course length.

Although in the long-term university course profiles are determined by student demand, the short-term reality is different. The requirement for universities and their faculties to fill student quotas for various courses so as to maintain their level of Commonwealth funding, means that student demand as reflected in their course preferences is not always met. In some instances, faculties have more applicants than available places and students are turned away. In others, universities enrol students in courses low on the student preferences so as to fill university course quotas. The internal funding decisions of universities therefore become a major determinant of the quality of the intake.

It is clear that the State has very limited influence in this arrangement between the Commonwealth and individual universities for the funding and education of teachers. The only sanction available to the State is to make clear its expectations of beginning teachers and to refuse employment of those graduates whose preparation falls short of these requirements. This is a weak power that comes too late. The State’s ability to influence the graduate pool from which it draws, both in terms of numbers in particular fields and their quality, is extremely limited.

9.3 The funding of teacher education in universities

As universities are self-governing institutions, there is little information available about the costs of component parts of their operations. The Commonwealth Department of Education, Training and Youth Affairs (DETYA) is currently seeking to address this problem by promoting activity-based costing in higher education institutions. Although the use of such costing methodologies would assist in addressing the data deficiency, there needs to be the widest possible definition of what constitutes a course to capture the full cost of higher education. The Review noted that a trial of the methodology conducted in three universities did not consider the cost of professional experience components of teacher education or any other course of professional preparation.

Currently, the Relative Funding Model (RFM) is the most widely accepted mechanism for estimating costs of university courses that is publicly available. The model was developed by the Commonwealth following its establishment of the unified higher education system in 1988 to assist in determining funding levels for universities. The model, based on 1989 sample studies of the estimated teaching costs of different university disciplines, provided the basis for a once-off adjustment to university operating grants over the 1991–1993 triennium. It has since been adjusted annually to reflect changes in the Consumer Price Index (CPI), and other relevant measures.

The Relative Funding Model captures the cost of graduating a student by discipline area. As such, it focuses on the faculty unit providing the teaching. The model does not represent the full cost of preparing, for example, a science teacher, as the cost of courses provided by the science faculty are attributed to that faculty.

Universities face competing pressures in determining appropriate funding for the different levels of undergraduate, postgraduate and research study. There is pressure to reduce the cost of existing services and to achieve more with less. At the same time, decisions must

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[228] P. Baldwin, Assessment of the relative funding position of Australian higher education institutions, August 1990.
be made about new courses, the level of quality needed to achieve their objectives and ways to provide for their costs. Those faculties catering for professions that have a long-standing history in the university sector usually begin their cost negotiations within universities from a much more generous base than do the more recent entrants such as teaching and nursing.

Although universities are not required to use the Relative Funding Model as a basis for their internal resource allocation, many use it or versions of it to allocate funds internally. Universities, for example, can allocate their resources to support fields of study in high demand at the expense of others considered to be in decline. Only on rare occasions is teacher education a winner in Relative Funding Model terms.

Under the Relative Funding Model each academic discipline is grouped into weighted bands reflecting the different costs of course delivery. There are five bands for undergraduate courses, three bands for postgraduate courses and two bands for research degrees. The teaching unit allocation in each band is shown in Table 9.1.

Teacher education is ranked in the second lowest band of teaching unit allocation, with an undergraduate course notionally being allocated $8,937, a postgraduate course $9,624 and a research degree $13,749 annually in 1999 prices. The allocation for a teacher education course is only 48 per cent of that for the highest ranked courses, such as medicine. Teacher education is also ranked below nursing, which is in the third Relative Funding Model band and is funded at $10,999 per student at the undergraduate level. Using the Relative Funding Model, it is possible to estimate the resources notionally available to teacher education, by multiplying the teaching unit allocation by the number of equivalent full-time students (EFTSU).

As shown in Table 9.2, the total amount estimated from Department of Education, Training and Youth Affairs statistics for the education field of study in Australian universities was $370 million in 1999.

The issue is to determine how much of this notional allocation found its way directly into funding teacher education courses in each university. Although the Review was unable to obtain a specific answer, there seemed to be evidence that teacher education in many universities was being funded ‘below par’, with the exception of one university in which teacher education was funded at the higher Relative Funding Model Band 3 of the model.

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Table 9.1 Teaching Unit Allocation ($) for course delivery under the Relative Funding Model

<table>
<thead>
<tr>
<th>RFM BAND</th>
<th>DISCIPLINE</th>
<th>Undergraduate</th>
<th>Postgraduate</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accounting</td>
<td>6,875</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Economics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Law</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other humanities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Behavioural science</td>
<td>8,937</td>
<td>9,624</td>
<td>13,749</td>
</tr>
<tr>
<td></td>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other social sciences</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Computing</td>
<td>10,999</td>
<td>12,374</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nursing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other built environment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other languages</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visual and performing arts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Engineering</td>
<td>15,124</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Science</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surveying</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Agriculture</td>
<td>18,561</td>
<td>20,624</td>
<td>32,311</td>
</tr>
<tr>
<td></td>
<td>Dentistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medicine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Veterinary science</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Most of the provision of teacher education courses is at the undergraduate level. If funded according to the Relative Funding Model, the funds notionally available to all undergraduate courses in the education field of study is estimated to be $273 million. This figure does not count the cost of providing courses outside of the education discipline area, which in the case of double degrees, for example, BSc, BEd, may be substantial. The estimate of funds available to all postgraduate courses in education is $65 million and research degrees is $29 million (Table 9.2).

The resource allocation derived from the Relative Funding Model reflects only the minimum course costs defined for the purposes of determining Commonwealth operating grants. On average, only 68 per cent of university total operating revenue comes from Commonwealth operating grants and the Higher Education Contribution Scheme (HECS). As universities receive income from other sources, it is possible that this income could be used to help subsidise higher course costs. In teacher education, the main sources of other income are from research grants and competitive tendering, overseas student fees and charges, and some consultancy.

Again, teacher education does less well than other disciplines in terms of its ability to generate incomes from other sources, the potential to cross-subsidise higher course costs is therefore limited. In 1999, fee-paying students represented less than seven per cent of student load in teacher education. Research income was $105 million in 1996.

Employers of teachers have limited interest in supporting graduate study and must address the relatively low proportion of the funds they make available for graduate teacher education associated with universities.

### 9.4 The cost of teacher education in New South Wales

In 1999, there were 13,260 equivalent full-time students enrolled in the discipline of education in New South Wales universities. Student load in education is distributed among eleven institutions across the State, as illustrated in Figure 9.1. Although the University of Canberra prepares teachers mainly for New South Wales schools, it has been omitted from this analysis as it is located in the Australian Capital Territory. Taken in total, the University of Western Sydney (UWS) is the largest provider of education courses, with over 20 per cent of the State’s student load. Statistically, however, until now information on teacher education load has been provided separately for the two

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Table 9.2 Estimated total cost of university courses in Education, Australia, 1999

<table>
<thead>
<tr>
<th>Course Level</th>
<th>EFTSU</th>
<th>$ per unit</th>
<th>Total allocation (rounded) $ ,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research degree</td>
<td>2,126</td>
<td>13,749</td>
<td>29,230</td>
</tr>
<tr>
<td>Other postgraduate</td>
<td>6,788</td>
<td>9,624</td>
<td>65,328</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>30,554</td>
<td>8,937</td>
<td>237,061</td>
</tr>
<tr>
<td>Other</td>
<td>237</td>
<td>8,937</td>
<td>2,118</td>
</tr>
<tr>
<td>TOTAL</td>
<td>39,705</td>
<td></td>
<td>369,737</td>
</tr>
</tbody>
</table>

Note: Based on Equivalent Full-time Student Units (EFTSU) in the discipline of Education, excluding: full-fee paying overseas students; fee-paying undergraduate and postgraduate students; students whose places are funded by employers; and students in non-award and enabling courses. Unit cost based on RFM 1999.

Sources: DETYA Higher Education Statistics; DETYA Students 1999 Selected Higher Education Statistics.

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members (UWS Nepean and UWS Milperra) engaged in teacher education. Seven other universities each cater for between eight and 12 per cent of the total. The smallest providers are Avondale College, the University of New South Wales and Southern Cross University with one, three and four per cent of the total respectively. More importantly, none of the load is applied to school-based teacher education, or teacher education undertaken in the TAFE system.

Estimates of the costs of teacher education in New South Wales can be made by multiplying the Relative Funding Model teaching unit allocation by EFTSU. As shown in Table 9.3, the total cost of teacher education in New South Wales in 1999 was $124 million. Of this full amount, $102 million or 83 per cent was spent on initial teacher training representing around ten times that spent on either postgraduate degrees or research. These costs do not include the non-teacher education components of teacher preparation.

This does seem to be an imbalance given the much smaller number of new teachers engaged each year, particularly to teach in primary schools, compared with the vast number in the existing teaching workforce requiring continuing education. Resources not required for initial teacher education because of the relatively low level of entry into teacher education, should be re-directed to programs for continuing professional development, particularly for teachers in the early years of teaching.

The issue for the State is whether the more than $123 million available for teacher education is best spent in this proportion and totally in universities.

Is this money better spent directly on university-driven teacher education in ten institutions (not counting the Australian Catholic University, Avondale College or the University of Canberra) or should some proportion be allocated to school-based or TAFE-based teacher education? At the moment there is no mechanism which would allow such possibilities to be funded.

Fragmentation of provision

If the University of Western Sydney is considered as two institutions, as it has been to date, the load per institution

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232 To this, in a sense, should be added the costs of preparing 787 teachers in the University of Canberra at $7.3 million and 426 teachers in the Australian Catholic University at $3.9 million, bringing the total cost of preparing teachers for the State by all institutions, regardless of location, to $135 million.

233 Separate New South Wales data for the Australian Catholic University are not publicly available.
Table 9.3  Notional allocation to teacher education courses in New South Wales, 1999

<table>
<thead>
<tr>
<th></th>
<th>Undergraduate</th>
<th>Graduate</th>
<th>Postgraduate</th>
<th>Research</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diploma</td>
<td>Degree</td>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Load NSW</td>
<td>9,722</td>
<td>1,618</td>
<td>1,213</td>
<td>705</td>
<td>13,258</td>
</tr>
<tr>
<td>RFM Funding Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>($</td>
<td>8,937</td>
<td>9,624</td>
<td>9,624</td>
<td>13,749</td>
<td></td>
</tr>
<tr>
<td>TOTAL ($000)</td>
<td>86,885</td>
<td>15,572</td>
<td>11,674</td>
<td>9,693</td>
<td>123,825</td>
</tr>
</tbody>
</table>

Sources: DETYA Higher Education Statistics Collection. DETYA Students 1999 Selected Higher Education Statistics

across the State ranges between 500 and 1500 students.

The teacher education program becomes very fragmented and hard to sustain given that each university tries to divide its program into: early childhood, primary, secondary and adult education; six primary and eight secondary key learning areas; and undergraduate and graduate education.

Quality suffers, the power of the teacher education faculty to attract funds is weakened and generally the needs of the individual universities rather than the State come to be served. There is a case for reducing significantly the number of providers, or at least the number of courses leaving involved only those universities prepared to give appropriate priority to teacher education. A group of universities could work together to offer similar courses at graduate and undergraduate level. While on the face of it such an approach has advantages, the mechanism by which this might be approached would need careful consideration.

9.5 The cost of the practicum

Unlike other sections of this Report, where the term professional experience is preferred, this section uses the term 'practicum' to refer to the traditional field experience operation that most universities currently arrange as part of their preservice course. The cost estimates relate to the practicum as a traditional approach, and not to the kind of professional experience seen as being central to an effective preservice teacher education program. The practicum or field placement in industry is a long-standing tradition, central to the educational experience of many professional training programs such as teaching, nursing, medicine, engineering and dentistry. This has been considered in some detail in Chapter 6. Such field experience is being recognised increasingly as a desirable feature of the academic program in many other professions²³⁴.

There is a well established theoretical basis to argue for a strong practicum in a professional curriculum for teacher education stemming from the work of Tisher, Turney and others²³⁵. The 1984 research by Briggs first drew attention to the importance of field experience²³⁶. Considerable support was found among teachers, potential teachers and teacher educators for an effective practicum to prepare student teachers for employment.

Participation in such placements is a significant factor in improving employment outcomes for course graduates in a range of fields²³⁷. Teacher education students overwhelmingly acknowledge the practicum as an important or the most important element of their training. This particularly applies to the management of student behaviour, which is an important issue for this Review.

The organisation of industry placements varies significantly among the various professional areas. For example, in engineering courses, industry placements tend to be in a job, where the student applies for a position and is employed by the firm for the duration of the period. Under this model, there is limited supervision by the university of the students. Such an arrangement for field experience is so remote from the university that it is weighted at only one-fifth of one normal EFTSU under the Relative Funding Model. In contrast, the practicum in teacher education is intended to be highly structured, with the student supervised both by a teacher on site and an academic from the university. Supervision of at least this level is necessary under a best practice model that sees practical experience embedded in the academic curriculum. Research emphasises the importance of a structured model to identify the skills and outcomes that the student is expected to acquire for the practicum to deliver the necessary opportunities for learning.

Activity-based costing: a case study

To obtain the cost per student of the practicum component of a typical traditional teacher education program, the Review undertook an activity-based costing analysis of a notional institution to determine the costs of its main activities, the staff time allocated to these activities, the cost of that time, and the cost of non-staff inputs. The average cost per student per year was calculated for four different lengths of practicum experience. The main costs of the practicum in teacher education are associated with:

- organising placements
- supervising students on placement
- payment of the industrial award to the supervising teacher on site
- related non-staff costs.

The organisation of placements for 1,000 students in this notional institution involves two full-time administrative staff and two half-time academic staff, paid at different salary levels. The costs of the administrative staff total $91,000 a year and those of the academics $57,000 a year (including on-costs). The organisation of placements represents 27 per cent of the total cost of the practicum. 

To supervise students on placement, the university’s full-time academic staff have one-twelfth or 8.3 per cent of their salary earmarked for this activity and the faculty also employs a large number of casual staff to assist. The total cost of these two elements is $68,720. The non-staff expenses associated with academic supervision include vehicle hire of $6,700 and the printing of practicum resource books for students of $5,000. The cost of supervision of students on placement is low, representing 14 per cent of the total cost of the practicum. It does not seem to match the priority both teachers in training and employers give to the experience.

The third cost component of the practicum is the payment to supervising teachers on site. Under the Federal Award, supervising teachers in schools are paid $21.20 per student per day. The total annual bill for on-site supervision is $295,000. In addition, processing these payments costs $29,500 a year. Payment to supervising teachers on site is the largest cost component, representing 59 per cent of the total cost of the practicum.

The total cost (rounded sum of the above) to the faculty of administering the practicum is $554,000 a year. If the faculty was funded according to the Relative Funding Model, the cost of the practicum would represent six per cent of its total operating income of $8.9 million a year.

As the average length of practicum is 40-60 days for a four-year undergraduate course, the amount of $398 in column (iii) indicates the minimum approximate cost per student per year for this degree. On the other hand, the amount of $1,593 in column (v) indicates the minimum cost of a diploma of education degree, where 40 days of practicum is undertaken in one year. The National Standards and Guidelines for Initial Teacher Education recommends a minimum of 80 days supervised practical experience for every teacher education graduate. If implemented, the total cost per student is $3,185 as indicated in column (vi) of Table 9.4.

Not included in this analysis are the administrative and teaching costs to schools. Organising placements is not a one-way activity, and school staff spend significant time doing so even if the schools do not charge universities for the effort. In addition, schools provide office space, access to computing facilities and other resources. No data are available for estimating the costs involved for schools, but

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238 KPMG, Review of relative costs of research training and teaching, Background paper no. 2.

239 Adey, p. 23.
these should be determined and included in future cost calculations of the practicum. Despite these hidden costs to schools where the practicum takes place, the Review found surprisingly little involvement of the school or the employer in negotiating the nature of these activities.

Cost estimates

In the absence of a survey of all universities, estimates of the approximate cost of the practicum in all universities in New South Wales were obtained using the notional costs estimates above. Table 9.5 assumes that the minimum number of days is spent on the practicum in these courses, that is, ten days per year for a four-year bachelor degree and 40 days for a one-year diploma. The minimum cost of the practicum in the State’s universities is an estimated $6.1 million per year, which is six per cent of total estimated 1999 expenditure on initial teacher education in New South Wales. The reality is that many teachers are prepared in double degree models, so that only around half of the total funds used to prepare them are available to faculties of teacher education. The rest goes to the faculties where they are undertaking their discipline studies. For these faculties of education the practicum represents almost 20 per cent of their expenditure. Yet, if the

### Table 9.4  Estimates of the cost of the practicum ($ per student per year, 1999 prices)

<table>
<thead>
<tr>
<th>Activities</th>
<th>One day</th>
<th>10 days</th>
<th>20 days</th>
<th>40 days</th>
<th>60 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Organising Placements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin officer A (f/t)</td>
<td>3.63</td>
<td>36</td>
<td>73</td>
<td>145</td>
<td>290</td>
</tr>
<tr>
<td>Admin officer B (f/t)</td>
<td>2.94</td>
<td>29</td>
<td>59</td>
<td>118</td>
<td>235</td>
</tr>
<tr>
<td>Academic A (0.5)</td>
<td>2.16</td>
<td>22</td>
<td>43</td>
<td>87</td>
<td>173</td>
</tr>
<tr>
<td>Academic B (0.5)</td>
<td>1.98</td>
<td>20</td>
<td>40</td>
<td>79</td>
<td>159</td>
</tr>
<tr>
<td>Sub-total</td>
<td>10.72</td>
<td>107</td>
<td>214</td>
<td>429</td>
<td>857</td>
</tr>
<tr>
<td>2. Academic supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acad. B (0.08%) &amp; Casuals</td>
<td>4.94</td>
<td>49</td>
<td>99</td>
<td>198</td>
<td>395</td>
</tr>
<tr>
<td>Vehicle hire</td>
<td>0.48</td>
<td>5</td>
<td>10</td>
<td>19</td>
<td>38</td>
</tr>
<tr>
<td>Printing</td>
<td>0.36</td>
<td>4</td>
<td>7</td>
<td>14</td>
<td>29</td>
</tr>
<tr>
<td>Sub-total</td>
<td>5.78</td>
<td>58</td>
<td>116</td>
<td>231</td>
<td>462</td>
</tr>
<tr>
<td>3. On-site supervision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payment of teachers</td>
<td>21.20</td>
<td>212</td>
<td>424</td>
<td>848</td>
<td>1,696</td>
</tr>
<tr>
<td>Financial services support</td>
<td>2.12</td>
<td>21</td>
<td>42</td>
<td>85</td>
<td>170</td>
</tr>
<tr>
<td>Sub-total</td>
<td>23.32</td>
<td>233</td>
<td>466</td>
<td>933</td>
<td>1,866</td>
</tr>
<tr>
<td><strong>TOTAL ($ per student per year)</strong></td>
<td>39.8</td>
<td>398</td>
<td>796</td>
<td>1,593</td>
<td>3,185</td>
</tr>
</tbody>
</table>

Note: The data in this table are based on the experience of one institution and its application to other institutions may be limited. To the extent that the activities associated with organising the practicum are similar in all institutions, this table is a fair and reasonable representation of the costs associated with the provision of the practicum in teacher education courses. The costs of on-site supervision, for example, are consistent across jurisdictions.

