

VICTORIA

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Auditor General  
Victoria

# Teacher work force planning

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AUDITOR GENERAL  
VICTORIA

The Hon. B.A. Chamberlain MLC  
President  
Legislative Council  
Parliament House  
MELBOURNE

The Hon. A. Andrianopoulos MLA  
Speaker  
Legislative Assembly  
Parliament House  
MELBOURNE

Sir

Under the provisions of section 16 of the *Audit Act* 1994, I transmit my performance audit report on *Teacher work force planning*.

Yours faithfully

J.W. CAMERON  
*Auditor-General*

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# Foreword

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The provision of high quality school education plays a critical role in promoting an individual's learning and development, as well as being of vital importance to the Victorian economy and Australia's international competitiveness.

The availability of appropriately trained and qualified teachers is a prerequisite for quality schooling. Work force planning is, therefore, of vital interest to government, relevant government bodies and industry. With over 800 000 primary and secondary students throughout Victoria, there is widespread community interest in both the quantum and quality of the teacher work force.

This audit has identified an urgent need to ensure an adequate supply of teachers to prevent any prospective shortage of teachers in Victoria. Matching the demand for teachers with an appropriate supply is a critical input into teacher work force planning. The work force planning process is made more difficult by the number of important stakeholders in the process at both a State and Commonwealth level. Under current arrangements for the planning and funding of higher education, there is a need for greater co-ordination to ensure an adequate number and appropriate distribution of teacher education places to supply the need for teachers in schools.

A number of emerging issues will impact on teacher supply and demand in the near future such as the ageing of the government teacher work force, and the emergence of hard-to-staff schools and subjects. These factors only serve to emphasise the need for robust work force planning processes. Work force planning by the Department of Education, Employment and Training will need to become increasingly sophisticated in order to ensure an adequate supply of teachers both generally and in particular curriculum and geographic areas.

The importance of effective teacher work force planning cannot be underestimated and has led to my decision to examine this issue. This report should provide a basis for increasing general understanding of key issues and encouraging continuous improvement of teacher work force planning processes.



J.W. CAMERON  
*Auditor-General*

*21 November 2001*

# Part 1

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## Executive summary

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## INTRODUCTION

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**1.1** In February 2001, there were 2 223 primary and secondary schools with over 800 000 students in Victoria. In the government school system, there were 1 542<sup>1</sup> primary and secondary schools with 528 565 students. The government school system accounts for approximately 70 per cent of all schools and nearly 66 per cent of all students.

**1.2** In October 2000, the Victorian Government established a number of education and training objectives to increase participation levels and educational attainment across both government and non-government school sectors. These objectives were:

- to improve the standards of literacy and numeracy in primary schooling;
- to increase the percentage of young people who successfully complete Year 12, or the equivalent;
- to enable more adults to take up education and training, and so increase the overall level of educational attainment and literacy levels in Victoria;
- to increase the level of participation and achievement in education and training in rural and regional Victoria, and among groups where it is presently low; and
- to make near-universal participation in post-school education and training the norm in our society.

**1.3** The Government has also set 3 specific targets as benchmarks to measure progress towards these objectives. These are:

- **By 2005** – Victoria will be at, or above, national average benchmark levels for reading, writing and numeracy as they apply to primary students;
- **By 2010** – 90 per cent of young people in Victoria will complete Year 12 or its equivalent; and
- **By 2005** – the percentage of young people aged 15 to 19 in rural and regional Victoria engaged in education and training will increase by 6 per cent.

**1.4** A critical prerequisite for achieving the Government's objectives is the availability of appropriately trained and qualified primary and secondary teachers for all Victorian schools. Within this context, teacher work force planning should be a key aspect of Department of Education, Employment and Training's (DEET) long-term planning and policy development activity.

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<sup>1</sup> In addition to the 1 542 primary and secondary schools, there are 79 special schools and 4 language centres.



## AUDIT OBJECTIVES AND SCOPE

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**1.5** The objective of the audit was to determine whether effective arrangements are in place for planning and managing the supply and demand for government primary and secondary school teachers. Specifically, the audit assessed:

- whether DEET undertakes appropriate work force planning activities;
- how well DEET undertakes teacher work force planning;
- how well schools plan for and manage their teacher requirements;
- the effectiveness of initiatives to ensure the required numbers and types of teachers are available; and
- the effectiveness of linkages between key stakeholders involved in teacher work force planning.

**1.6** The audit included coverage of:

- the dual role of DEET as an employer and funder of primary and secondary teachers and the Statewide education policy-maker and planner;
- universities' role as suppliers of graduates to meet teacher demand; and
- the role of government schools as employers of teachers acting on behalf of DEET.

## OVERALL AUDIT CONCLUSION

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**1.7** We concluded that current arrangements for planning and managing the supply and demand for teachers should be re-focused to reflect DEET's role in overseeing the provision of teachers across the government and non-government sectors.

**1.8** Government school vacancies are usually filled. However, there are some schools that report difficulties in recruiting teachers and some subject areas which are difficult to staff. Schools continue to use other strategies to fill vacancies such as teachers teaching outside subject area and changes to curriculum and teacher allotments. The outlook is for staffing difficulties to continue. The supply of teachers is funded by the Commonwealth and managed by universities. DEET must, therefore, inform and influence these stakeholders.

**1.9** Specifically, we concluded that:

- the Victorian Government's education objectives relate to both government and non-government schools and the teacher labour market is affected by trends in both the government and non-government sectors;
- current work force planning activities by DEET have been limited in their effectiveness due to a lack of focus on both government and non-government sectors and particular segments of the teacher labour market;
- work force projections should focus on particular segments of the teacher labour market, in addition to aggregate teacher numbers;

- while most schools undertake some form of work force planning as part of their local school-based management responsibilities, integrated information and planning tools, better training and support, are required;
- initiatives such as the Teaching Scholarship Scheme, designed to ensure an appropriate supply of government school teachers, have had only marginal impact and there have been limited initiatives to address subject areas of teacher shortage and schools with staffing difficulties; and
- co-ordination between key stakeholders has not been effective due to an absence of clear decision-making mechanisms to address teacher supply and demand issues.

## **THE TEACHER LABOUR MARKET**

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**1.10** Our audit shows that the teacher labour market is currently moving from a position of surplus to one of balance. Advertised vacancies are in the main filled by a reducing number of applicants (*para. 3.16*).

**1.11** Some shortages of teachers already exist in particular segments of the labour market in areas such as information technology and languages other than english (LOTE) in secondary schools. Schools are surveyed at a particular time of the year as to whether they had any difficulties recruiting teaching staff to their school. Schools in some areas report having ongoing recruitment difficulties. In the move to self-management of schools, a Principal may restructure the curriculum offerings and a teacher may teach beyond their subject areas to satisfy the curriculum needs of their students. The Principal, however, must be satisfied that the teacher is capable of teaching the required curriculum. Our survey of work force planning in a representative sample of schools has identified that restructuring of curriculum offerings and teachers teaching out of their specialist subject areas are common strategies used by schools to deal with difficult-to-staff positions or subjects (*paras 3.16 and 6.15*).

**1.12** Approximately forty-five per cent of the government teaching work force will be progressively reaching retirement age over the next 10 years. The ageing of the teacher work force, coupled with natural attrition, will mean that the Victorian teacher labour market is likely to be in a position of shortage over this period unless there is an increase in the number of new entrants to the profession. Projected increases in enrolments and retention rates in secondary schools will add to the impact of shortages on the secondary teacher labour market and some segments of that market (*paras 3.17 and 3.21*).

**1.13** Entrants into the teaching labour market come mainly from universities following teacher education, and also from other occupations and those returning from employer granted leave. Unless there is an increase in the number of teacher education positions at universities, it is unlikely that the current supply will be able to meet the expected demand over this period (*paras 3.21 and 6.13*).