Sources: Ministerial Advisory Council on the Quality of Teaching, Identifying the challenges; KPMG, Review of relative costs of research training and teaching: Background paper no. 3.
pedagogy to teach a discipline were the responsibility of
the discipline, then some of the costs should be borne by
the faculty in which it is taught.

Deans of education point to the fact that in some
universities, nursing is funded at 1.6 of the Relative
Funding Model over the entirety of the course offerings,
which implies a greater allowance for the professional
experience component than is the case for teacher
education.

This total expenditure seems all too small a proportion
given the practical skill nature of teaching. It highlights
both the ‘worst practice’ elements of the traditional model
for preparing teachers and the very limited involvement of
university staff in supervising and mentoring graduates in
their first year of teaching.

The current funding arrangements present the State with
a balancing act: if the State were to allocate funding to
enhance the practicum, the universities are more than
likely to withdraw the level of their support by an
equivalent amount. In addition the State would be
providing resources for an area deemed to be a Common-
wealth activity. In the light of the preceding analyses, what
is needed is a re-appraisal by universities of the way they
allocate funds internally. The continuing use of the
Relative Funding Model is inadequate in accounting for
the real costs of the practicum. The implementation of
activity-based funding models within universities must be
a priority.

Reforming the practicum

As self-governing institutions, universities make indepen-
dent decisions on the extent to which the practicum is
funded. Most universities were able to demonstrate to the
Review the cost of the practicum. Some universities relied
on adaptations of the Relative Funding Model to give an
indirect costing.

Under the Relative Funding Model, education courses are
weighted at 1.3 of the resources allocated to one of the
lowest level courses – a difference of $2,062 per student
from the courses of lowest cost (Table 9.1). However, the
additional weighting for teacher education under the
Relative Funding Model is also intended to reflect the
higher number of teaching hours associated with the
courses clustered in Band 2.

The extent to which the cost of the practicum is taken into
account in the Relative Funding Model, or indeed, if it was

### Table 9.5  Estimated minimum cost of the practicum in initial teacher education courses in
New South Wales universities, 1999

<table>
<thead>
<tr>
<th>EFTSU by Field of Study</th>
<th>Bachelor degree</th>
<th>Diploma</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial primary</td>
<td>3,228</td>
<td>130</td>
<td>3,358</td>
</tr>
<tr>
<td>Initial secondary</td>
<td>2,869</td>
<td>920</td>
<td>3,789</td>
</tr>
<tr>
<td>Initial special</td>
<td>129</td>
<td>0</td>
<td>129</td>
</tr>
<tr>
<td>Initial TAFE</td>
<td>0</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Initial teacher education - general</td>
<td>1,872</td>
<td>145</td>
<td>1,972</td>
</tr>
<tr>
<td>Initial teacher education - other</td>
<td>569</td>
<td>51</td>
<td>620</td>
</tr>
<tr>
<td>Total Load (EFTSU)</td>
<td>10,483</td>
<td>1,256</td>
<td>11,739</td>
</tr>
<tr>
<td>Estimated cost of practicum per student per year ($)</td>
<td>398</td>
<td>1,593</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL ($000 rounded)**

<table>
<thead>
<tr>
<th>Bachelor degree</th>
<th>Diploma</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,127</td>
<td>2,000</td>
<td>6,137</td>
</tr>
</tbody>
</table>

*Note: This table uses the DETYA Field of Study classification to classify EFTSU by courses of study, whereas the EFTSU by discipline reflects students undertaking units of study classified as Education.*

*Source: DETYA Higher Education Statistics.*
taken into account at all when the model was developed, is not clear. The existing Relative Funding Model weights industry placements at 0.2 of an EFTSU, but specifically excludes from this category placements that are supervised by the university, such as in teacher education or nursing.

In *Identifying the Challenges*\(^\text{240}\), the deans of education describe a range of strategies that they employ to meet the costs of the practicum from their budgets. Recognising the practicum as an academic subject is a common strategy to help offset the additional costs. Most deans of education report the need to cross-subsidise the practicum from teaching resources through reducing class time or student/staff ratios. The dean of an education faculty indicated to the Review that a strong motivation for extending a graduate training course from one to two years was to spread the costs of the practicum over a longer period.

Unfortunately, these responses appear to be driven more by costs than educational considerations. Even though the cost of the practicum to the universities is only six to eight per cent of the total cost of a course, it is seen as expensive.

Additionally, certain cost elements are relatively inflexible. The payment of supervision allowances to individual teachers under the *Australian Higher Education Practice Teaching Supervision Award* is a significant cost associated with the practicum. While a relatively small amount of money, the supervision allowance has, at least in theory, two important functions:

- to recognise the skills and input of the supervising teacher
- to give education faculties a role in the selection of on-site supervisors.

In reality, universities often have to accept what they can get, rather than be assured of finding places where best practice occurs.

If a way is found to rationalise the costs of the supervision allowance, it is important that mechanisms be put in place to acknowledge both of these functions in some other way. That is, the role of the supervising teacher should be recognised and education faculties should retain some control over who is appointed to supervise their students.

Elsewhere, the Report proposes that schools be accredited to perform this task, and the supervising teachers be specially prepared for their role. These should involve university-school conjoint appointments to support the practicum.

In the early 1990s, the Commonwealth Government offered to re-direct the funding provided to universities for the payment of supervising teachers to a permanent teacher professional development fund if senior teachers would take on the role of practicum supervision. In the context of award restructuring, discussions were initiated with employers and teacher unions about including the supervision of student teachers in the duties of the new Advanced Skills Teacher classification. This would have removed the requirement to pay the supervision allowance and thereby free up the money for professional development. In its 1992 Policy Statement, *Teaching Counts*, the Commonwealth Government estimated the total cost of the practicum to be $15 million per year – less than five per cent of total national expenditure on initial teacher education which was estimated as $308 million in 1992. However, in the supporting documents, the then Department of Employment, Education and Training did not explain how the estimates were derived\(^\text{241}\).

Only Victoria took up the Commonwealth’s offer and practicum supervision was included in the duties of Advanced Skills Teachers. Teachers employed by other authorities continued to be eligible for the supervision allowance. Advanced Skills Teachers in Victoria, now known as ‘Leading Teachers’, continue to be exempt from the *Award* and are therefore not paid for supervising the practicum.

No evidence has been found of the Commonwealth following through the implementation of this initiative by either withdrawing the pro-rata funding allocated for the payment of supervising teachers in Victoria, or establishing a teacher professional development fund specific to that State. The money involved would have been in the order of $4.5 million a year\(^\text{242}\).

The Advanced Skills Teacher was not a particularly

\(^{240}\) Ministerial Advisory Council on the Quality of Teaching, *Identifying the challenges: Initial and continuing education for the 21st century.*

\(^{241}\) *Kim Beazley, Teaching counts – A Ministerial Statement by the Honourable Kim Beazley, MP, Minister for Employment, Education and Training, AGPS, Canberra, 1993.*

successful model in New South Wales or elsewhere. Alternatives should be considered. The Review identified more flexible approaches by some universities for engaging these resources to pay for the staff development of supervising teachers. The Australian Higher Education Practice Teaching Supervision Award should be reviewed and amended to enable, where agreed by the parties, adoption of such approaches.

Structured industry placements are now recognised as an important element of professional training in many fields of study. The practicum remains one of the most valuable elements of teacher education courses, yet it is given lower funding priority than other components of a teacher education course by universities. Consequently, the period of time teacher education students spend in schools is less than the best practice standards recommended for teacher education and well below the average for other professions.

The issue of professional experience is so fundamental to the success of teacher education that other models should be tried jointly by the profession, the universities and employers. As noted previously, the majority of costs associated with the practicum are fixed so there is little opportunity for savings to be made. As the major funding provider for initial teacher education, the Commonwealth Government has a responsibility to fund the professional experience component of teacher education adequately in its operating grants to universities.

Universities should consider a fundamental re-allocation of priorities and resources of their teacher education courses to give proper attention to the professional experiences component, including requiring university staff to spend more of their instructional time in schools.

The difficulty with providing State funds for these activities raised earlier could be overcome by directing contributions from employers towards raising the quality of school level support for professional experience. Only through providing resources to these components can the State achieve any real control over the amount and quality of the field experience provided to teachers.

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**Review of the relative costs of research training and teaching**

The Commonwealth has commissioned KPMG Consultants to undertake a review to determine the relative costs of research training and teaching and to explore options for developing a new funding model for higher education\(^{243}\).

The review’s relative cost methodology involves the following steps:

- identifying factors influencing the costs of teaching and research training
- identifying the costs of teaching and research training on the basis of field and method of study
- establishing relative costs within current funding allocations
- producing sector-wide costing averages
- assigning weights with respect to publicly funded research and non-research student places.

It is time this important area is revisited and due recognition given to the fact that the relative costs of university courses have changed over the decade since the original model was developed. The Review acknowledges that professional experience is a high cost activity for universities. The impact of structured industry placements on the cost relativities in higher education will also be examined. The KPMG consultants note in a background paper:

> With the growth in and emphasis placed on such forms of practical preparation, it is possible that the costs of establishment, management and supervision of placements may have moved relative to on-campus modes of study\(^{244}\).

The review is to report later this year. It offers an opportunity to consider fully the special requirements of new approaches to educating teachers. If the Commonwealth is prepared to acknowledge the high cost of professional experience and takes this factor into account in determining its future operating grants, this should assist moves to make teacher education more closely related to the real work of teachers.

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\(^{243}\) KPMG, Review of relative costs of research training and teaching, Background paper no. 2.

\(^{244}\) KPMG, Review of relative costs of research training and teaching, Background paper no. 2.
9.6 The impact of Commonwealth policies

Commonwealth policy initiatives in higher education

The Commonwealth Government’s introduction of a system of block funding to universities in 1988 and the Higher Education Contribution Scheme (HECS) in the early 1990s have had major impacts on teacher education. The Ministerial Advisory Council on the Quality of Teaching (MACQT) report, *Identifying the Challenges*, highlighted the impact of Commonwealth higher education policies on teacher education courses in New South Wales. The report noted in particular the influence of:

- the Higher Education Contribution Scheme which required teachers for the first time ever to make a contribution to the cost of their course
- the introduction of fees for postgraduate courses, which caused a marked drop in the number of teachers wishing to pursue such courses
- unfunded salary increases for university staff, which caused a greater emphasis on lower cost staff and increases in staff-student ratios
- the five per cent cut to base operating grants for universities which caused a re-focusing of priorities, often to the detriment of teacher education.

Academic staff

The number of equivalent full-time academic staff in education faculties in New South Wales has fallen from 981 to 825, or 16 per cent, between 1994 and 1998. However, the decline has not been uniform across universities. Education faculties at Newcastle, Southern Cross, and Sydney universities have experienced the most dramatic reductions of 48, 44 and 32 per cent respectively. The changes in academic staff in teacher education are shown in Table 9.6.

| Table 9.6 Academic staff* (FTE) employed in Education, New South Wales, 1994 and 1998 |
|-------------------------------------|-----|-----|-----|
|                                     | 1994 | 1998 | Change (%) |
| Avondale College                    | 23   | 21   | -9 |
| Charles Sturt                      | 81   | 79   | -8 |
| Macquarie University               | 76   | 59   | -22 |
| Southern Cross                     | 40   | 23   | -43 |
| New England                        | 77   | 70   | -9 |
| UNSW                               | 54   | 63   | 17 |
| Newcastle                          | 87   | 56   | -36 |
| Sydney                             | 180  | 129  | -28 |
| UTS                                | 129  | 156  | 21 |
| UWS                                | 113  | 101  | -11 |
| Wollongong                         | 53   | 69   | 30 |
| **New South Wales**                | **913** | **826** | **-10** |

*FTE: Full Time equivalent

Sources: DEET Selected Higher Education Staff Statistics, 1994; DETYA Selected Staff Higher Education Statistics, 1998

Student/staff ratios

Reductions in staffing should be considered in the context of total student numbers, as student/staff ratios are one indicator of course quality. In 1998 the average student/staff ratio in education in New South Wales institutions was 17.7 students per full-time staff member compared to 14.8 students in 1994. As illustrated in Table 9.7, student/staff ratios have increased in all institutions since 1994; however, there is considerable variation in ratios between institutions.

The University of Sydney and the University of New South Wales have the lowest student/staff ratios, 11.1 and 11.6 students per staff member respectively. The universities with the highest ratios are Charles Sturt (23.2), Macquarie (24.0), Southern Cross (23.9), New England (22.3), Newcastle (25.6) and Western Sydney (26.3).

The size of the formal program may have something to do with variation amongst the remaining universities. Small programs tend to have low staff-student ratios and high cost per student.

The staff referred to are full-time, fractional full-time and casual staff with a ‘teaching only’ function or with a ‘teaching and research’ function. In other words, they are academic staff, not administrative staff. Casual staff are included in these statistics. As the proportion of time spent on research is not specified, the student/staff ratios need to be treated with caution. For example, universities which have a high research output in education such as the University of New South Wales may have full-time academic staff who undertake only a small amount of teaching. Yet these staff would be counted in the student/staff ratio as if they were engaged in teaching full-time.

This could lower the student/staff ratio in institutions with a high research output. Yet, it is hard to explain why universities would have a high research output without it being reflected in the number of people being trained either at undergraduate or graduate level.

Casual staff

Casual staff have always featured in academic staffing profiles because of the role they play in delivering tutorials. Across New South Wales universities, an average of 17 per cent of all academic staff are employed on a casual basis. In teacher education, the proportion of staff

Table 9.7 Changes in student/staff ratios in Education, 1994 and 1998, by institution

<table>
<thead>
<tr>
<th>Institution</th>
<th>1994</th>
<th>1998</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avondale College</td>
<td>10.0</td>
<td>8.7</td>
<td>-13</td>
</tr>
<tr>
<td>Charles Sturt</td>
<td>19.5</td>
<td>23.9</td>
<td>23</td>
</tr>
<tr>
<td>Macquarie University</td>
<td>18.0</td>
<td>24.8</td>
<td>38</td>
</tr>
<tr>
<td>Southern Cross</td>
<td>22.7</td>
<td>24.3</td>
<td>7</td>
</tr>
<tr>
<td>New England</td>
<td>15.9</td>
<td>23.1</td>
<td>46</td>
</tr>
<tr>
<td>UNSW</td>
<td>15.1</td>
<td>11.0</td>
<td>-27</td>
</tr>
<tr>
<td>Newcastle</td>
<td>18.2</td>
<td>25.7</td>
<td>41</td>
</tr>
<tr>
<td>Sydney</td>
<td>10.3</td>
<td>10.9</td>
<td>6</td>
</tr>
<tr>
<td>UTS</td>
<td>13.9</td>
<td>10.6</td>
<td>-24</td>
</tr>
<tr>
<td>UWS</td>
<td>19.8</td>
<td>26.2</td>
<td>32</td>
</tr>
<tr>
<td>Wollongong</td>
<td>17.0</td>
<td>16.5</td>
<td>-3</td>
</tr>
<tr>
<td>New South Wales</td>
<td>15.9</td>
<td>17.8</td>
<td>12</td>
</tr>
</tbody>
</table>
who are casual is generally higher, at an average of 23 per cent for universities. The Ministerial Advisory Council on the Quality of Teaching report suggests that the quality of course delivery suffers if too many casual staff are employed in major teaching roles such as lecturing, student assessment, and coordination and supervision of the practicum. There is considerable variation between universities in the proportion of total teacher Education academics who are employed on a casual basis.

Seven universities of the eleven are at or below the State average of 23 per cent for casual staff as a proportion of all academic staff in teacher education. Four universities are well above the State average of their employment of casual staff in teacher education – Southern Cross University (30 per cent), University of Wollongong (39 per cent), University of Technology, Sydney (44 per cent) and the University of New South Wales (46 per cent). A comparison between the proportion of casual staff employed in the rest of the university (Figure 9.2) with that in education suggests that the extent of casual employment in Education reflects the specific circumstances of these teacher education faculties rather than any university-wide industrial agreements. For example, in four universities, the proportion of all staff employed on a casual basis in teacher education is lower than in the rest of the university (Charles Sturt, New England, Newcastle and the University of Western Sydney – disregarding the anomalous data for Macquarie). In the remaining institutions, the proportion of all staff employed on a casual basis in teacher education is higher than for the rest of the university (Avondale, Southern Cross, University of New South Wales, Sydney, University of Technology, Sydney and Wollongong).