**1.14** Under current arrangements for the planning and funding of higher education, responsibility for the public funding of universities rests with the Commonwealth Government. The reduction of funding to universities by the Commonwealth has been accompanied by increased university decision-making regarding the allocation of student places across faculties. These decisions are based on a range of factors, which may not necessarily take into account the State's need for teachers (*para. 3.22*).

**1.15** Notwithstanding the requirement for an increased number of teacher education places to supply the need for teachers in schools, a number of factors will significantly impact on future teacher availability, including:

- Increases of 4 per cent in secondary school enrolments from 1995-96 to 2006 in line with the general increase in the population in Victoria. These increases will be greater if account is taken of the impact of State Government targets for increasing the number of young people completing Year 12, or its equivalent, to 90 per cent by 2010 (*paras 2.2 and 4.38*);
- The ageing of the teacher work force, with the mean age of a teacher increasing from almost 39 years in 1991 to about 43 in 2000. About 7 000 teachers (19 per cent) in the government school system are in the 50 to 54 age group. This contrasts with other school sectors, particularly the Catholic sector where there is a far younger age profile (*paras 4.44 to 4.51*);
- The significant financial benefits for resignation prior to age 55 for members of the Government's Revised Superannuation Scheme result in high attrition levels, as evidenced by the relatively small proportion of government teachers aged 55 years and over (7 per cent of total government teacher work force) (*paras 4.46 and 4.65*); and
- The decline in entrants to teacher education courses at Victorian universities during the mid-1990s (first year enrolments declined from a high of 5 126 in 1991 to a low of 2 921 in 1995). This cohort will have an ongoing impact on total teacher numbers, despite the recent increase in enrolments (up to 4 150 in 2001) and the increasing proportion of these which are one-year post-graduate teacher education courses. These post-graduate courses generally allow graduates in other disciplines to qualify as a teacher after one year of teacher education (*paras 4.12 and 4.22*).

## AUDIT FINDINGS

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### Projections of teacher supply and demand

**1.16** Work force planning by DEET has been focused on the government sector. To reflect the broader policy role now expected of DEET, the non-government sector should be included in DEET's supply and demand forecasting (*paras 5.13 to 5.16*).

**1.17** Current work force planning methods are based on projections of aggregate teacher numbers on a school basis. These methods were initially developed to estimate the number of teachers in excess of requirements. The current approach of projecting aggregate teacher demand provides an initial assessment of overall teacher demand, but the composition of the demand needs to be considered for more comprehensive work force planning (*paras 5.4, 5.7 and 5.13*).

**1.18** Long-range warning indicators and short-term indicators could be expanded to assist DEET in monitoring changes in teacher supply or demand (*para. 5.27*).

**1.19** Information available centrally for work force planning purposes needs to be expanded. Upgrading existing survey collections, accessing additional sources of data (e.g. Australian Bureau of Statistics data) and improving the capacity of management information systems such as DEET's Human Resource Management System is required in order to provide reliable and up-to-date information (*paras 5.34 to 5.37 and 5.40 to 5.43*).

**1.20** There is scope to improve management reporting in relation to work force planning (*para. 5.45*).

### **Work force planning by schools**

**1.21** Based on a survey of 119 primary and secondary schools, over 20 per cent of large schools and nearly 50 per cent of small schools had no documented work force plan that linked their strategic plan (the School Charter) with their budgeting and staffing projections. Only 20 per cent of schools had a work force plan that covered at least 3 years (*para. 6.21*).

**1.22** DEET provides a range of tools for schools to use for work force planning purposes. However, the extent of their use, and understanding of the appropriate tools to use, was variable across schools. While nearly all schools use the School Global Budget Ready Reckoner, it is clear that DEET can better support schools to enhance their capacity in work force planning through the provision of more integrated information and planning tools, and targeted training in work force planning (*paras 6.22, 6.24 to 6.28*).