In general, those institutions with the lowest proportion of casual staff have the highest student/staff ratios in education (Table 9.7). The exception is Southern Cross University which has both a higher than average proportion of casual staff and high student staff ratios. A comparison between the proportion of casual staff employed in the rest of the university (Figure 9.2) with that in Education suggests that the extent of casual employment in Education reflects the specific circumstances of these teacher education faculties rather than any university-wide industrial agreements. In five universities, the proportion of all staff employed on a casual basis in teacher education is lower than in the rest of the university (Charles Sturt, Macquarie, New England, Newcastle and the University of Western Sydney). In the remaining
The proportion of all staff employed on a casual basis in Education is higher than for the rest of the university (Avondale, Southern Cross, University of New South Wales, Sydney, University of Technology, Sydney and Wollongong).

The most marked difference between Education and other faculties is at the University of New South Wales where the proportion of staff who are casual in Education is almost four times as great as the rest of the University. The fact that four of the institutions (Avondale, University of New South Wales, Sydney, and Wollongong) have below average student/staff ratios could mean that lower ratios can only be funded through savings generated by employing more academic staff on a casual basis. The teacher education staffing profile can also be distorted where casual staff are employed only to supervise the practicum and they are not counted because they neither teach nor conduct research.

It would be obviously a concern to the State that a university can in effect make important cost savings without the major employer, or indeed any employer, knowing whether quality is being maintained, or the course is still being taught effectively.

**Implications for the State**

In summary, the consequences of the Commonwealth’s higher education policies for teacher education courses are:

- a decline in student load as a proportion of all higher education load
- a reduction in the number of students enrolled
- an increase in student/teaching staff ratios and an increase in the number of casual staff employed in academic roles
- pressure on the quality of teacher education programs in terms of both content and practical experience
- an inability for teacher education to occur anywhere but in a university.

These are all tangible effects. In addition, attention has been drawn to a series of intangible effects such as:

- lack of appropriate professional experience in courses
- loss of important links with schools
- too little emphasis on excellence and best practice
- few joint appointments between universities and employers.

The relatively poor state of teacher education courses in New South Wales and their rather tenuous relationships to the needs of employers may not necessarily be the direct result of a policy decision by the Federal Government. The problems have arisen as a result of a series of decisions made by university administrators, at least with tacit Commonwealth approval, based on factors such as:

- patterns of demand for places from potential students, which are influenced by the imposition of the Higher Education Contribution Scheme and full fees for graduate education
- the relative cost to the university of places in teacher education compared with other fields of study
- a university historical funding profile
- loss of close links between university staff from the disciplines and schools.

The accumulated decisions of individual universities in response to these factors have affected both the distribution of teacher education places in the State and the quality of teacher education courses. The State must be more actively involved in these resource decisions if the decline is to be addressed adequately.

### 9.7 Related Commonwealth policies that affect teacher education

The Commonwealth has been very much a disinterested partner in the field of teacher education, in spite of its funding responsibilities for higher education, and the significant resources it provides to both non-government schools and State systems. Its commitment to teacher professional development programs has declined steadily over the past 25 years, as discussed below, and there has never been any discernible link between professional development funding and resources put into teacher education in universities.

**Professional development programs**

In 1974, the Karmel Committee recommended the introduction of a professional development program for teachers and the establishment of Commonwealth-funded
education centres to support teacher-initiated professional development.

A review by the Commonwealth Schools Commission in 1983 found that the professional program accounted for no more than 20 per cent of total outlays on teacher professional development by government and non-government school systems. By 1985, the professional development program was reduced to one-third of its original level and was gradually phased out. The Education Centres program was progressively cut back during the 1980s and abolished in 1996. Given such centres have flourished elsewhere it is difficult to explain why those in Australia have closed.

In 1993, the then Commonwealth Minister for Employment, Education and Training, the Honourable Kim Beazley MP, produced a policy statement on teacher education called Teaching Counts. The policy statement upheld the central role of both the university and the practicum in teacher education and announced a national professional development program for teachers with funding of $20 million per year from 1994 to 1996.

Program priorities included providing teachers with opportunities to renew their knowledge of their subject disciplines as well as funding national teacher forums. Funding was project-based and the Minister approved all grants under the program which finished in 1996.

It is understandable that these ad hoc programs lose momentum and no longer gain funds because they are not tied directly to mainstream teacher education activities either in schools or universities. They are put forward because the formal system is failing and they are too little to be much help. In addition, there is no professional body to ensure momentum is maintained.

In Teaching Counts, the Commonwealth also introduced the Quality Schooling Program with funding of $5.7 million over three years.

The Quality Schooling Program provided assistance for projects in areas such as school leadership, school organisation and student welfare. In 1999, the Commonwealth provided funding of $76 million over three years for a Quality Teacher Program under its Quality Outcomes Program. The funding is to be directed to strategic projects related to teacher professional development. Again, there is no professional organisation to ensure that these funds are spent to their best effect. Employer needs in this context are not necessarily the same as professional needs, and if the desired outcome is genuine teacher development, then it is the profession that should advise on priorities.

Overall, Commonwealth involvement in teacher professional development has been short-term and a small proportion of total outlays in this area. The main responsibility for professional development rests with the employers of teachers, the State government and the non-government schools. Any deficiencies in the initial training of teachers must be addressed at this level, because the State government has no capacity to ensure that the outcomes of initial teacher education courses are adequate to meet the professional demands of today’s schools.

Currently, there is a variety of State-level provision for professional development. Some $114 million in funds was provided in 1999-2000 for professional development related activities in government schools. These funds include funding direct to schools, funding for district and statewide training programs, and salaries of district and state office staff involved in program delivery and design.

Of the dedicated Department of Education and Training’s Training and Development Directorate budget of $20 million, some $4.8 million is spent on teacher relief, leaving only $15.2 million to develop and deliver programs for teachers.

The State Government also provided significant cross-sectoral funding to enable the implementation of the reform of the Higher School Certificate.

Catholic systemic schools are also provided with significant funds for training and development. Based on an extrapolation of average per teacher funding levels within the Lismore and Parramatta Diocese, it is estimated that approximately $17 million is allocated to training and development in that system. This represents an estimate only as each Diocese is free to determine how the various State, Commonwealth and systemic resources available to it are allocated.

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248 Kim Beazley, Teaching counts.

249 Kim Beazley, Teaching counts.
The Association of Independent Schools also provides significant training and development opportunities for schools and teachers on a cost recovery basis. The Review was informed that the extent of these activities is growing at around 30 per cent per year.

As a consequence of the expansion of Commonwealth funding in the non-government school sector, there has been an expansion of training and development bureaucracies in some Catholic Diocesan Offices and in the Association of Independent Schools. Many of these activities are funded by employers, schools and teachers themselves on a cost recovery basis. They represent, once again, a philosophy of ‘what can be done for teachers’, rather than one which enables teachers to adopt a professional view of their own development needs.

Although the management review into the New South Wales Education Portfolio in 1990 by Brian Scott proposed that professional teaching organisations should have a greater role in the provision of professional development, their capacity to contribute to training and development remains relatively limited. Nevertheless, despite their limited resources, the individual subject associations made substantial contributions to the implementation of the reform of the Higher School Certificate and School Certificate, a welcome utilisation of their expertise and a valuable professional input.

9.8 Private school funding

A key issue affecting the supply of teachers in government schools is the high level of transfer of teachers from government to non-government schools. The non-government school system is able to recruit teachers after they have had a few years of experience in the government system or can take their pick of the very best young graduates. Practices which allow only what is essentially a one-way flow of teachers between systems should be questioned.

The government school system, in a very real sense, the ‘well’ from which teachers for all schools are drawn. The Department of Education and Training, therefore, bears the major costs of new teacher induction and is responsible for delivering the bulk of on-the-job learning that new teachers require during their early years. The important issue is that the training ground obligations of the State sector should be acknowledged and funded from non-State sources. There is a strong case for an employer who engages a teacher from a State school to pay a ‘training fee’ or at least for the Commonwealth to do so on their behalf.

Government schools in New South Wales employed 50,108 teaching staff in 1999, an increase of 705 or one per cent from 1997. Non-government schools in New South Wales had the equivalent of 21,733 full-time teaching staff in 1999, an increase of 1,329 or seven per cent over 1997.

The strongest enrolment growth in non-government schools is at the secondary level, where future shortages are predicted. As the difficult-to-staff schools are overwhelmingly in the government system, the Commonwealth government should acknowledge the effect of movement of teachers between the sectors. Non-government schools are free to operate in the most desirable locations and generally do not serve low socio-economic communities or where they do their populations are not representative of all sectors of the community. These ‘free-rider’ schools therefore benefit disproportionately from teachers who have been inducted by the government school system. Again, there is a strong case for the State employer to receive some recompense.

The Commonwealth Government is the major provider of funding to non-government schools. As shown in Table 9.9, the Commonwealth government is providing $2.6 billion to non-government schools in the year 2000, amounting to 62 per cent of all Commonwealth schools outlays. Non-government schools currently account for 30 per cent of school enrolments in Australia.

Commonwealth resources for non-government schools will increase steadily over the next four years. Due to the Enrolment Benchmark Adjustment (EBA), the cost of new places in non-government schools will be met largely from cuts to Commonwealth recurrent funding for State schools, without any account being taken of the teacher training role of State schools on behalf of the non-government school sector. A system is needed so that all schools can flourish and that the distribution of funds from whatever source, Commonwealth or State, is provided in a fair and

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equitable manner, taking into account the full cost of educating teachers in the State.

9.9 Supporting effective induction

As discussed in chapter 5, new teachers, parents, teacher educators and employers all emphasised in advice to the Review the importance of sound induction. Yet because the task falls between the resources needed to graduate a student and the resources an employer has to give up if the new teacher does not take a full load while being inducted, too little is spent on this important activity. The Commonwealth, the States, the universities, employers and unions must address this issue so that there are resources to give new teachers a fair start to their professional career.

If the resource implications are too great then teachers may well need to consider partial funding of the scheme. New entrants to the profession might be served better by forgoing part of their salary in order to commence on a reduced load. The reduction in salary need not be borne in the first year alone. The salary forgone could be amortised across, for instance, the first three years of teaching. This would not be the first time that teachers have traded-off salary for conditions. This was the case in the 1980s when teachers fought so hard for reduced class sizes.

Nonetheless, a commitment from teachers to induction in this way would need to be matched by employers so that the induction provides beginning teachers with effective support and mentoring so that they are able to build on their pre-service preparation.

9.10 Issues requiring attention

Since the transfer of responsibility for teacher education from the States to the Commonwealth more than thirty years ago there has been a steady diminution of the State Government’s ability to act in this important area. The States have now limited capacity to effect supply and even less to impact on quality. In fact, unless major reforms are introduced, as the level of supply decreases, so too will quality. At the Commonwealth level, teacher education is seen merely as one of many competing priorities in the higher education sector. Even with the Commonwealth Government’s higher education policies determining the overall level of university operating grants, and the capacity of universities to raise money from other sources, universities remain at arm’s length from the influence of government.

State needs

The constitutional responsibility of the State Government to provide an effective school education system depends largely on the quality and standards of its teachers. Yet there is diminishing confidence in the commitment and capacity of universities to produce sufficient graduates with the professional skills and attributes required of a teacher in the 21st century.

Such concerns are not limited to teacher education. The New South Wales Department of Health expresses similar views about its inability to influence the supply of nurses. Although a 1994 agreement proposed that universities would prepare 2,100 nurses per annum, there was a cumulative shortfall of 1,409 over the four-year period 1994–1997. This shortfall occurred despite a 1994 review of nurse education proposing appropriate planning committees to advise on the needs of the nursing workforce at the state and national levels.

During the Review discussions were held with the Department of Health on the nature of workforce planning since the transfer of responsibility for nurse education to the Commonwealth. The fact that universities were taking

| Table 9.8 Teaching staff* by sector in New South Wales, 1997 and 1997 |
|-----------------------------|----------------|----------------|-----------|
|                             | 1997           | 1998           | Difference | Change (%) |
| Government                  | 49,403         | 50,108         | 705       | 1          |
| Non-government              | 20,404         | 21,733         | 1,329     | 7          |

Source: ABS Cat No. 4221.0 Schools Australia 1999
significantly fewer students into nursing than would be required to meet the original targets is creating supply problems.

As is the case for teaching, there is concern about a widening gap between universities and the Department of Health. This is leading to some ambivalence about respective roles and expectations regarding the preparation of nurses. The lack of clinical relevance in some degree programs acted against ease of entry into work. In addition, factors such as increasing casualisation of the workplace, mobility between the public and private sectors, and movement of nurses from New South Wales to interstate and overseas have created problems which have parallels in the teaching arena.

Managing supply

If New South Wales had retained responsibility for the training of teachers, would the State be facing the quality and supply issues it does today?

For example, would all the institutions training teachers in 1974 still be training them? Essentially they are still involved in teacher preparation, yet the number of people commencing teacher education each year has declined from 8,740 in 1975 to a more or less steady rate of 5,900, or some 2,800 fewer teachers, in the year 2000.

Additionally, while there are sufficient teacher education places overall, there is undersupply in early childhood and some areas of secondary and oversupply in primary. The State has no direct mechanism to address this imbalance.

There is a case for a national view to be taken of teacher education provision. Instead of all universities trying to provide the widest possible range of courses, the quality of teacher education in fields where the numbers are small might be improved by requiring only one or two excellent national providers to cover the whole country, both in undergraduate and graduate education.

Resourcing and quality

A further and potentially more serious issue relates to how might the university resources transferred out of teacher education be retrieved from other fields of study to respond to the anticipated significant increase in demand for teachers, or to meet more effectively their needs for continuing education.

Under present arrangements the Commonwealth has little capacity to retrieve these resources. A solution to inject significant new funds into teacher education has little chance of success in the current climate unless the needs of teacher education become a national priority. Teacher education has major national significance, requiring special attention, strategic direction and intervention from both

<table>
<thead>
<tr>
<th>Type of program</th>
<th>Government schools $ million</th>
<th>Non-government $ million</th>
<th>Joint programs $ million</th>
<th>Total $ million</th>
<th>Distribution (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Recurrent Grants Program</td>
<td>1,114</td>
<td>2,451</td>
<td></td>
<td>3,569</td>
<td>83</td>
</tr>
<tr>
<td>Capital Grants Program</td>
<td>220</td>
<td>86</td>
<td>-</td>
<td>306</td>
<td>7</td>
</tr>
<tr>
<td>Other Targeted Programs</td>
<td>268</td>
<td>133</td>
<td>23</td>
<td>425</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,602</strong></td>
<td><strong>2,674</strong></td>
<td><strong>23</strong></td>
<td><strong>4,300</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>


State and Commonwealth Governments.

Each university in isolation, with at least tacit agreement of the Commonwealth, has largely determined the transfer of resources out of teacher education into other fields of study higher on their priority list.

Education as a percentage of all higher education load in New South Wales universities has declined from about 23 per cent in 1983 to about eleven per cent in 1999. Although this occurred at a time of rapid growth in higher education, it still resulted in a real decline of eight per cent in the number of teacher education graduates over the period 251.

The downward trend reflects some response by the universities to the problem of over supply, particularly of primary graduates. It is not an appropriate response, however, which fully considers the changing needs of employers and specific areas of undersupply.

Additionally, expectations about teacher education have essentially stood still while the initial and continuing education provision of a wide range of other occupations has increased.

The transfer of resources out of initial teacher education occurred despite the need for resources to be directed towards assisting teachers already employed, particularly as the complexity of teachers’ work increased during the 1990s. An opportunity has been lost: to take advantage of the easing pressure on teacher numbers and shift efforts towards improving quality. Too rarely in discussion with university staff preparing teachers was quality performance and best practice the issue. Their major motivating factor is still the need to maintain numbers by ‘pushing students over the line’.

Retrospective alternative scenarios, no matter how interesting, are generally not helpful unless they illuminate a current issue. In this case, the Review believes that much greater regard should have been paid to the increased need for continuing teacher education following a period of very rapid growth in student enrolments resulting in growth in teachers employed in schools up until the 1990s. The need to preserve the teacher education share of resources was even greater when this growth was accompanied also by major curriculum changes as has been the case in New South Wales.

251 DETYA. Students 1999, Selected Higher Education Statistics.

School and TAFE based teacher education

Currently, there is no possibility of resources previously used for teacher education being transferred to a school system, for example to provide school-based programs for teachers. Yet, on the one hand, the costs of any inadequacies in initial preparation are met, to the extent that they are, by the employer through the provision of professional support. On the other, pressures on professional development are leading systems, often unreasonably, to require universities to include more and more within their courses.

These comments are not intended to detract from the often sound teacher and school improvement programs which are funded by both State and Federal Governments. The issue is that funding for improvement programs bears little relationship to funding provided to universities for teacher education, whether for preservice or inservice activities.

At present, the State has little capacity to increase the amount of site or school-based learning, where the instruction is given by teachers in schools or by university staff spending much more time in a clinical setting. Nor can they direct the funding to the TAFE system to support the training of teachers. For example, despite the obvious advantages of preparing technological and applied studies teachers on-site at the Coffs Harbour Educational Precinct, utilising the resources of the school, the TAFE system and Southern Cross University, there is almost no capacity to fund such arrangements except through agreement by the University to purchase services from the TAFE Institute.

Even though there are strong arguments that greater involvement of schools in the preparation of teachers might increase its relevance and provide an environment in which theory can come alive through practice, or that the TAFE system is better placed to provide a range of practical skills for teachers, universities are unlikely to give up any of their funding. This is already obvious in the way in which funding has been withdrawn from the ‘soft-touch’ practicum in order to maintain other areas of university teacher provision.

State-Commonwealth responsibilities

The current shared responsibility for funding schooling and tertiary education between the Commonwealth and the State causes significant issues for teacher education. The Commonwealth makes the most significant contribution to
non-government schools and university education. The State makes the most significant contribution to government schools and to TAFE institutions. In such a system where there is no clear demarcation, there will be forever a stand-off between the two governments about who should fund what.

Money from the Commonwealth provided to non-government schools could be used for school-based teacher education, both initial and continuing, particularly now it is clear how influential the level of teacher performance is on student outcomes. This is not done because teacher education is seen as a responsibility of the universities.

Similarly, the State money provided to government schools could also be used to improve teachers, but this occurs only to a limited extent. What is provided is ripe for cutting whenever the budget for schools becomes tight, because it is seen as a Commonwealth responsibility to fund the preparation of teachers as well as their professional development.

These factors are compounded in the education industry by the low level of responsibility assumed by employers for the continuing education of their employees. While many teachers maintain their professional growth, a culture has arisen of over-reliance on employer-provided courses. These issues were considered in chapter 5.

The lifelong learning of teachers receives insufficient attention just at a time when so much change is occurring in schools and lifelong education is an aim for all. In reality, the education sector is amongst the least effective in providing the required lifelong education for continuing effectiveness.

Business and industry support

A number of major business organisations took the opportunity to respond to the Review. Undoubtedly, business and industry place a high priority on education and, in particular, on how well the education system is preparing people for employment. There are many ways in which business and industry contribute to the development of educational policy and to providing opportunities for young people. This level of support, while welcome, differs from the explicit and tangible support of business for education in other countries. Large corporations in the United States are contributing millions of dollars to education. For example, the Coca-Cola Company has contributed US$100 million to education over the past decade. The company’s commitment focused on education as a means of improving the lives of others around the world. Ingrid Saunders Jones, chairperson of The Coca-Cola Foundation, encapsulated the company’s perspective on assisting teachers.

When teachers are overwhelmed, they can lose the connection to the student,” she says. “When I was a teacher, I was startled to see how easily that could happen. What helps teachers stay connected? It’s when they have an opportunity for training. They need a place to go for motivation when they feel isolated. That’s what we support with our grants.

Teachers do their best teaching—and kids do their best learning—when they’re connected and motivated252.

Such a commitment is not unique. Many other companies are active financial supporters of education and teaching, specifically through grants to the National Board for Professional Teaching Standards, sponsorship of teaching awards including prestigious national teacher of the year awards, as well as a wide range of teacher development activities.

The agenda for change laid out in this Report is ambitious. If teaching matters, as is clearly the case, then it needs to be valued in tangible ways. Australian business and industry need to do more than talk about the importance of excellence in education. They need to demonstrate their commitment to it, and teachers need to respond in ways that emphasise quality and professionalism. As noted previously, Australian business and industry can provide assistance with start up funds for the Institute of Teachers, with proposals such as that advanced for a centre of teaching excellence by New England University, assistance with professional development, the provision of teaching fellowships and public support of awards for teaching excellence. There are many ways in which business and industry could demonstrate to teachers how they are valued. This seems an excellent place for mutual obligations to be exercised. If our society wants to be one genuinely committed to excellence as the basis for national

prosperity, support of this kind for teacher excellence would be a singularly appropriate place to start.

9.11 Conclusions and Recommendations

What the previous discussion has highlighted is the lack of careful analysis of the relationship between the resources provided, how they are applied and how they could be applied more effectively. The resourcing of teacher education therefore needs to be considered in terms of both principles and priorities.

Resourcing decisions need to address four key principles which have been prominent in the Review. They are that:

- there should be a diversity of entry pathways into teaching
- effective professional experience must be the core of initial teacher preparation
- funded courses must have a focus on teacher quality
- teachers need continually to develop throughout their working lives.

Resourcing priorities must be set with input from all parties for whom the resources are intended. There is a mixed government/non-government school system providing education to the people of New South Wales and its diversity is likely to increase. What the State needs is the best mixed system of both government and non-government schools able to apply effectively all the resources, both Commonwealth and State, that are available to prepare teachers for all schools.

Such an approach will require representatives of the State, the Commonwealth, employers and the universities to determine the most effective mechanism for meeting the needs of all schools for teachers. Currently, each university is preparing some teachers, yet none can be considered fully effective in terms of quality or meeting needs as perceived by employers.

A new approach is required in which the State, on behalf of all employers, is able to determine its total requirements both for initial and continuing education within available resources and then call for potential providers to tender to undertake the task required.

The tender documentation would specify both performance and supply requirements, the quality focus would ensure that decisions would not be dictated only by cost. Such tenders could operate for up to five years to encourage providers to apply the appropriate resources in a dedicated and on-going way, but not for so long that they can become complacent as now seems to be the case.

Such an approach would enable the State to regain a legitimate and sensible level of control needed to maintain a supply of quality teachers in schools and other educational settings. While these are long term goals, there are other pressing short term ones.

Clearly, immediate action needs to be taken to address the looming critical shortages of secondary mathematics, science, technology and languages teachers.

The possibility of a bi-lateral agreement between the State and Commonwealth to direct some higher education funding towards specific teacher education needs to be investigated. Universities could be invited to tender for the right to offer the courses. Tender documentation should require universities to adopt innovative and collaborative delivery strategies to give the courses relevance and produce quality high performing teachers.

The funded places would increase each year over the life of the contract so that the university would have continuity of intake. The current agreement between the Australian Catholic University and the New South Wales Department of Education and Training for the provision of teacher education courses for Aboriginal and Torres Strait Islander students provides a precedent for such processes.

The involvement of both the Commonwealth and the State jointly in these processes would add significant potential to broaden the scope of such activities. The State could also offer support for students entering these courses through the provision of scholarships, either to repay students the Higher Education Contribution Scheme debt or in the form of living away from home allowances. Non-government schools should also be invited to participate and contribute to any scholarship or support scheme.

A Joint Committee for managing the resourcing of teacher education and advising on needs should be established. It should involve State and Commonwealth representatives, as well as representatives of employers, the universities and the proposed Institute of Teachers. Its functions would be to determine state needs, prepare tender documentation to address these needs, recommend where funding should be applied and advise the Minister more generally on teacher education supply needs.
The advice provided on teacher supply by this committee will complement that on teacher quality provided by the Institute of Teachers. This will ensure comprehensive and independent advice to the Government.

The committee should be constituted as an expert committee, but be required to consult broadly with all parties having an interest in issues concerning teacher supply.

A further initiative to involve employers of teachers more directly in the provision of teacher education, and to develop new pathways into teaching would be for the Joint Committee to establish a system of paid training in the workplace.

Those selected on the basis of relevant background and experience could be employed as teachers-in-training in schools. Such an approach would provide an integrated process for recruitment, education, professional experience, induction and internship which might eventually lead to full employment. Formal agreements would need to be developed between employers and universities or TAFE for the delivery of such arrangements.

This approach would be similar to the system of traineeships in other fields.

In particular, the parties should encourage mature-age people, or people already with an appropriate education to apply. This is consistent with support given in advice to the Review for flexible pathways into teaching, discussed in chapter 5.

Finally, it is time that the total resources that are already applied to teacher education be brought together in a clear, open and transparent manner so that they are better used to prepare quality, high-performing teachers. The current situation cannot continue.

The special needs of teacher education in this State, which parallel those of nursing, should be addressed in a cooperative manner. It cannot be left to universities to allocate their load as they see fit, without the State being convinced that its needs are being met.

The emphasis must now be on:

- quality
- making professional experience the core of teacher education programs
- bringing together universities, other potential providers and schools as a unified system.

The actual costs of different models of teacher education should be explored, both by developing pilots of alternative approaches and by establishing the real costs of current programs.

The Relative Funding Model was a useful device when first constructed, but has now probably passed its period of usefulness. It is encouraging to see that other models are currently being explored at Commonwealth level. In the case of teaching, future models should be developed in full cooperation with the State and employers who provide professional experience so that the full costs are known.

**Recommendation 8**

That a Joint Committee on Teacher Supply be established representing the New South Wales Government, the Commonwealth Government, the employers, the universities and the Institute of Teachers to:

- develop improved funding arrangements for teacher education in New South Wales
- advise the New South Wales Government and the Commonwealth Government on the most appropriate allocation of government resources to ensure the adequate supply of quality teachers in the State.

**Recommendation 9**

That the Joint Committee on Teacher Supply, in consultation with the Institute of Teachers and employers:

- determine the mechanism whereby the State’s requirements for the supply of quality teachers can be submitted to open tender from potential providers of teacher education courses
- institute a range of scholarships and paid training opportunities to attract talented young people to teaching, aimed at supporting those teaching subjects and teaching localities where supply problems are apparent
- seek advice from the universities on the design of specific courses for scholarship holders.
10. Supplying Quality Teachers

10.1 Introduction

Quality teachers must be an absolute priority for governments, employers and universities. The research of Darling-Hammond and others referred to earlier in this Report, directly linking teacher quality to student outcomes, heightens the responsibility which each shares in this regard.

A number of submissions commented on the increasing difficulty of filling permanent and casual teaching vacancies in some schools in rural, isolated, and socially disadvantaged communities. Others spoke of shortages of teachers in some secondary teaching specialisations and in the early childhood sector. The issue of how inadequate supply might be best addressed is becoming increasingly a national issue as States become further distanced from the processes of determining the number, in which fields and the quality of teachers to be trained.

Whether there are sufficient teachers being prepared to meet future demands in Australia is not clear. Deans of education, on the one hand, claim that the number is inadequate to meet future demand. Government school systems, on the other, claim an adequate overall supply with limited shortages in some secondary teaching areas.

At the same time, in advice to the Review, employers spoke of shortages of qualified early childhood teachers, submissions from non-government school systems spoke of a teacher shortage251, and many advertisements for teaching vacancies in government schools appear in the weekend newspapers.

The question of more closely matching supply and demand is important given the long lead time normally required to prepare teachers by the university route. Employers, when faced with shortages in the past, become extremely ‘ingenious’ at using methods such as interstate and overseas recruitment and quick courses of preparation to enhance supply.

Over recent decades there have been cycles of over and under supply and in a profession as large as teaching this will always apply. At present, there are elements of both.

There are too many primary teachers being prepared unless it can be seen as an effective preparation for other work and insufficient numbers of early childhood and secondary teachers in some teaching specialisations.

While the Review is aware that many previous attempts to develop human resource planning projections for teachers have been inaccurate, this does not mean that the State should adopt a laissez-faire approach. If employers were more closely engaged with the process to determine the number, fields and quality expectations of teachers required for New South Wales, a better match should result.

An oversupply is less of a problem than an undersupply of quality teachers in important areas. Increasingly, people trained as teachers find fulfilling careers outside teaching and form a pool to be tapped when shortages appear, although there is some doubt that this is effective.

Several comments about how personally difficult it was for many recent graduates of primary courses to find work as teachers were received. These were often expressed in terms of unfulfilled desires and expectations: disappointment at not finding the kind of work for which they were prepared.

Many appear prepared to work for long periods as casual or contract teachers in the hope of gaining permanent employment in the education sector, an often demoralising business. Unless casual or contract teaching can be made a worthwhile professional career in itself, such teachers would be better-off taking the initiative to secure a job outside teaching. Placing newly trained teachers and others returning to employment on a waiting list is an unkind approach, delaying them from finding other equally fulfilling jobs, in the vain hope of a teaching position becoming available. This approach has a similar effect to that of the former wool stockpile, distorting the market and compromising quality.

Responding to questions about teacher supply in general, and quality teacher supply specifically, is of critical importance. The effects of inadequate teacher supply go beyond the immediate concerns of unfilled teaching positions. The issues of teacher supply and teacher quality

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are inter-dependent and cannot be separated. Too often each is treated in isolation, with the one compromising the other. When the chips are down, it is supply rather than quality that wins the day, to the detriment of students in schools. Attention was drawn to examples internationally, and this situation clearly obtains in New South Wales, that where there are insufficient numbers of teachers to fill vacancies, the quality of teachers appointed to schools declines. The standard is not the quality of the teacher: the standard is the size of the class.

Less well known are the effects of a lowering of teacher quality on teacher supply. Again, experiences overseas have shown that when qualifications and requirements for teachers have been raised, the attractiveness of teaching as a career has increased and supply concerns have abated.

The standard must become the performance ability of the teacher, not the size of the class or the ratio of students per teacher, and the providers of teacher education courses must make it their top priority to prepare sufficient numbers of quality teachers. If the universities are unable to do so, then other forms of teacher education should be explored.

The evidence indicates that approaches to teacher supply in New South Wales must be re-defined in terms of the supply of quality teachers who meet predetermined standards. Little attention has been given to this priority in Australia, whereas in the United States it has become the focus of a national report comparing the progress of individual states towards raising the quality of teachers. The report provides an audit of the qualifications and experience of the teaching force, the qualifications and standards required by states and the priority they give to the continuing development of teachers either through the provision of courses or the rewards attached to quality.

Internationally, demand for teachers is increasing. This is likely to be fuelled in the future by:

- a steady increase in the size of the school-age population. In Australia the annual rate of increase has been estimated at 2.5 per cent.\(^{255}\)
- increased demand for education as more people stay on in education and training for longer periods of their lives and the concept of lifelong learning bites harder
- the general ageing of the current teaching service with potentially higher rates of retirement. The average age of the current teaching force in New South Wales is approximately 43
- a reduction of class sizes in some countries, for example, in Japan from 40 to 30.

In New South Wales, where government schools are currently staffed so that no class in the upper primary and lower secondary school need exceed 30, with smaller classes in lower primary and post-compulsory years. Class size is unlikely to reduce much below these levels except in areas of special needs.

In some countries, for example in the United States, the short-term outlook is approaching critical proportions. Reports from the United States indicate that:

…[s]chools must hire an estimated 2.2 million new teachers over the next decade due to increasing enrollments, the retirement of approximately half our current teaching force, and high attrition rates.\(^{256}\)

There is no reason to believe that demand patterns in Australia will be different from other developed countries such as the United Kingdom and United States. Although these factors are unlikely to impact significantly on teacher demand in the short term, they will have long term consequences as demand overtakes existing supply. Without fundamental changes in policy direction in Australia, these shortages can only be met as they have in the past by strategies that compromise the quality of teachers and hence teaching in schools.

As noted previously, the extent of teacher demand is an increasing source of tension between those responsible for preparing teachers, the deans of education, and those responsible for providing a teacher in every class, without the embarrassment of over-supply, the employers of teachers. On the one hand, deans of education are perceived as overstating supply problems, while on the other employers seldom comment except in the broadest terms on shortages. The normal response to the deans is that they overstate the case for shortage out of self-interest.

The number of people who undertake teacher education

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\(^{255}\) MCEETYA, School Teacher Demand and Supply: Primary and Secondary, prepared by the CESCEO National Teacher Supply and Demand Working Party, May 1999.

\(^{256}\) J. Reed, The importance of professional development for teachers, Educational Horizons, Spring 2000, pp. 117-18.
courses or education-related courses is not of itself a matter of concern to the Review, provided enough are prepared of acceptable quality to meet employer needs. This parallels the situation in law where there are almost as many people now undertaking law courses as the total number engaged in legal practice. Employer needs in law are well and truly being met.

Of considerable concern was the difficulty of ascertaining authoritative data about quality and supply. The issue of availability and reliability of information about the skills, quality and characteristics of teachers in government and non-government schools must be addressed. As noted in chapter 5, no system currently holds up-to-date data on the quality of its workforce in an electronic form. The urgent need for a census of all teachers to provide information on their qualifications and experience is apparent.

If the quality of teachers is important, then it should be a central focus of system planning. Schools and school systems therefore need to build the capacity to research, analyse and report on questions concerning the quality of teachers they employ.

The New South Wales Department of Education and Training could build this capacity into the new Enterprise Resource Planning system it is seeking to introduce over the next few years. It is essential that this system has the capacity to provide for rapid analysis of teacher quality issues.

Even though teachers may be reluctant to provide such information, it is in their interest to support analysis of teaching qualifications and skills. This will allow a better understanding of their developmental needs, and will assist employers to know the full range of skills they can draw on in a school and where shortfalls are apparent.

Recommendation 1 foreshadowed an expectation that the proposed Institute of Teachers would report to the Minister on the quality, qualifications and experience of teachers in this State. This practice of collecting information existed in government schools under the former staffing report processes. Even though the capacity to collect and analyse the data electronically did not exist at the time, the information was collected twice each year. The discontinuation of the data collection suggests that teacher quality has not been a major focus in planning.

Both government and non-government schools should be required to provide information to the proposed Institute of Teachers on the qualifications of teachers and their relevance to the classes and subjects taught. The Institute should publish aggregated information in its annual report.

10.2 Teacher supply and demand

Managing and monitoring the supply of teachers to schools is becoming an increasingly complex task. Currently, schools in New South Wales recruit teachers from a variety of sources, including:

- teacher education graduates of New South Wales universities employed on graduation
- recent university teacher education graduates after a period of teaching on a casual basis or alternative employment
- overseas and interstate trained teachers, either with or without previous teaching employment experience
- teachers returning to employment after a period of alternative employment, study, or parenting
- graduates from a range of sources, particularly where demand is high and supply is weak.