### **Initiatives to increase teacher supply**

**1.23** In April 2001, the *Victorian Government Schools Agreement 2001* provided for salary increases for all Victorian government primary and secondary teachers. Currently, the salary for a Beginning teacher is \$38 630, resulting in Victoria having the highest commencing salary for graduates in Australia. The salary increases should have the impact of increasing the attractiveness of teaching as a career (*para. 7.5*).

**1.24** The major initiative to attract graduate teachers to government schools, the Teaching Scholarship Scheme, was hampered by:

- The comparatively low number of vacancies offered by schools as part of the Scheme (*para. 7.11*);
- Areas of significant recruitment difficulty not being adequately targeted by the Scheme (*paras 7.15 to 7.17*);

- Inadequate identification of schools with staffing difficulties and subjects which are difficult to staff (*paras 5.20 to 5.25*); and
- Shortfalls in the marketing of the Scheme. Over 50 per cent of those school Principals or their senior staff who had awarded a scholarship believed that the marketing could be improved (*paras 7.24 to 7.25*).

**1.25** The Teacher Graduate Recruitment Program provides some benefits to schools, though its effectiveness is reduced by the limited number of vacancies offered by schools (*paras 7.42 to 7.43*).

**1.26** Apart from the Teaching Scholarship Scheme, there were limited initiatives specifically designed to address schools with staffing difficulties and subjects which are difficult to staff. A range of potential options are suggested in this report (*para. 7.47*).

### **Co-ordination between the key players**

**1.27** Our audit found that while the main co-ordinating mechanism, the Teacher Supply and Demand Reference Group, fulfilled its term-of-reference by providing advice and feedback to DEET, it was hindered by its very large membership. There were inadequate processes to disseminate information such as new policy initiatives to parties outside the Group's direct membership. In addition, there was limited co-ordination between individual members undertaking separate work force planning studies (*paras 8.6, 8.9 and 8.12*).

**1.28** The primary focus of the above reference group was information sharing. No mechanism is in place to facilitate effective decision-making between relevant stakeholders in relation to teacher supply and demand issues (*paras 8.15 to 8.16*).

**1.29** The development of a long-term teacher supply plan is required to support the achievement of the Government's policy objectives and benchmarks for education and training (*paras 8.23 to 8.25*).

## RECOMMENDATIONS

**1.30** A full listing of recommendations contained in the report are set out below:

<i>Report reference</i>	<i>Paragraph number</i>	<i>Recommendation</i>
<b>DEET work force planning</b>	5.16	A work force planning charter should be developed, outlining roles, responsibilities and areas of authority, that reflects DEET's broader responsibilities in overseeing the provision of educational services in Victoria across all education sectors.
	5.18	DEET should continue to adopt a State-based teacher work force planning model and continue to participate in national planning activities.
	5.28	Work force projections should include: <ul style="list-style-type: none"> <li>• both government and non-government sectors;</li> <li>• coverage of specific segments of the teacher labour market;</li> <li>• both short and long-term indicators; and</li> <li>• rigorous criteria to identify schools with staffing difficulties and subjects which are difficult to staff.</li> </ul>
	5.32	Information sought from teachers as part of ongoing teacher registration processes should include details from those no longer teaching such as current occupation and future intentions to teach. Subject to cost and privacy considerations, this information should be updated annually.
	5.38	A business case should be developed to consider the upgrading of the Human Resources Management System.
	5.44	The quality and availability of existing work force survey data should be improved through: <ul style="list-style-type: none"> <li>• consolidation of some existing surveys and the extension of survey coverage to government and non-government sectors;</li> <li>• the use of additional Australian Bureau of Statistics and other data; and</li> <li>• the introduction of a new survey to seek resignation and retirement intentions of teachers in the 50 to 54 age group, subject to privacy safeguards.</li> </ul>
	5.46	A work force planning management reporting model should be adopted that reflects the relevant roles and responsibilities of each level of management.
	<b>School work force planning</b>	6.23