Although government schools only employ graduates of approved courses of teacher education, non-government schools may also employ teachers with partial or no professional teaching preparation. In some cases their employment may be on a reduced teaching and salary load while they complete a course of professional preparation. In other cases, employers may require the teacher to complete a professional program in their own time. Others will not necessarily be required to obtain any teaching qualifications.

The most reliable information about the supply of teachers in New South Wales is available only for the first of the above sources of supply. The Department of Education and Training surveys New South Wales universities annually to determine the number and subject specialisations of students expected to graduate in that year.

Deans of education, through the Australian Council of Deans of Education, also monitor teacher supply through the collection of annual projections of the numbers primary and secondary teachers expected to complete courses within the next five years.
Other New South Wales-sourced supply information is available from a database of teachers seeking employment in government schools. This database, or ‘waiting list’, contains information about the number, qualifications, teaching specialisations and employment preferences of teachers who have applied for employment with the Department of Education and Training. It does not differentiate between teachers from the last four supply categories identified above.

Supply information is also available from the Commonwealth Department of Education, Training and Youth Affairs (DETYA) Higher Education Collections and Australian Bureau of Statistics (ABS) census data. This information is collected for other purposes and is therefore less useful in projections of teacher supply and demand.

It is interesting to note that data arising from the 1996 Australian Bureau of Statistics census indicate that in New South Wales 22.4 per cent of the approximately 100,000 people who recorded a teaching degree as their highest qualification were not in the labour force. Of those aged under 65 years this represented 18 per cent of those trained to teach in primary schools and 13 per cent of those trained for teaching in secondary schools.

Apart from these sources of data, there is little other than anecdotal information, which arises from the process of staffing schools, relating to the supply of teachers.

Data on expected course completions have been collected for the past ten years. These data are collected mid-year as a guide to the number of students expected to graduate. They allow broad trends in supply to be mapped. Figures 10.1 and 10.2 refer to the numbers of expected graduates with particular teaching specialisations nominated by universities.

In particular, it should be noted that the graphs for the secondary area do not represent the total number of teachers, rather an estimate of teachers with particular specialisations, for example, in mathematics or science. Some may have several specialisations.

The greatest variability in the supply of teachers evident in these graphs is more a function of changes in the way teachers are prepared than considered decisions by universities to reduce or increase the number undergoing training. For example, the decision by some universities to increase the length of courses from three to four years created a short-term reduction in supply in the early 1990s. These sharp changes were a result of decisions made some four to five years prior to the effect.

This change from three to four years did not consider adequately the implications for resourcing, especially the resources needed in areas of teaching outside universities, such as those for developing professional experience. They were not applied to induction, or even reserved for use later in a teacher’s career. This matter has now been resolved in that the norm is four years of pre-service preparation, but it is as an example of the application of resources without due regard necessarily to their best use.

Of particular significance in these figures are the trends apparent in the numbers of mathematics, science and technology teachers: known areas of shortage (Figure 10.3). All three areas currently show a reduction in supply from the peak in 1993-94. The numbers of teachers being prepared in each case is relatively small, when compared with the total number of teachers in training. Thus, small changes like a decision by an individual university to increase or decrease the size of the cohort, to offer or to discontinue a course greatly impacts on supply. Implications of the dwindling supply in these areas are considered in section 10.4.

As noted previously, the only other New South Wales-sourced information on teacher supply is that arising from the waiting list of teachers who have applied for employment in government schools.

Projecting demand for teachers is a much more difficult exercise than mapping supply. Demand for teachers is sensitive to a wider range of factors.

These include:

- government policy decisions impacting on teacher numbers or class sizes, and hence pupil-teacher ratios
- the number of students in schools, which increases at variable rates as a result of population cycles and migration, grade retention policies, school starting age and retention policies
- the availability of adequately trained teachers, determined by the extent of supply
Figure 10.1 Projected completions in the secondary areas of teaching, all universities, 1990-99

Figure 10.2 Projected completions in the primary areas of teaching, all universities, 1990-99

Figure 10.3 Projected course completions in mathematics, science and technological and applied studies, all New South Wales universities, 1990-99
employment opportunities for teachers, either overseas or interstate

- separation rates of teachers, that is resignation and retirement rates and unavailability after a period of casual, limited tenure or fixed-term appointment

- changes in unemployment levels making it easier to obtain employment outside of teaching

- curriculum changes and changes in student choice causing a rebalancing of teacher numbers in specific areas.

Compounding the issue is the accuracy of the assumptions upon which projections might be based. Other than noting the comments in submissions about a tightening of supply in some schools and in some subject areas no attempt was made to model or project teacher demand for New South Wales. Instead, an attempt was made to understand the issues of contention in the current national debate about the accuracy of various projections.

When demand for teachers in a particular area rises, and the only teachers available are marginal in quality, is it better to persist with the current curriculum with weak teachers, or modify the curriculum to enable it to be delivered when quality teachers become available? For example, more harm is almost certainly done by poor teaching in mathematics or science than by teaching no mathematics or science at all, and catching up when a good teacher becomes available. Many would know of children whose whole future to learn mathematics has been damaged by one poor mathematics teacher. Issues such as this have never been dealt with previously, because they are professional issues needing a professional response. How much does it really cost to employ a weak teacher?

10.3 Supplying quality teachers to New South Wales schools

There is no doubt that the supply of teachers in New South Wales is tightening. All school sectors report increasing difficulty in attracting teachers. This is especially apparent in rural and regional areas and in certain secondary subjects.

As indicated previously, the general ageing of the New South Wales teaching service means that significant numbers of teachers will retire over the next decade. The age profile of teachers in government schools is set out in Figure 10.4. Data are not available for the total non-government sector.

The highest percentage of males is in the 45–49 age group. Previous trends indicate that the majority of males retire at 60 years of age. Therefore, a large number of male teachers are projected to retire in the next 10 to 15 years.

The highest percentage of females is also in the 45–49 age group. Previous trends indicate that the majority of females retire at 55 years of age. Therefore, a large number of female teachers are projected to retire in the next five to ten years. Given that 75.0 per cent of primary teachers are female (as opposed to 50.4 per cent secondary teachers), the earlier retirement age of females is likely to have greater impact on primary schools.

Adding to this analysis, given that 69.4 per cent of teachers in government schools are over 40 years of age, some 56,000 primary and secondary teachers will need to be prepared just to replace those retiring from the existing workforce over the next 15 to 20 years.
Figure 10.5 Net supply of secondary mathematics teachers, 1999-2006

Figure 10.6 Net supply of secondary science teachers, 1999-2006

Figure 10.7 Net supply of secondary technological and applied studies teachers, 1999-2006
This does not take into account attrition through other means, nor growth in the system, nor interstate and overseas movement of teachers. Other indicators of increasing demand is the growth in interstate and international recruitment. A university in the Sydney metropolitan area advised the Review that the number of employers coming on campus to recruit final-year teachers in training increased markedly in 2000. Whereas in the past only the Department of Education and Training visited the university, this year a non-government school, two interstate recruiting teams and three international agencies have visited the university.

The non-government school, an employer in regional New South Wales, offered secondary teaching positions to any graduate of primary teacher education prepared to relocate.

International recruiters are targeting primary early childhood teachers for Japan, and mathematics and science teachers for Britain and North America – the same areas as those in short supply in New South Wales. It is expected that some 2,000 primary and secondary teachers will be recruited Australia-wide for overseas teaching positions this year.

Extensive interstate recruiting is also targeting these areas of shortage. In 1999, one university reported that almost its entire secondary mathematics cohort was recruited for work in Queensland prior to completion of their studies. The students were in full employment in September of their final year and the university made arrangements for them to complete their preparation by distance mode.

The Department of Education and Training compiles estimates of the level of teacher supply. These are developed for different localities within the State, based on the expressed preferences for employment of teachers on the waiting list. The process considers a number of factors, including changing regional demographics and attrition rates. The estimates involve both high and low loss scenarios. Figures 10.5, 10.6 and 10.7 show best scenario net supply (supply minus demand) estimates for mathematics, science and technology to government schools in isolated, Western Sydney, inland, East Sydney and coastal localities over the period 1999-2006.

Clearly, on the basis of these best estimate projections, the supply of mathematics teachers overall is falling rapidly. In particular, there is an approaching crisis in supply to inland and isolated schools. These issues impact more on government schools, given that in the main the source of teachers for non-government schools are government schools.

The situation makes serious consideration of the proposal from the University of New England to better support the teaching of mathematics, science and technology in rural areas all the more pressing.

Figure 10.8  Teacher resignations in government schools by length of service, 1999
Teachers in government schools are a large pool for the non-government sector to draw on, from which it is able to recruit the best. There are also other factors that need consideration. Although attrition rates from teaching are described by the Department of Education and Training as being at historically low levels, issues arise from the consideration of trends in the nature of resignation rates from government schools. Figure 10.8 shows the number of teachers who resigned in 1999 by the number of years of teaching service, up to 10 years. The figure shows the greatest loss of teachers from government schools occurs in the first few years of service.

This high rate of loss could be a result of any one or a combination of factors ranging from:

- unmet expectations of teachers in terms of their role and the level of support that should be provided to them
- difficult professional or personal circumstances
- failure to meet adequate professional standards
- changing career or life aspirations or other opportunities.

The other observation is that the rate of early resignation of secondary teachers is almost twice the rate of primary teachers. Because of the nature of the subject or discipline specific nature of secondary teacher preparation, these teachers are likely to have greater opportunity for employment in other industries.

It could also be argued that, in general, secondary teachers are less well prepared pedagogically than primary teachers and consequently have a higher failure rate.

There are some fundamental implications of the second hypothesis. The first is that greater support through better professional induction and mentoring might help retain these much-needed younger teachers in the government teaching service. Failure to link induction to career long development might also be part of the reason for the relatively high rate of loss of people who have just completed their initial preparation.

A further implication, obvious in Figure 10.9, is that demand for teachers overall could be reduced by ensuring more attractive conditions. This does not necessarily imply increased salary but intrinsic rewards which come from being genuinely valued as a professional, and increased opportunities for relevant professional development and growth throughout their careers. Payment of study fees, provision of laptops, and opportunities for professional development in other schools are possibilities which were raised with the Review.
10.4 Recruitment of quality teachers to New South Wales schools

The most common comments to the Review relating to teacher supply concerned an inability to fill vacancies in difficult-to-staff schools or to find sufficient numbers of qualified early childhood or secondary teachers. But there were others who perceived a link between tightening supply conditions and increasing difficulty in attracting quality students to teacher education. They were concerned about perceptions of a general decline in the quality of entrants to the profession as represented by a perceived decline in the university entrance scores of students enrolling in teacher education courses.

Several comments need to be made about this perception. First, the overall quality of entrants to teacher education courses has a similar range to that of Arts and Science courses more generally (Figures 5.1, 5.2). Second, it is not known whether students enrolled at or near cut-off points actually complete their course. The third and more pointed observation is that, commonly, young people who are unsuccessful at gaining entry to university when they leave school often return as mature-age students, where they regularly out-perform most others. This is the case with former BHP workers from Newcastle who chose to retrain as teachers. They achieved high levels of success as university students. As reported in chapter 5, they will bring a wealth of experience of the wider world to their teaching.

Nonetheless, the concept outlined in chapter 5 to develop an entrance type examination, similar in intent to the GAMSAT test applied to select entrants to medicine, could alleviate many concerns about the quality and suitability of those entering training. An opportunity will have been lost, however, if the test focuses overly on lowest common denominator issues in relation to literacy and numeracy. General aptitude as well as suitability for teaching must also be assessed. Of greater concern than the quality issues raised by selection into training programs were the teacher quality implications that occur at the point of recruitment. These arise when greater priority is given to the need to recruit someone to a vacancy rather than to the quality of the person filling it.

The strongest evidence of this practice comes when emergency hiring procedures are introduced to overcome shortfalls in supply.

These practices are currently evident in the United States where the national shortage of qualified teachers leads many schools to employ unqualified people to manage the classroom. Texas, for example is short of more than 40,000 qualified teachers out of a workforce of 256,500. Similar practices occurred in New South Wales in the 1980s, when in response to a shortage of mathematics teachers, ten weeks of intensive training was provided for new recruits without teaching qualifications. And once these teachers are employed in government schools they are effectively in the system for life.

There are, however, other less obvious implications for quality that arise from shortage of supply. The Review observed evidence of these in visits to the Department of Education and Training’s School Staffing Unit located at Blacktown.

Staff at the Unit described how new teachers applying for appointment to government schools are placed on a waiting list according to suitability criteria. Within the constraints of the waiting list and the transfer points scheme, the most suitable are appointed first. In those areas where there is a shortage of teacher supply, which is the case for secondary mathematics, science or technology, there are fewer teachers to choose from. If the school is in a less attractive area, the offer may be rejected by better candidates and in the end be accepted by a teacher of lesser and perhaps even marginal competence. Thus, there is potential for the effects of lower teacher quality to impact more heavily on difficult-to-staff schools.

This situation is not peculiar to New South Wales. It is universal in occurrence. Research in the United States notes that when teacher quality has a lower priority than filling a teaching vacancy, students in disadvantaged schools are more likely to be taught by unqualified teachers than students in more affluent areas\(^{258}\).

The effects of lower quality teachers in difficult to staff schools were brought to the attention of the Review by principals who reported higher than average rates of placement of new teachers on quality improvement programs. They felt that the difficulties of educating students in their schools were being exacerbated by poor quality recruits.

During visits to schools the view was put by teachers from the country that there should be no change to current staffing practices in government schools. This appeared to be because these teachers saw the current practice of rewarding them through transfer points as their only recompense for accepting difficult or less attractive assignments. As canvassed earlier, such practices reward waiting rather than quality and development.

Despite the fact that teachers express views which indicate that they strongly support the existing practices, it is time for a different approach to attracting, appointing, rewarding and retaining quality teachers, particularly in government schools in New South Wales.

10.5 Expanding pathways

The need to expand and broaden pathways into teaching was discussed in chapter 5. This position is strongly supported. Providing opportunities for such people to enter the profession will help alleviate teacher supply problems and provide opportunities to broaden the professional pool in schools. There is evidence of an increasing number of people seeking to enter the profession from a range of different professional back-grounds. They have much to offer.

**Recommendation 10**

That the Joint Committee on Teacher Supply work with universities, employers, the TAFE system and the Institute of Teachers to increase the diversity of pathways for entry into teaching, giving priority to strategies which emphasise high quality professional experience in the workplace.

10.6 Progress towards developing national projections of teacher supply and demand

Nationally, there are two competing initiatives aimed at projecting teacher supply and demand.

Attempts by the Australian Council of Deans of Education (ACDE) to understand teacher demand have arisen from:

…a need, which has been honestly and professionally felt by many in schools and higher education divisions in recent years, for the most accurate forecasts possible for the purposes of sensible negotiations with, and advice to, universities regarding student places in initial teacher education - with the intention of avoiding any surpluses or shortages that would be detrimental to the quality of schooling in the future259.

The Australian Council of Deans of Education project therefore has been concerned primarily with the development of a methodology for projecting the extent of demand for school and early childhood teachers. The initial projections released in 1996 indicated a significant shortfall in the number of teachers nationally. New South Wales, however, was seen to be relatively well placed with no shortage of primary teachers and minor shortages of secondary teachers. Significant shortages were projected in some States and Territories.

The work was repudiated by Government agencies in the States and Territories on the basis that the inputs to the model, including separation rates and student enrolment projections, were anomalous and led to an overstatement of demand. The projections have been subsequently updated each year. Where possible, criticisms of the methodology have been addressed, but the projections are still highly contentious. Preston characterised in 1999 her most recent estimates as:

- fully incorporating the non-government as well as government sectors in student enrolment projections, teacher numbers, and other factors
- estimating actual teacher numbers, not full time equivalents

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259 B. Preston, Seeking reality, equity and quality in the future teaching labour market, ACDE Annual Conference, 20 September 1999, p. 2.
taking account of unavailability after a period of casual or limited term employment, and leave not accounted for in pupil-teacher ratios, as well as formal resignations and retirements

accounting realistically for graduates from previous years who had been unable to gain positions, re-entrants to the teaching service, and other recruits who are not graduates of the previous year

ensuring that the supply and demand figures are provided on a comparable basis

providing findings of shortfalls or surpluses as numbers (of graduates) and percentages of other totals (total teacher numbers, total supply, total demand, and supply as a percentage of demand) that are relevant to those who may use the findings260.

Nonetheless, the uses to which the projections of the Australian Council of Deans of Education’s projections have been put has created most concern for government school systems. Teacher unions have used the projections to argue that the increased demand for teachers is a reflection of the unattractiveness of teaching as a career, and therefore teachers should be paid more. Despite this position ignoring the full range of factors outlined previously which may contribute to increased demand, unions argue that higher wages are necessary to attract more people to teaching. Evidence of this occurring is apparent in wage negotiations in South Australia and New South Wales.

Surely, from the perspective of school systems, establishing a sensible and agreed relationship between supply and demand is an obvious way of countering this inappropriate use of the projections.

The other weakness of the model, recognised by the deans of education, is its inability to provide accurate projections of demand for particular types of teachers, for example, vocational education and training, or mathematics and science teachers. In an effort to counter the Australian Council of Deans of Education’s projections, States and Territories established a working party of the Conference of Education System Chief Executive Officers (CESCEO) to develop their own report on supply and demand261.

While this report indicates few problems with current supply, it has a number of substantial methodological weaknesses.

The most obvious problem is that the report simply represents a qualitative analysis of the characteristics of the existing teaching force and supply conditions. It presents only historical trend data and a commentary on current supply conditions, and provides no forward projection of demand. Nor does the report propose a process for projecting future demand beyond commenting on factors relating to demand and current supply conditions. The section on New South Wales refers primarily to the adequacy of supply as evidenced in the Department of Education and Training’s waiting lists.