## RECOMMENDATIONS - *continued*

<i>Report reference</i>	<i>Paragraph number</i>	<i>Recommendation</i>
<b>School work force planning - <i>continued</i></b>	6.29	DEET should: <ul style="list-style-type: none"> <li>• increase the use of the Human Resources Management System for work force planning;</li> <li>• improve work force planning through better linking of planning tools;</li> <li>• establish a consolidated source of information (e.g. website) for work force planning; and</li> <li>• increase schools' awareness of DEET's enrolment projections and their limitations for work force planning purposes.</li> </ul>
	6.38	DEET should: <ul style="list-style-type: none"> <li>• conduct a follow-up survey of those schools identified as having Casual Relief Teacher (CRT) recruitment difficulties; and</li> <li>• analyse these results to determine whether sufficient justification exists to introduce initiatives to increase the CRT pool in areas of greatest need.</li> </ul>
<b>Initiatives to address teacher work force requirements</b>	7.34	DEET should upgrade the Teaching Scholarship Scheme by: <ul style="list-style-type: none"> <li>• ensuring the Scheme is restructured to target schools and subject areas where recruitment difficulties exist, with varying levels of scholarship payments to reflect the relative difficulty that each school has in filling vacancies;</li> <li>• marketing the Scheme to undergraduates with required subject qualifications in order to encourage them to undertake post-graduate teacher education in subject areas which are difficult to staff;</li> <li>• ongoing marketing of the benefits of the Scheme to Principals;</li> <li>• enhancing key aspects of the administration of the Scheme such as the application process; and</li> <li>• monitoring and evaluating changes to the Scheme.</li> </ul>
	7.46	DEET should increase and monitor participation in the Teacher Graduate Recruitment Program. Attention should be directed to: <ul style="list-style-type: none"> <li>• highlighting the financial and administrative benefits of the Program to schools through marketing strategies; and</li> <li>• providing Principals with current information regarding the status of the teacher labour market to encourage informed decision-making relating to offers of employment under the Program.</li> </ul>
	7.77	DEET should give consideration to the adoption of additional initiatives designed to increase teacher supply into schools with staffing difficulties and subject areas which are difficult to staff.

## RECOMMENDATIONS - continued

Report reference	Paragraph number	Recommendation
<b>Co-ordination between key stakeholders</b>	8.7	The operations of the Teacher Supply and Demand Reference Group should be reviewed to ensure that it continues to meet the needs of members.
	8.10	The Teacher Supply and Demand Reference Group should identify the information needs of its constituencies and determine the most appropriate means of communicating information to these interested parties.
	8.14	The Teacher Supply and Demand Reference Group should give consideration to a more co-ordinated approach to examining teacher supply and demand, and explore the potential to conduct co-operative research projects.
	8.22	A high-level body should be established in which key decision-makers can agree on, and then address within their own organisations, teacher supply and demand issues.
	8.26	A targeted teacher supply plan should be developed.

□ **RESPONSE** provided by Secretary, Department of Education, Employment and Training

*The Department welcomes the report into teacher work force planning in Victoria. It has provided a comprehensive review of the capacity of DEET centrally and schools to undertake teacher work force planning and manage teacher requirements, the effectiveness of central and local initiatives to ensure that the appropriate numbers and types of teachers are available, and the effectiveness of links between stakeholders involved in teacher work force planning.*

*The Department is in agreement with the overall audit conclusion that the teacher supply and demand is currently in balance in Victoria. However both the Department and the report recognise that there is difficulty in recruiting teachers in some schools and to some curriculum areas, and that without intervention this position will worsen.*

*The recommendations contained in the report will provide a framework for the Department to improve current strategies and develop future initiatives particularly related to the involvement of the non-government school sector in determining teacher work force trends, an increased focus on collecting data on segments of teacher labour markets, ongoing training and support to improve work force planning as part of local school management responsibilities, targeting strategies to improve teacher supply to particular schools and in particular subject areas, and improving co-ordination among key stakeholders.*