The CESCEO report relies heavily on data from the Department of Education, Training and Youth Affairs higher education collection. These data require careful use, as the potential for misclassification is high. For example, the report indicates that in 1996 there were 100 secondary initial teacher education completions in South Australia (and no ‘general’ or other category distinct from ‘primary’ or ‘early childhood’). Yet, the Australian Council of Deans of Education report indicates that there were approximately 250 secondary initial teacher education, and 60 combined primary/secondary, graduates in that year. How can discrepancies be this great?

The report brings together a range of labour force data without making an adequate analysis of the connection between them. For example, in the section discussing teacher separation rates, the report comments on data from an Australian Bureau of Statistics labour mobility survey:

An estimated 4 per cent of those employed in the education industry changed industry of employment in the year to February 1996: 89 per cent remained in the education industry, 2 per cent were looking for work, and 5 per cent were not in the labour force262.

This suggests an annual separation rate from the education industry of around 11 per cent. Yet, the report simply comments that the rate of separation of teachers from government schools across the States and Territories is in the order of one to five per cent. The report does not make

260 B. Preston, 1999, p. 3.
clear that the data from the labour mobility survey refers to all who work in the education industry: university professors, school teachers, self employed consultants and teachers, school janitors, and gardeners.

A further weakness in the CESCEO report is its inability to advise on the implications of the growing demand in the non-government sector. Given that non-government schools employ one-third of all teachers and the sector is growing at a faster rate than the government sector, the issue of demand is cross-sectoral, deserving to be addressed in a way that estimates total demand.

Clearly, neither the Australian Council of Deans of Education nor the Conference of Education System Chief Executive Officers has the right answer. It is apparent that much would be gained from cooperative and collaborative work in this area. There is no doubt that supply of teachers will tighten in the long-term with the effects being more dramatic in some states and in some teaching areas than others.

The Australian Council of Deans of Education has, in its defence, the basis of a transparent methodology for projecting demand. The working party of the Conference of System Chief Executive Officers did not. The CESCEO Working Party has since been replaced by a MCEETYA Taskforce on Teacher Supply. There would be benefit in this group and that of the Deans of Education merging to develop agreed data useful to both the supply side represented by the deans and the demand side represented by employers and government agencies.

Substantial collaborative work involving university vice-chancellors, the deans of education, government and non-government school authorities is needed to refine the assumptions underlying the Australian Council of Deans of Education model so that supply and demand for teachers can be more accurately projected. The aim of this work should be to provide the basis for planning at the state and territory level. Such an outcome would be to everyone’s benefit. Universities would be able to plan ahead, young people preparing for employment as teachers would have reasonable expectations of work on graduation, and schools and school systems would have a more uniform and adequate supply of teachers.

Most importantly, it would contribute to raising the quality of teaching and teachers to the benefit of students in schools.

**Recommendation 11**

That the New South Wales Government present the case for the current Taskforce on Teacher Preparation and Recruitment, established by the Council of Ministers (MCEETYA), to be replaced by a working group acting for governments, employers and universities to establish an agreed basis for the development of medium and long-term projections of national teacher supply and demand.

**10.7 Building in quality**

The use by the Department of Education and Training of waiting lists is unsustainable on several counts. They focus on the need to find a person to fill the position rather than on the quality of the person appointed. They have the potential to over-state the number of teachers available. Instances were cited of people in other employment maintaining their name on the list in case they became unemployed. The current rhetoric of adequate supply is in contrast to the advice, particularly from some secondary principals, of the difficulty of filling some teaching positions and of their advice noted previously about the poor quality of some teachers appointed to their schools.

Additionally, the lists do not contain information on those seeking employment in non-government schools and therefore have limited validity as indicators of teacher supply for the State. Given that non-government schools are growing at a faster rate than government schools, it is becoming increasingly important to take a more global view of teacher supply and demand. It is interesting to note that non-government schools do not have employment waiting lists for their teachers, another indicator of the relationship between the waiting lists and quality.

From an administrative perspective, there is some rationale for an employer the size of the Department having a system of waiting lists for employment. Yet, the limited effectiveness of the waiting list to provide for teacher quality require that alternative recruitment mechanisms be explored if this priority is to be addressed. The focus for improvement in this respect should be on recruitment strategies which differentiate performance standards and
characteristics of teachers so that those having the greater potential to produce good teaching are the people the Department actively seeks to employ.

Employment eligibility lists which differentiate qualifications, characteristics and experience of applicants, accompanied by a recruitment policy which selects the best for all vacancies at all times at the very least are required.

Earlier in this Report the reasons against keeping waiting lists at all were outlined. It would be strange indeed to see waiting lists in other professions. The best available teacher at the time, from whatever source, must be the over-riding requirement, one put to good effect in the non-government sector.

An important supplement to such quality information could be quality accreditation provided by the proposed Institute of Teachers. Just as, say, the Institution of Engineers maintains a membership list, so too should the Institute of Teachers.

**Recommendation 12**

That the New South Wales Department of Education and Training:

- abolish the waiting lists of people wishing to be employed
- develop and implement a policy which selects the best available applicant for any vacancy at the time
- differentiate between applicants for appointment to particular positions on the basis of qualifications and experience and the extent to which they match the requirements of the position
- give increased priority to:
  - succession planning
  - the open national advertising of educational leadership positions.

There are significant implications of this recommendation, including the phasing out of the current transfer points scheme which is at the core of current staffing policies in government schools. This proposal is not advanced lightly as teachers attach significant value to their transfer points. As noted previously, in advice to the Review, particularly from teachers in country schools, many teachers have endured considerable hardship by accepting teaching assignments in less favourable and sometimes in remote locations for which the transfer points were seen as small compensation. Nonetheless, the potential benefits of an appointment system focusing on quality means that consideration should be given to strategies to discontinue the scheme.

The question of compensation for teachers who have accrued transfer points should be considered carefully. Although monetary compensation might be deemed as appropriate, its payment represents a short-sighted solution to the quality conundrum and one which fails to address the quality concerns institutionalised by the scheme.

The most appropriate form of compensation for affected teachers would be the provision of specific professional development opportunities allowing them to better compete for positions on the basis of quality. Properly recognised quality improvement would be of lasting benefit to these teachers and for the schools in which they teach.

Related to issues of supplying high performing teachers and educational leaders discussed elsewhere in this Report, is the need for the Department of Education and Training to engage in succession planning by preparing sufficient leaders at various teaching levels in schools. As noted previously, the average age of teachers in New South Wales government schools is 43.3 years and is increasing steadily. A plan is needed to develop the broadest possible pool of teaching talents to lead the next generation of teachers.

As a first step the Department of Education and Training should advertise school promotion positions widely, both internally and externally as well as nationally, to attract the best available teachers and educational leaders. This would put the Department as an employer on equal footing with all other employers in New South Wales.

Such proposals cannot be implemented in the context of the legislative requirements of the *Teaching Services Act 1980*. The Act also presents a barrier to the re-employment of teachers. Those teachers who resign from a promotions position in a government school cannot be re-employed at the same level. They have to go back to being a classroom teacher, despite the fact that they may have grown and developed professionally during their time out of the
government school system. Teachers who have attempted to return report that they decided instead to pursue other forms of employment rather than to go back to positions they felt they had progressed beyond.

The Act requires revision, to ensure greater flexibility in the appointment of teachers and in particular school leaders. It is a constraint that other employers of teachers do not have to suffer. What is needed are flexible career pathways that encompass both the government and non-government sectors.

**Recommendation 13**

That the *Teaching Services Act 1980* be reviewed by the Government with a view to amending those provisions affecting the employment of teachers by the Department of Education and Training to:

- enable the recommendations of this Review to be implemented effectively
- bring the Act up-to-date
- allow for reasonable change without requiring further amendment.

During the course of the Review, several strategies were advanced by the Department of Education and Training to attend both to matters of quality and supply. The first was a proposal to re-institute scholarships targeted at attracting talented young people to teach in areas of shortage. One strategy would be for the Department to seek tenders from universities able to provide programs specially for these scholarship holders, to stretch them to become the very best teachers. Scholarships could be in the form of the Higher Education Contribution Scheme relief, general living support, and special consideration relating to their professional expenditure.

Another strategy could be to offer employment to students in their third year of training. Such arrangements would allow opportunities for enhancing professional experience, giving the kind of internship opportunities denied many young teachers because of cost. The student teachers would be targeted in areas of short supply and provide opportunities for them to be paid for their work. These arrangements could be made available in areas where employment was likely, leading to formal appointment of these student teachers on completion of their course.

Non-government schools may wish to consider similar responses to meet their need for teachers, taking some responsibility for preparing new teachers for the non-government sector in addition to recruiting them from government schools. Recommendation 9 requires the proposed *Joint Committee on Teacher Supply* to facilitate the provisions of scholarships and training arrangements. These should be targeted to give an adequate supply of quality teachers in areas of anticipated shortage.

**10.7 Conclusion**

The imperative for achieving a supply of *quality* teachers to schools has been given insufficient priority in the past, and creates a very different perspective from simply supplying teachers. Such an approach should be the primary focus of supply policies.

The supply of high-performing, quality teachers is a statewide and national issue. Given the growth of non-government schools, it is also increasingly an issue for all schools. Too few universities see this as their main role. They still act as if quantity rather than quality is the imperative. Yet every child in every school in the State deserves a good teacher. The effects of a year with a poor teacher, in terms of acquiring knowledge and developing appropriate skills and habits, may be worse than having no teacher at all.
11. **Critical choices**

11.1 **Introduction**

Evidence provided to the Review within its terms of reference has raised many critical choices and questions about teacher education and teaching in New South Wales which must be addressed. Two have great importance; if they are not dealt with satisfactorily, the other choices and questions will be most difficult to deal with.

First, as referred to throughout the Report, does teaching itself want to change, and in the process establish itself as a profession? Second, as discussed in chapter 10, are we prepared to focus on quality performance rather than giving priority simply to putting a person in front of a class? Beyond those two critical questions others arise.

- Are current models of teacher education to be left largely in place or should new ones be developed which substantially reconnect teacher education with schools and other educational settings?
- How can funding arrangements be developed and agreed upon which match society’s expectations about the quality of those who teach in our schools?
- How can perceptions about the status and standing of teaching, including views held within universities, be changed to match the expressed belief that it is the critical profession to the extent that it impacts on all others and on all people in the community?
- Should the preparation of teachers remain primarily the responsibility of teacher education faculties or should it be more widely shared with other disciplines in the university, employers, the TAFE system and the profession?
- Would explicit standards applied to teacher preparation programs be an appropriate way for desired outcomes to be achieved, by shifting the focus from inputs to outcomes?
- Are present pathways into teaching adequate to meet the varied and changing needs and demands of schools and other education providers or should greater emphasis be placed on multiple entry points into teaching to increase the profession’s diversity and relevance?
- Is the present balance between professional practitioners and para-professionals appropriate or should para-professional pathways and roles be increased, consistent with changes in many other professions?
- Must teacher education and teaching continue to function within a standards vacuum or can professional standards be established which will underpin the quality of teaching in the State’s schools and other educational institutions?
- Is the present practicum model appropriate or should professional experience become the central feature of how teachers are prepared for entry into the profession in New South Wales?
- Is the present balance between pre-service preparation and induction appropriate, or should induction become a more significant and structured component of a teacher’s initial preparation?
- Should the Department of Education and Training continue to be the defacto agency for determining the suitability of teachers for employment in New South Wales, or should the profession exercise this responsibility, with a focus on quality performance, through a State-wide professional structure?
- Is it possible for structures of schooling and employment to be established in New South Wales so that government schools no longer continue to be the ‘nursery’ in which outstanding practitioners are developed for the benefit of non-government schools?
- Are universities and employers sufficiently ‘building in’ teacher education into new models of schooling such as the secondary collegiate model in the Department of Education and Training, including conjoint appointments?
- Should the continuing education of teachers be a largely unstructured process driven primarily by employer needs or should there be a sequential framework which recognises and rewards teachers for the professional responsibility they have exercised for their own improvement?
Will present approaches to the preparation of educational leaders be sufficient to support today’s teachers in today’s schools to engage with the challenges of societal change?

Are the systemic structures within which many schools operate adequate for the effective preparation and continuing education of teachers or should there be increased localisation in some key aspects of how they operate?

The choices and questions confronting teacher education and teaching need to be engaged with determination and resolved. Failure adequately to do so is likely to mean that within a decade, and probably less, the sheer momentum of what is now occurring more broadly in society will sweep away much of the edifice of how we prepare teachers, how we sustain them to the extent that we do, and how they teach.

Most, if not all, who contributed to the Review are deeply committed to teacher education and to teaching. For many it has been their life’s work, the only career they have known. To an extent which could not be ignored, the evidence points to the fact that change is needed now in teacher education and teaching if the profession is to re-claim a position of primacy in a society where the advance of change is irresistible and inevitable. Those who argued otherwise, including some universities, have failed to identify the imperatives which now apply.

Change is needed in teacher education and in teaching which will:

- guarantee adequate funding arrangements for an effective and contemporary system of teacher education to involve all employers and Commonwealth and State governments
- attract more of ‘the best and brightest’ into teaching and retain them
- embed the initial preparation of teachers in the profession’s practice
- strengthen the diversity of entry pathways and the diversity of preparation models to meet client and employer needs
- assure the Government and people of New South Wales about the quality of teacher education programs and graduates

- establish the strongest possible sense of professional identity for teachers, including standards of professional practice
- create the strongest possible culture of lifelong learning in teachers
- encourage and reward our best teachers
- prepare our future educational leaders to connect pedagogy and teaching with broader societal changes.

The issues are not about teachers; they are, as United States Secretary of Education Richard Riley said, about the systems within which they are prepared and within which they teach263.

Choices can be made and questions can be answered in ways which will lead to better systems of teacher education and higher quality better performing teachers. If those systems are established, the circumstances will have been created for the very best teaching to occur in all our schools and other educational institutions.

11.2 Review implementation

For the critical choices to be made and for the changes proposed in this report to be achieved, responsibilities need to be accepted and exercised. Although this is a Report to Government, its consequences must be responded to more broadly.

During the Review a question was asked in a meeting about the nature of likely recommendations ‘…so that the barricades could be erected’. Such a mind-set, irrespective of where it is held within the State’s complex education structure, will contribute nothing to teachers or to the critical work they do. It will, if heeded, not cause the critical choices or questions to go away, but it will mean that they continue to be unanswered, to the detriment of students in New South Wales.

All those who have a stake or an interest in teacher education need to identify the responsibilities they hold so that the proposed directions and recommendations are achieved. This is an exercise, as said elsewhere in this Report, about teachers, universities, employers, professional associations and interest groups setting expectations of themselves.

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Governments, State and Federal, will have to develop better funding arrangements for teacher education to enable those charged with the preparation and continuing education of teachers to fulfil the responsibilities they have to quality teaching in the State’s schools and other educational institutions.

Those who exercise positions of leadership in universities must assume responsibility for giving teacher education the highest possible priority in terms of strategic planning and funding. They need to connect teacher education with other disciplines in the university and to focus on the relevant pedagogy which teachers need to be effective in their work.

Those who exercise responsibility for the leadership of teacher education faculties need to see that their programs give primacy to the preparation of teachers whose pedagogy will meet the standards appropriate at initial entry to the profession. They also need to ensure that the faculty is strongly oriented to partnerships with other providers and schools, focused on the centrality of professional experience.

Those who prepare teachers and those who employ them must work together within a structure where there is planning, cooperation and high quality data systems for preparation programs to meet employer requirements, in terms of graduate supply and quality performance.

Universities and employers must define more clearly their respective responsibilities in the preparation and induction of teachers. Once these responsibilities are clarified, they must work together to fulfil them.

Universities must formally attest, and take responsibility for, the initial certification of graduates that they are competent to teach at the completion of the course.

Employers need to support and promote any system of teacher accreditation which may arise from the Review, if they are seeking quality performance from all their teachers.

The unions which represent teachers need to give consideration to how they can contribute to the effectiveness of any professional structure and systems of teacher accreditation which may be established, while at the same time continuing to represent and advance the industrial interests of teachers. They must learn to separate industrial from professional issues.

The professional associations need to identify in the proposed State-wide professional structure for teachers the potential for their roles to be strengthened, particularly in terms of future work related to the development of standards of professional practice. The Professional Teachers’ Council must have a significant role in this work to allow the expertise of teachers to be utilised.

The State-wide parent and community bodies must articulate the interest which all parents have in the quality of classroom teaching, and support systems designed to guarantee that their children are well taught by teachers whose work occurs at the highest possible standards of professional practice.

Perhaps most importantly, teachers must build an identity for themselves as members of a quality profession. It is in their interests to support a system of professional recognition which may emerge from the Review in which they can exercise greater professional responsibility.

### 11.3 Pathways into teaching

Elsewhere in this Report, specific directions seen as necessary for developing appropriate and contemporary pathways into teaching were identified. Schools are intrinsically a part of the society they serve; this connectedness can only increase in the years ahead. It is important that pathways are established or expanded which will strengthen the responsiveness of schools to societal changes.

The quality and relevance of teaching in schools and other educational institutions will be improved by encouraging and facilitating the entry into teaching of knowledgeable and skilled people who will both increase and broaden the professional base of teaching. This applies as much to the traditional subject areas as it does to the growing vocational education and training (VET) area. The key characteristic of these diverse and flexible pathways should be the centrality of professional experience and the standards of performance which apply to it.