- ❑ **RESPONSE** provided by Secretary, Department of Education, Employment and Training - continued

*The report recommends an enhanced role for DEET in overseeing the provision of teachers across the government and non-government sectors. While the Department welcomes this expanded role it also acknowledges there is no legislative basis which requires the non-government schools sector to collect and report to the Department on workforce data. There are also only limited work force data collections undertaken by both the Catholic Education Office and the Association of Independent Schools Victoria. In recognition of these limitations, the Department currently uses its own work force data to extrapolate work force trends in the non-government schools sector. The extrapolated data is provided to representatives of the non-government sector for verification through the Teacher Supply and Demand Reference Group.*

*To incorporate more accurate and reliable non-government work force data into its teacher supply and demand analysis, the Department will need to negotiate formal reporting arrangements with both the Catholic Education Office and the Association of Independent Schools Victoria which will require them to undertake a much more active role in data collection and reporting.*

*The Department, in line with this report, recognises the significant potential risk posed by the undersupply of teachers to meet future demand. The teacher labour market is an issue of national interest that is being addressed by the Ministerial Council of Education, Employment, Training and Youth Affairs (MCEETYA). A report titled “The demand and supply of primary and secondary school teachers in Australia” was produced for MCEETYA which indicated that Victoria’s work force projections were typical of those of other Australian States.*

*The supply of increased numbers of appropriately trained graduates is being addressed nationally by MCEETYA, which is currently chaired by Minister Delahunty.*

*The Department strongly supports the findings of the report that local work force planning is a major responsibility of schools and critical to their effective performance. While acknowledging that some schools do not formally document a plan, all schools use their Charter to inform work force planning and increasingly schools are becoming more sophisticated in this area. The goals and priorities a school sets for itself in the Charter and annual monitoring of its achievements against these goals and priorities is the major driver for resource allocation in schools. The work force planning outcomes are a result of the directions specified in the Charter.*

*Since the move to an “actuals-based” funding model for 2001, which involves a significant advance for enhanced local management in schools, DEET has in place mechanisms and training that will, over time, increase the capacity of schools to utilise the sophisticated web-based planning tools described in this report.*

*As highlighted in the report, the need for timely replacement of teachers with appropriately qualified graduates is an ongoing concern for the Department. The Teacher Graduate Recruitment Program and the Teacher Scholarship Scheme have increased the number of graduates recruited into Victorian government schools for 2002, particularly during the latter part of this year. The initial impact of these programs has been limited by a set of factors unique to 2001, these being the move to an “actuals” based school funding model and the introduction of a new career structure for teachers as a result of the Victorian Government Schools Agreement 2001.*

- ❑ **RESPONSE** provided by Secretary, Department of Education, Employment and Training - continued

*Internal reviews of the Teacher Graduate Recruitment Program and the Teacher Scholarship Scheme have delivered findings similar to those contained in this report and have resulted in the Department implementing initiatives which more directly target schools that have difficulty in recruiting staff and promote teaching to undergraduates in subjects that have been difficult to staff. Marketing of both graduate recruitment programs and communication between schools and applicants has also been improved as a result of feedback from schools.*

*A teacher recruitment strategy has been developed and endorsed by the Minister for Education which will ensure action continues to be taken to address teacher supply and demand issues in Victorian schools.*

- ❑ **RESPONSE** provided by President, Australian Council of Deans of Education

*This comprehensive report addresses the important issues in teacher supply and demand, clearly identifies a number of areas that impact on this field, and provides strategies for the improvement of current processes and outcomes.*

## Part 2

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# Background

## **GOVERNMENT GOALS AND TARGETS FOR EDUCATION**

**2.1** In October 2000 the Victorian Government set 5 goals for education and training in response to 2 major reviews: The Ministerial Review of Post Compulsory Education and Training Pathways in Victoria (the Kirby Report), and the Report of the Ministerial Working Party – Public Education: The Next Generation (the PENG Review). These goals are:

- to improve the standards of literacy and numeracy in primary schooling;
- to increase the percentage of young people who successfully complete Year 12 or the equivalent;
- to enable more adults to take up education and training and so increase the overall level of educational attainment and literacy levels in Victoria;
- to increase the level of participation and achievement in education and training in rural and regional Victoria and among groups where it is presently low; and
- to make near-universal participation in post-school education and training the norm in our society.