Additionally, employers should guarantee that their personnel practices are designed to recruit and appoint the best available people on the grounds of merit and suitability, and that their employment practices are of the highest calibre.
11.4 Initial teacher education

Many of the most important issues which affect teacher education cannot be addressed unless those related to its funding are resolved. In advice to the Review, repeated comment was made across all groups on the inadequacy of present funding levels for teacher education and the need for new arrangements to be agreed to so that the quality of teacher education could be improved.

There needs to be resolution of the unsustainable situation which currently applies of the Commonwealth Government having funding responsibility for teacher education but the State Government having responsibility for teacher supply and quality. In this separation resides many of the current issues in teacher education in New South Wales.

Priority must be given to establishing and applying standards in initial teacher education programs, including standards related to the professional experience component. These standards should then become the basis upon which teacher education programs are externally endorsed and against which the universities attest to the quality of performance and readiness for entry into the teaching profession of their graduates. These standards must be explicit but at the same time be constructed so that they do not impose uniformity either across universities or within them in how teacher education programs are structured.

11.5 Professional experience

In general, and in spite of the best efforts of some universities, teacher educators, employers and teachers, it is apparent that teacher education and schools are insufficiently connected. In too many instances they are out of step, marching to a different drum. As with models of preparation in many other professions, the initial education of teachers must occur to a greater extent in the workplace and be accepted more widely as a professional responsibility, consistent with what it means to be a member of a profession.

This shift, from many current practices to models which place professional experience as the central component of teacher education programs, will not be speedily achieved. Major funding and resource issues will need to be resolved; many teacher educators will have to develop entirely new constructs about how teachers are best prepared; and partnership arrangements, including conjoint appointments, will need to be developed between universities, employers, TAFE Institutes, schools and other educational institutions. The size or complexity of the task, however, cannot be given or accepted as excuses for inaction or delay.

As a key element in this shift, a process must be developed and applied which will enable the accreditation of schools and other educational institutions involved in the provision of professional experience. At a later stage this should be extended to include the accreditation of schools offering specific educational programs which could be incorporated into the overall provision of pre-service and continuing teacher education. Schools need to be active partners in teacher education.

11.6 Induction

In the course of the Review issues related to the induction of teachers figured prominently. It is in many ways the critical link between preparation and practice as a professional. Evidence to the Review indicates that the link is not as strong as it should be.

Critically, present deficiencies in the induction of teachers will only be addressed when two things occur.

First, when the universities and employers define clearly their respective responsibilities so that each knows what is dealt with in pre-service programs and what is dealt with in an induction program. This, combined with explicit standards for pre-service teacher education programs, will enable issues related to mandated course components to be addressed.

Second, significant improvement in the quality of overall induction at the school or local level must be brought about by establishing explicit requirements concerning the responsibilities of educational leaders and mentors, the structure of the induction program, including participation by universities, and how it is linked to professional growth.
Recommendation 14

That the Institute of Teachers coordinate consultation between universities, the TAFE system and employers to:

- define their respective responsibilities in the induction of teachers
- expand, as a priority, current professional development initiatives which equip educational leaders and mentors with the knowledge and skills to fulfil their roles in the induction of new members
- allow new teachers after a period of satisfactory performance to be accredited at Level 1 in the system of teacher accreditation.

11.7 Information technology

No contemporary teacher education program and no contemporary school or educational provider can ignore or be half-hearted about the implications of information technology for teaching. Such responses to the place of computers and other technologies seriously degrade the quality of teaching in schools.

Increasing numbers of the State’s citizens require a high level of digital technology skills in their jobs and in order to go about much of their day-to-day lives. By any standard, New South Wales is an advanced and sophisticated society, with an economy and way of life reliant on advanced technology. In this society technological literacy is assuming an importance commensurate with English literacy and numeracy. Simply, our schools must teach technological literacy; our teachers must be well prepared to do so.

From the evidence, priority must be given to preparing and supporting teachers so that relevant technology is adapted into their pedagogy. Approaches which treat computers and other technologies as separate from the pedagogy which normally applies in the classroom must be limited in their effect. Approaches to teacher training which are primarily functionalist, giving teachers only essential skills of a mainly technical kind, are unlikely to bring about long-term change in classroom practice.

The pre-service preparation of teachers should not be focused only on essential information technology competencies. Such an approach will not deliver the highest possible standards of teaching. Within the context of the individual teacher’s pedagogy, programs must prepare teachers to employ technology as a teaching tool and establish the learning conditions in which students can turn the information they access via technology into knowledge.

The Review received advice about the importance of this issue for the many teachers who have only limited technology skills and who are often reluctant to build technology into their teaching. The point was made frequently that the technology skills of significant numbers of students were in advance of those teachers whose pre-service preparation occurred before the age of the microchip.

The State and the employers have made major commitments, such as the continuing Technology in Learning and Teaching (TILT) program in the Department of Education and Training, to address this issue. These programs are important in upgrading the overall technology skill level of New South Wales teachers. They must, however, be viewed as part of a two-fold approach. Importantly, at the local level, teachers who participate in these programs must be strongly encouraged and supported by principals and educational leaders through school based structures and professional development initiatives which make meaning at the classroom level. Investment must be made at this level in order for the benefits of the larger programs to be realised.

Schools in both the government and non-government sectors now employ a growing number of teachers who have advanced technology skills. The profession, through a structured process of teacher accreditation, needs to recognise these teachers and to encourage more of them to acquire higher credentials; in turn, employers must explore ways in which teachers so recognised are rewarded and their skills utilised to improve pedagogy at the local level. The work of these teachers is critical in maintaining the interface between professional development and classroom practice.

Recommendation 15

That the Institute of Teachers establish professional standards for advanced accreditation in digital information and communications technology to:
increase the knowledge and skill base of the profession in information and communications technology

enable teachers to demonstrate that they have achieved advanced standards in information and communications technology

strengthen interaction between professional development in information and communications technology and pedagogy at the classroom level.

11.8 Behaviour management

From the evidence provided to the Review, the conclusion could reasonably be drawn that behaviour management is an area of major concern in teacher education. Few, if any, indicated great confidence in current approaches and practices. It would seem to be an area in which the complexity of societal change has proven too great for current models of teacher education.

A major reason for the uncertainty is that in the models of teacher preparation which now apply, learning about behaviour management is not connected with the life of schools and the professional practice of teachers. This is not an argument against teaching theory about behaviour management in teacher education; indeed the argument could well be that in a professional experience model the theory becomes even more important because it has to be relevant and contemporary to become alive.

The expression ‘behaviour management’ has, perhaps, connotations of a power relationship between the teacher and the student which seems poorly suited in the ideal of contemporary schools and contemporary teaching. Teachers who are especially effective in this area know that the focus needs to shift from ‘management’ to constructing learning environments in which productive relationships can be established. Most students find the experiences of schooling more rewarding when these conditions apply. Teacher preparation programs must respond strongly to this understanding.

Many teachers do outstanding work in ‘managing student behaviour’ in ways which demonstrate a deep level of understanding about children and adolescents and the contexts in which they lead their lives. A sequential structure of teacher accreditation, in which teachers can be recognised for their further learning in the area of behaviour management and specialised areas such as drug education in the education of students with behaviour disorders, will strengthen significantly the effectiveness of schools in creating positive and inclusive learning environments. This will be even more so if the employers and unions support a structure which encourages the knowledge and skills development of teachers and enables the profession to tap more deeply into the well of its own expertise in all areas, including behaviour management.

Recommendation 16

That the Institute of Teachers establish professional standards for advanced accreditation in behaviour management to:

- increase the knowledge and skill base of the profession in the management of student behaviour and the creation of positive learning environments

- enable teachers to demonstrate that they have achieved advanced standards in behaviour management, including specific areas such as the management of students with behaviour disorders and drug education.

11.9 Lifelong learning

All teachers enter the profession with an immediate background as learners, whatever the entry pathway. Their learning skills are not of a basic kind; they are, in the great majority of instances, people who have skills for sophisticated learning, involving research, analysis and deduction.

It is not only a matter of irony that their continuing learning is so lowly valued within the profession and by the employers; it is a tragedy. The on-going learning of teachers, and of teacher educators, should be a matter of absolute priority.

The continuing learning of teachers matters for:

- students who want to learn with teachers who are expert in what they teach and are up-to-date in how they teach

- parents who want their children taught by teachers
whose knowledge and skills are unquestionably contemporary

- universities and TAFE Institutes requiring schools to be effective learning places in which future undergraduates are well prepared for tertiary studies
- employers who want a workforce with skills for modern employment
- governments requiring a knowledgeable and skilled citizenry
- the teaching profession if it wants to be recognised as one.

A significant number of teachers are lifelong learners. They keep up-to-date through activities which include: individual professional reading, participation in professional development courses offered by the employers, professional associations and other providers, undertaking postgraduate studies in universities and TAFE, and participation in teacher exchange schemes and employer, government and corporate sponsored study schemes.

Nevertheless, while any number of individual teachers can demonstrate that they have maintained professional currency:

- the teaching profession does not have a culture of lifelong learning, as further learning carries little professional recognition or reward
- the learning is often ignored by employers, and has no consequences in terms of a teacher’s standing or remuneration and no necessary consequence for career advancement.

There is no systematic process in the Department of Education and Training to track the further qualifications of government school teachers. It is a matter of teachers reporting any qualification gained; many, perhaps most, appear not to bother. In other words, one employer at least does not know the full knowledge and skill qualifications of teachers in classrooms, and in reality, would only be confident about being able to account for minimum qualification requirements at the time of initial employment. No evidence was provided by other employers that they gather, hold or use such important aggregated data.

A culture which encourages and values the lifelong learning of teachers and teacher educators will only be created in New South Wales when:

- there is a strong and prominent professional structure with which teachers can identify, a structure which places importance on the currency of its members’ knowledge and skills, as in other professions
- the employers and the unions agree that the further learning of teachers should be recognised, valued and rewarded.

Currently, teacher professional development is a mixed and myriad bag, provided by education systems, private providers, teacher professional organisations, teacher unions, university and higher education institutions, communities and, increasingly, the world wide web.

Accessing professional development from a variety of sources is not an issue, and indeed should be encouraged. The core issues, rather, are:

- the need for a rational approach to accreditation, by the profession, of programs which make a real difference to the quality of teaching and educational leadership, whatever their context
- the need for a sequential professional structure which recognises standards and qualifications attained through professional development.

A professional structure is required which will provide the framework within which teachers and teacher educators can plan and undertake their further learning and then be accredited for learning which the profession as a whole values and recognises.

11.10 Educational leadership

The issue of educational leadership was raised repeatedly during the course of the Review. If good teachers are seen as people who make a difference to student learning, the same can be said of educational leaders, except that they make a difference to the quality of teaching as well.

Information provided to the Review stressed that the quality of the performance of educational leaders is critically important in issues related to teacher quality. The quality of educational leadership in universities, TAFE Institutes and schools will be one of the determining factors in the success or otherwise of the model of teacher education proposed in this Review.
During the Review meetings were held with, and advice was received from, a number of outstanding educational leaders. In the final analysis it was apparent that outstanding educational leaders share two particular characteristics.

First, a capacity to make clear the linkages between, on the one hand, what is happening in our society and, on the other, the pedagogy which needs to apply in universities, schools and other educational settings to meet the challenges which arise from those changes.

Second, a belief in the critical importance of teachers and their work and that as educational leaders they can effect for the better the quality of teaching in the schools and institutions they lead.

It was these people who provided especially valued advice to the Review about what needs to happen in order to position teacher education and teaching for success over the next decade and beyond. They were less interested in talking about the past or in describing, or defending, present practices, however much they drew on them to illustrate a point.

There are two core issues to be addressed in the area of educational leadership.

First, the need for a model of teacher accreditation which encourages, recognises and rewards teachers who have reached standards and attained qualifications at advanced levels as the basis for educational leadership in schools. In teaching we must integrate expertise and responsibility. We need to have systems which will strengthen educational leadership so that, at whatever level, those with recognised expertise actually have an impact on the quality of classroom practice.

Second, the need for the universities, employers and others with a stake in the quality of educational leadership in schools, including the corporate sector, to support the provision of programs within the proposed Australian Graduate School of Teaching (AGST), which raise the quality of educational leadership. This approach is needed to build a strong program of inter-disciplinary studies for those who aspire to or hold senior educational leadership positions in schools and other educational institutions. The Australian Graduate School of Teaching needs to be seen and supported by the employers as the major structure where senior educational leaders will be prepared and sustained in the profession. Overall, current postgraduate education programs in universities are in decline and are not meeting the requirements of potential leaders from schools. The universities should be part of the equation, but not the whole of it.

11.11 Teaching environments

The Institute of Teachers proposed in this Report, if established and provided it is appropriately resourced and well led, will give a focus on and structure for quality performance in teaching which the employers, universities, unions or professional associations as separate entities are not well placed to achieve.

Nonetheless, a critical issue needs to be addressed by the employers in the first instance, if teaching is to be professionalised in New South Wales. The quality of professional practice is inevitably bound up in the relationship between the practitioner and the employer. Many teachers in New South Wales, most apparently those who teach in government schools but not necessarily limited to them, perceive much of this relationship to be an industrial one, not a professional one. They view the capacity they have to act as a professional person to be limited.

The quality of teacher education, and therefore of teaching, will be advanced by increasing localisation of decision making so that true professional responsibility can be exercised, particularly in the two areas which most directly affect teachers: professional development and staffing. Structures are needed at the local level which will enable teachers and educational leaders to exercise a greater level of professional responsibility and authority, an important consideration in positioning them to meet the educational challenges about which many spoke during the Review.

In this issue is encapsulated the meaning of the observation made during the course of the Review that the reform of teacher education and the reform of schooling need to occur concurrently.

11.12 Timeline

As canvassed elsewhere in the Report, the story of reviews of teacher education is one of issues identified and opportunities lost, at both state and national levels. If, as
many said, the Review was timely, its issues need to be addressed now.

The core future directions laid out in this Report will only be achieved if all those who have a stake or an interest in teacher education accept and exercise the responsibilities they have to address critical choices and questions which cannot be allowed to remain unresolved.

The following is provided as an indicative timeline in relation to the priority directions which need to be followed.

**By June 2001**
- The Government sets up an interim committee to establish the *Institute of Teachers* and commence its work. The committee should be constituted as a strategic rather than a representative group and should continue until June 2002, at which time the *Institute* becomes fully functioning.
- In consultation with the Commonwealth Government, the employers, the universities and the *Institute of Teachers*, the New South Wales Government establishes the *Joint Committee on Teacher Supply*.
- A task force is formed to provide advice on the establishment of the *Australian Graduate School of Teaching*.

**By June 2002**
- The *Institute of Teachers* becomes fully functioning, including finalisation of elected and nominated persons to the *Institute’s Council*.

**By January 2003**
- The *Institute of Teachers* releases draft standards for the endorsement of initial teacher education programs in New South Wales, including the professional experience component.
- The *Australian Graduate School of Teaching* is established.

**By June 2003**
- Standards for the endorsement of initial teacher education programs are finalised.

- The *Institute of Teachers* disseminates draft standards of professional practice for consultation.
- The *Institute of Teachers* disseminates draft procedures for the accreditation of schools involved in the professional experience component of initial teacher education.
- Universities and employers finalise their respective responsibilities in teacher induction.
- Universities finalise processes designed to assess suitability to teach for entry into initial teacher education.
- Universities finalise processes to certify teacher education graduates as meeting required standards for entry into the profession.

**By January 2004**
- Standards of professional practice are finalised.
- The *Institute of Teachers* finalises processes and standards for the accreditation of schools involved in the professional experience component of initial teacher education.

**By June 2004**
- First Accredited Practising Teachers (APTs) recognised.

The policy directions and recommendations arising from this Review have ramifications in many areas of education. Responsibility for their implementation will be widely based, resting with Government and with a number of jurisdictions.

Of necessity, responding to this Review will be a picture of transformation and reform on many different fronts. Building in a capacity for the processes of change to be monitored will be important, so that priority continues to be given to the directions which must be addressed and met.

If the major thrust of the recommendations of this Review are accepted by the Government, it will be important that their implementation be evaluated. In about 2005, there should be a subsequent review of progress, focused specifically on the extent to which the teacher education institutions are meeting the needs of the employers in the supply of quality teachers. This review should also
consider the extent to which policies have been implemented which are contributing to the revitalisation of the profession.

Recommendation 17

That the Government:

- establish a process to monitor and report on the implementation of the Review’s directions
- in five years time establish a subsequent review to determine the extent to which the quality of provision of initial and continuing teacher education has improved to meet the needs of the employers and of the profession.

11.13 Resources

The Review believes that the Government should provide initial funding for the establishment of the Institute of Teachers. In so doing, the Government should identify current funding in education which should be transferred to the Institute, especially to avoid duplication of activity. Within three years of its establishment, the Institute of Teachers should be partially funded by teacher applications for accreditation.

11.14 Conclusion

This Report lays out a range of directions and recommendations designed to bring about fundamental change in the ways teachers are educated. It seeks to position teaching to be in a strong position to meet both the challenges and the opportunities accompanying broader societal change at the beginning of a new century. In a society created and sustained by the knowledge and skills of its people and their capacity to work together for social and economic improvement, it is imperative that the quality of teaching be a priority for governments, universities, employers and, perhaps most importantly, the profession itself.

The limited impact of past reviews of teacher education over two decades carries a stark lesson. Telling evidence was gathered over that time about the need for change to develop a quality profession focused on delivering effective learning. Why was it that those with responsibility to transform teacher education and the quality of teaching did not meet the challenges? Why was it when so much was asked for, so little was given?

Almost unwittingly, responsibility for change was placed in the hands of traditional systems, both of schools and teacher education. These had become so focused on perpetuating themselves that they proved unequal to the task. They had become so divorced from teachers and teaching that they were incapable of creating the conditions in which the required changes could flourish. Had these challenges been met as they arose over the past 20 years, this Review would have been unnecessary.