**2.2** In order to measure the success in achieving these goals, the Government set the following benchmarks across both government and non-government school sectors:

- **By 2005** – Victoria will be at or above the national average benchmark levels for reading, writing and numeracy as they apply to primary students;
- **By 2010** – 90 per cent of young people in Victoria will complete Year 12 or its equivalent; and
- **By 2005** – the percentage of young people aged 15 to 19 in rural and regional Victoria engaged in education and training will increase by 6 per cent.

## **THE VICTORIAN SCHOOL SYSTEM – A BRIEF OVERVIEW**

**2.3** At a broad level, the education sector accounts for approximately 6 per cent of the employed work force in Victoria. Government primary and secondary teachers account for nearly 27 per cent of employment in this industry (according to Australian Bureau of Statistics, *Schools, Australia, 2000*). Funding of this work force is provided by the State Government. In 1999-2000, teacher costs in government schools amounted to \$2.6 billion.

**2.4** Victorian government schools operate within one of the most devolved educational systems in the world, with the delegation of decision-making to the school level of approximately 90 per cent of school's operating costs. This is achieved through the School Global Budget<sup>1</sup> which was first introduced in 1994.

<sup>1</sup> The School Global Budget in 2001 changed from a budget based on actual costs for teachers to a budget based on a standard salary cost of all teachers, excluding Principals, of \$53 080. Refer to: Victorian Auditor-General's Office, *Report on Ministerial Portfolios, June 2001*.

**2.5** At February 2001, there were 2 223 primary and secondary schools with a total of over 800 000 students in Victoria. In the government school system, there are 1 542<sup>2</sup> primary and secondary schools with 528 565 students. The government school system accounts for approximately 70 per cent of all schools and nearly 66 per cent of all students.

**2.6** There are 4 pathways to teaching in Victoria:

- a 4-year undergraduate teacher education degree (such as Bachelor of Education);
- a double-degree program where 2 degrees are studied at the same time, with one being a teacher education course (e.g., Bachelor of Science with Bachelor of Teaching);
- completion of an academic degree followed by a one or 2 year postgraduate teacher education course; and
- for teaching in the vocational and technology area, gaining relevant industry experience followed by a qualification in teacher education.

**2.7** There are 8 universities in Victoria offering teacher education, namely, the Australian Catholic University, Deakin University, La Trobe University, Monash University, RMIT, University of Ballarat, University of Melbourne and Victoria University of Technology. In addition, Victorian students can apply for teacher education places at the Albury campus of Charles Sturt University. The funding of university places is a Commonwealth Government responsibility and is administered through the Commonwealth Department of Education, Training and Youth Affairs (DETYA).

**2.8** Further details on the process for funding university places and details of teaching student applications, enrolments, graduations and destination after graduation are contained in Part 4 of this report.

## **AUDIT OBJECTIVES AND SCOPE**

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**2.9** The overall objective of this audit was to determine whether effective and efficient arrangements were in place for planning and managing the supply and demand for government primary and secondary school teachers.

**2.10** Specifically, the audit assessed:

- whether DEET undertakes appropriate work force planning activities;
- how well DEET had undertaken teacher work force planning;
- how well schools planned for and managed their teacher requirements;
- the effectiveness of initiatives to ensure that the required number and types of teachers were available; and
- the effectiveness of linkages between key stakeholders involved in teacher work force planning.

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<sup>2</sup>This audit did not cover the 79 government special schools and 4 language schools in Victoria.