Some may say that this is too harsh a judgement: that the structures were inadequate to bring about change; that universities, over two decades of reorganisation, had other priorities; and that resource constraints in both universities and schools prevented issues from being addressed adequately. Whatever the reasons for inaction, the mistakes of the past must not be repeated.

Key structures and systems must be put in place to revitalise teacher education and teaching. Quality education for all our young people must be the goal and it will occur only when sustained by a strong and effective teaching profession. Too often in the past when education problems arose, bureaucratically-conceived solutions were imposed in the hope that a ‘quick fix’ would work. It rarely does. Short-term solutions often lead to long-term problems. Real change involves a long haul of constant effort and too readily as we have seen in the past, people give up if there is no on-going driving force.

Yet there are signs as we enter the new millennium that key educational leaders are engaging with these challenges. The New South Wales Government has shown its commitment to quality teacher education and quality teaching by taking a lead in establishing this Review. Universities are looking to redress past inaction. School systems understand that the quality of student learning depends fundamentally on attracting and sustaining quality teachers. The opportunity presented by this Review is too important to be lost. People working from goodwill can rise above sectoral interests and, through a sense of common purpose, achieve much more than they can working individually or as a group whose primary purpose is to protect a fixed position. That is what is needed: the Review has given a lead. It can do no more than that.
Critically, teaching must be created and sustained as a quality profession in which teachers are able to exercise the range of responsibilities which society demands of those who seek to be recognised as professional practitioners. The issues to be addressed are professional issues; the salient lesson of the past two decades is that these issues are largely beyond the capacity of universities, employers, unions or traditional professional associations to resolve, especially when acting as separate entities and especially when attempting to impose solutions on teachers. It is now clear that only by drawing on the deep well of teacher professionalism will we:

- create a dynamic and responsive system of teacher education
- see the development and application of standards of professional practice in teaching
- ensure that our schools and other educational institutions are led by innovative and creative educational leaders, focused on pedagogy
- create a strong culture of teacher learning.

We know that the quality of teaching matters. From their advice to the Review, teachers know it clearly. This knowledge makes it even more important that we have data systems which provide reliable information on the effectiveness of directions and approaches arising from this Review designed to improve the quality of initial and continuing teacher education and the quality of teaching in schools and other educational settings. It would be unacceptable if, in say five years time, we were unable to answer the question: has there been improvement in the level of outcomes in these key areas?

To be in a position where it will be possible to answer such a critical question, data systems need to be developed and applied now, focused on the collection of information about quality so that outcomes rather than inputs can be measured. These systems should cover:

- the profile, experiences and professional standards of those who exercise responsibility for initial teacher education in universities, schools and other educational settings
- the employment destinations of teacher education graduates
- information about induction programs, including the effectiveness of mentoring and supervision and the range and outcomes of learning experiences provided to beginning teachers
- information about career choices made by teachers, including movement between government and non-government schools and between teaching and other occupations
- information related to accreditation of teachers within a professional standards framework, including the range and profile of teachers accredited at the particular levels
- information related to the continuing education of teachers, including participation in and outcomes of accredited professional development programs and postgraduate studies
- measures of the effectiveness of programs to improve the quality of educational leadership in schools and other educational settings.

Teaching is the critical profession. Its quality, its health, matters in ways which have consequences for society far greater than is the case for many other professions, occupations and vocations. Teaching has always been important, but never more so than in a society which knows its very future depends on the knowledge and skill base of its people. An investment in teacher education is an investment in teachers; an investment in teachers is an investment in student learning arising from quality teaching; an investment in student learning is an investment in the long-term quality of individual lives and in the prosperity and well being of the people of New South Wales.
Recommendations arising from evidence considered in the Review can be found in chapters 8, 9, 10 and 11 of this Report. They are provided here in a consolidated list. The page references refer to the location of each recommendation in the text. The recommendations refer, in the main, to actions the Government will need to take, on occasion in conjunction with the Commonwealth, to bring about desired changes in teacher education.

12.1 Recommendations

Recommendation 1

That the New South Wales Government establish an Institute of Teachers whose primary purpose is to enhance the level of professionalism of teachers and teaching. The Institute to be responsible for:

- the establishment and promulgation of performance standards at designated stages of development as a teacher, together with standards of ethical practice for teachers
- the accreditation and disaccreditation of teachers against such performance and ethical standards, determining related requirements for maintaining and extending or removing such accreditation, and establishing and maintaining records of teachers so accredited
- endorsing and disendorsing courses and programs of teacher education, both initial and continuing
- accrediting those schools and other institutions involved in the provision of professional experience in initial and continuing teacher education
- advising universities on ways to strengthen postgraduate programs and research in pedagogy and teacher education
- advising the Government and the community on issues relating to teacher quality and professional standards, and on the qualifications, profile and experiences of teachers employed throughout the State

- promoting the position and standing of the profession on professional matters
- communicating on professional issues among members
- determining, in cooperation with the Government and in discussion with parties involved in the profession, the fees and other means of providing the resources to be applied in fulfilling its responsibilities
- advising on areas where research is needed, particularly in pedagogy to advance the skill level of teachers in the State. (page 147)

Recommendation 2

That in the development of professional teaching standards the Institute of Teachers:

- establish, articulate and promulgate a clear purpose for such standards
- establish effective processes for the development, validation and assessment of such standards based on appropriate models of teacher development
- make the standards simple, transparent and easily accessible to all teachers
- consult widely to ensure ownership of and commitment to such standards by teachers
- determine requirements for teachers to maintain their accreditation or to be disaccredited if they do not fulfil the required performance and ethical standards. (page 158)

Recommendation 3

That the standards established by the Institute of Teachers be the basis for a staged accreditation system for practising teachers at three levels:

- professional competence (Accredited Practising Teacher 1)
- professional specialisation (Accredited Practising Teacher 2)
- professional leadership (Accredited Practising Teacher 3). (page 158)
Recommendation 4

That the Institute of Teachers:

- establish standards and processes for the endorsement of programs of initial teacher education to prepare teachers for New South Wales schools, setting out the outcomes expected of graduates in subject content, pedagogy and ethics
- establish standards for the provision of the professional experience component of initial teacher education, including standards for the supervision and mentoring of student teachers
- in the assessment process, take account of the priority given by the university to teacher education
- develop processes and criteria for reporting on the employment and professional outcomes of graduates from courses of teacher education in New South Wales and elsewhere
- develop criteria for certifying and recording individual student completions of endorsed programs. (page 161)

Recommendation 5

That the Institute of Teachers establish processes and procedures for the endorsement of programs of continuing teacher education, consistent with the stages of the accreditation system for individual teachers. (page 162)

Recommendation 6

That the New South Wales Government require the Institute of Teachers to:

- work with universities and relevant school systems to develop jointly criteria, processes and procedures for the accreditation of those schools providing professional experience for student teachers
- advise on the possible merit of, and options for, the eventual accreditation of all schools where quality educational practices can be certified
- maintain jointly with the universities a registry of accredited schools. (page 164)

Recommendation 7

That a taskforce be formed to provide advice to the Government on the structures, partnerships and resources required to establish an Australian Graduate School of Teaching in New South Wales. The taskforce should include nominees of the Institute of Teachers, employers of teachers and vice-chancellors of universities interested in the proposal. (page 165)

Recommendation 8

That a Joint Committee on Teacher Supply be established representing the New South Wales Government, the Commonwealth Government, the employers, the universities and the Institute of Teachers to:

- develop improved funding arrangements for teacher education in New South Wales
- advise the New South Wales Government and the Commonwealth Government on the most appropriate allocation of government resources to ensure the adequate supply of quality teachers in the State. (page 188)

Recommendation 9

That the Joint Committee on Teacher Supply, in consultation with the Institute of Teachers and employers:

- determine the mechanism whereby the State’s requirements for the supply of quality teachers can be submitted to open tender from potential providers of teacher education courses
- institute a range of scholarships and paid training opportunities to attract talented young people to teaching, aimed at supporting those teaching subjects and teaching localities where supply problems are apparent
- seek advice from the universities on the design of specific courses for scholarship holders. (page 188)

Recommendation 10

That the Joint Committee on Teacher Supply work with universities, employers, the TAFE system and the Institute of Teachers to increase the diversity of pathways for entry into teaching, giving priority to strategies which emphasise high quality professional experience in the workplace. (page 199)
Recommendation 11
That the New South Wales Government present the case for the current Taskforce on Teacher Preparation and Recruitment established by the Council of Ministers (MCEETYA), to be replaced by a working group acting for governments, employers and universities to establish an agreed basis for the development of medium and long-term projections of national teacher supply and demand. (page 201)

Recommendation 12
That the New South Wales Department of Education and Training:
- abolish the waiting lists of people wishing to be employed
- develop and implement a policy which selects the best available applicant for any vacancy at the time
- differentiate between applicants for appointment to particular positions on the basis of qualifications and experience and the extent to which they match the requirements of the position
- give increased priority to:
  - succession planning,
  - the open national advertising of educational leadership positions. (page 202)

Recommendation 13
That the Teaching Services Act 1980 be reviewed by the Government with a view to amending those provisions affecting the employment of teachers by the Department of Education and Training to:
- enable the recommendations of this Review to be implemented effectively
- bring the Act up-to-date
- allow for reasonable change without requiring further amendment. (page 203)

Recommendation 14
That the Institute of Teachers coordinate consultation among universities, the TAFE system and employers to:
- define their respective responsibilities in the induction of teachers
- expand, as a priority, current professional development initiatives which equip educational leaders and mentors with the knowledge and skills to fulfil their roles in the induction of new members
- allow new teachers after a period of satisfactory performance to be accredited at Level 1 in the system of teacher accreditation. (page 208)

Recommendation 15
That the Institute of Teachers establish professional standards for advanced accreditation in digital information and communications technology to:
- increase the knowledge and skill base of the profession in information and communications technology
- enable teachers to demonstrate that they have achieved advanced standards in information and communications technology
- strengthen interaction between professional development in information and communications technology and pedagogy at the classroom level. (page 208)

Recommendation 16
That the Institute of Teachers establish professional standards for advanced accreditation in behaviour management to:
- increase the knowledge and skill base of the profession in the management of student behaviour and the creation of positive learning environments
- enable teachers to demonstrate that they have achieved advanced standards in behaviour management, including specific areas such as the management of students with behaviour disorders and drug education. (page 209)

Recommendation 17
That the Government:
- establish a process to monitor and report on the implementation of the Review’s directions
- in five years time establish a subsequent review to determine the extent to which the quality of provision of initial and continuing teacher education has
improved to meet the needs of the employers and of the profession. (page 213)

12.2 Policy directions

Policy directions arising from evidence considered in the Review can be found in chapter 5 of this Report. They are provided here in a consolidated list. The page references refer to the location of each policy direction in the text of the Report.

Policy directions provide advice mainly to employers, universities and other stakeholders in teacher education and teaching on changes that should be made to current practice.

It will be necessary that:

1. those universities involved in and committed to teaching as a profession give teacher education the highest priority in their strategic planning, funding and reporting (page 38)

2. universities involved in teacher education develop arrangements to enable responsibility for the preparation of teachers, including appropriate knowledge, pedagogy and the values required, to be shared by the faculty of teacher education, other relevant disciplines in the university and professional associations (page 38)

3. employers of teachers, together with universities and the profession, support the development of standards to be applied at all stages of initial and continuing teacher education (page 39)

4. universities, in cooperation with employers of teachers and the profession, develop models of initial teacher education which place professional experience at their core and require joint planning, delivery and reporting (page 39)

5. teaching be established formally as a profession in which teachers can exercise responsibilities as professional people, consistent with other self-regulating professions (page 39)

6. universities, employers, the TAFE system and the Board of Studies promote teaching in schools and other educational institutions, including the development of Higher School Certificate courses which will give advanced standing to students who aspire to become teachers (page 48)

7. entry into initial teacher education include processes which enable the universities to assess suitability to teach, including personal qualities and capacities regarded as important to success in the profession (page 48)

8. the universities, in consultation with employers, the unions and the profession structure initial teacher education to give students significant professional experiences early in their course to inform them about their suitability for teaching and enable them, where teaching is not a suitable option, to pursue other study pathways (page 49)

9. the universities be required to attest to those graduates who meet acceptable standards at the end of their course prior to employment (page 49)

10. scholarships, traineeships and internships be offered to attract and retain outstanding students in initial teacher education programs, in ways that contribute to raising the quality of the profession (page 49)

11. employers introduce, in negotiations where appropriate with relevant unions, a system of differentiated salaries and conditions of employment to attract and retain high quality teachers in difficult-to-staff teaching subject areas and schools (page 49)

12. universities, employers and the TAFE system expand pathways into teaching for mature age entrants, including, where appropriate, guaranteed appointment to positions after completion of initial training (page 49)

13. the Department of Education and Training in its recruitment practices give priority to teacher quality in making teaching appointments rather than time spent on a waiting list (page 49)

14. the Graduate Recruitment Program of the Department of Education and Training be revised to give greater priority to assessing performance of such graduates in professional experience (page 49)

15. employers, in collaboration with universities, the TAFE system and schools, develop para-professional pathways into teaching which target talented and suitable applicants from a range of relevant backgrounds (page 49)
16. strategies be developed cooperatively between employers and the profession which promote teaching as an attractive and rewarding career for talented and suitable male as well as female school leavers and those already in the workforce (page 49)

17. universities and employers, in conjunction with schools and the TAFE system, develop further para-professional pathway programs into teaching for talented and suitable indigenous people (page 49)

18. universities, employers and the unions in conjunction with the profession facilitate and support increased research into the career and employment decisions of teachers in New South Wales to inform workforce planning (page 50)

19. the provision of teacher education in the State be sought from a range of institutions which are prepared to meet pre-determined requirements and have a strong commitment to its provision (page 59)

20. university teacher educators responsible for professional experience as members of the teaching profession be expected to undergo the same processes of accreditation as teachers (page 59)

21. universities value and reward academics in teacher education, irrespective of their faculty or discipline, particularly by recognising the role they have working with teachers and schools (page 59)

22. teacher education be structured and funded to meet the unique needs of regional and rural communities (page 59)

23. courses be developed for para-professionals in rural and remote educational settings to provide credentials to people who have important roles in the teaching process (page 59)

24. standards be established for the external assessment and endorsement of programs of initial teacher education (page 59)

25. a process be established to attest to the quality of professional experience provided for student teachers in schools (page 59)

26. the term ‘professional experience’ replace ‘practicum’ to emphasise the shift from ‘practice’ to ‘experience’ as being central to teacher preparation (page 63)

27. the professional experience of student teachers over their total pre-service program be provided in a diversity of settings (page 63)

28. the final pre-service professional experience be substantial and occur in a setting similar to that where employment for the individual teacher is most likely to be found (page 64)

29. teachers who supervise student teachers be professionally accredited in appropriate areas such as mentoring or educational leadership (page 64)

30. universities and other potential providers of teacher education expand significantly the number of conjoint appointments (page 64)

31. the professional experience component of initial teacher education give all student teachers significant structured learning about the operation and culture of schools, including perspectives across different school systems, ethics in teaching and the role of the teacher as a change agent (page 64)

32. standards and guidelines for the induction of new teachers be established, making induction programs consistent in terms of quality (page 68)

33. teachers who exercise an educational leadership role in the induction or supervision of new teachers be professionally accredited (page 68)

34. universities, the TAFE system and employers work together to define their respective responsibilities in initial teacher education and induction (page 68)

35. universities, the TAFE system and employers work together to determine how best to develop and make available teacher induction programs directly related to the specific requirements of their new employment (page 68)

36. employers reduce the initial workload of teachers in the first year of service and provide effective mentoring in the early years of teaching (page 68)

37. universities, the TAFE system and employers give greater attention to the preparation and induction of casual or contract teachers, equivalent to the provision for permanent teachers (page 68)
38. priority be given in initial and continuing teacher education to providing teachers with knowledge and skills to use information and communications technology to create learning environments that are both broad in scope and deep in concept development (page 75)

39. information and communications technology be used to strengthen and expand professional communication between teachers (page 75)

40. priority be given to commissioning research into specific models for integrating information and communications technology into pedagogy to create new learning opportunities for students (page 75)

41. the implications of information and communications technology for pedagogy and structures of teaching become a major focus in educational leadership programs (page 75)

42. approaches in initial and continuing teacher education programs give priority to issues related to interpersonal relationships (page 81)

43. learning about behaviour management in initial teacher education be addressed primarily within the framework of professional experience (page 81)

44. employers give teachers regular and diverse opportunities for professional revitalisation, including short-term exchange placements in other schools and educational settings and, where appropriate, opportunities which will assist the transition from teaching to other employment (page 81)

45. universities and the TAFE system in conjunction with the profession provide courses for teachers in behaviour management, including behaviour disordered students and drug education (page 81)

46. employers and teachers support a system of teacher accreditation which encourages and rewards their professional development throughout their career (page 86)

47. employers and teachers support an approach to continuing teacher education which emphasises the responsibility the profession and its individual members have for further learning to improve the quality of professional practice (page 86)

48. standards be established for educational leadership to which teachers can aspire, be accredited against, and for which they can be recognised and rewarded (page 90)

49. the universities have a better defined and more substantial role in the provision of educational leadership programs, especially by broadening the range of pedagogical and inter-disciplinary studies (page 90)

50. the Department of Education and Training consider strategies to broaden the sources of educational leaders in government schools (page 90)

51. employers, and particularly the Department of Education and Training, in their leadership and management structures take account of how the quality of teacher education and teaching can be improved through greater localisation of authority and decision making in schools (page 93).