**2.11** The audit focused on the supply and demand for primary and secondary teachers in government schools and included coverage of:

- DEET as an employer and funder of primary and secondary teachers and as well as the Statewide education policy-maker and planner;
- universities as suppliers of graduates to meet teacher demand; and
- schools as employers of teachers acting on behalf of DEET.

**2.12** The audit criteria used to assess the extent to which the objectives of the audit have been met are included in Appendix 1 of this report.

### **COMPLIANCE WITH AUDITING STANDARDS**

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**2.13** The audit was performed in accordance with Australian Auditing Standards applicable to performance audits and, accordingly, included such tests and procedures considered necessary to conduct the audit.

### **PERIOD COVERED BY THE AUDIT**

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**2.14** The audit field work covered the period from August 2000 to August 2001. In the statistical analysis Part of this report, data has been collected from 1989 to early 2001.

### **ASSISTANCE TO THE AUDIT TEAM**

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**2.15** Specialist assistance was provided to the audit team by:

- Mr Terry Swalwell, former secondary school Principal, who provided specialist advice on secondary education;
- Mr John Renowden, former primary school Principal, who provided specialist advice on primary education; and
- Dr Elizabeth Webster, Senior Research Fellow, Melbourne Institute of Applied Economic and Social Research, University of Melbourne, who provided specialist advice on the education labour market.

**2.16** We also engaged the following organisations to conduct a review of the work force planning practices of government primary and secondary schools:

- Educational Development and Review Pty Ltd;
- Educational Evaluators Australia; and
- Professional Development Institute, Faculty of Education, Monash University.

**2.17** Significant support was provided to the audit team by the management and staff of DEET and the 9 teacher education universities. The Graduate Careers Council of Australia and the Victorian Tertiary Admissions Centre also provided significant assistance through the provision of statistical data for this report.

## Part 3

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# Teacher labour market and work force planning

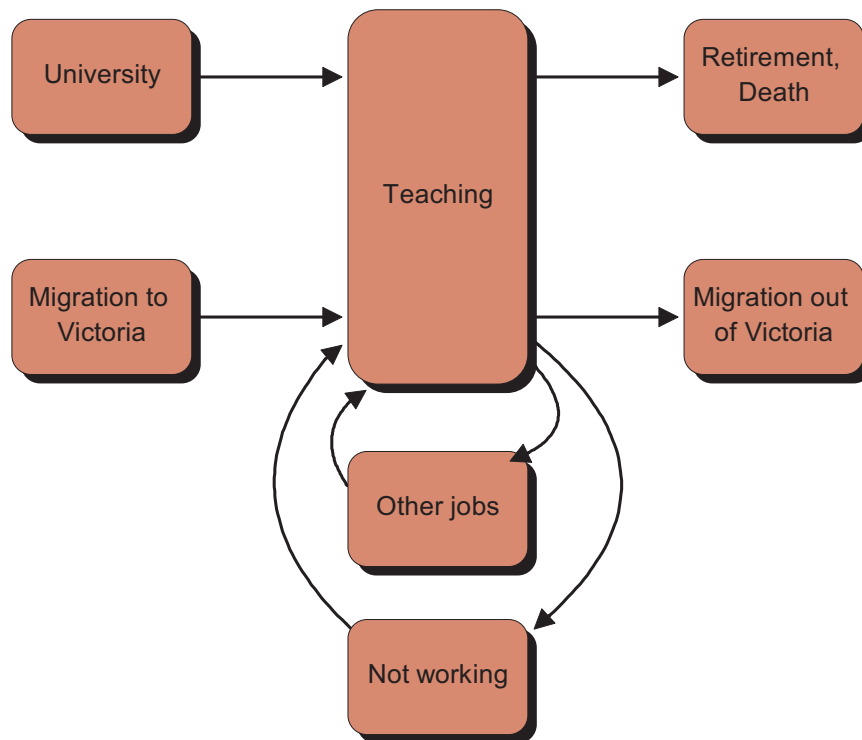
## INTRODUCTION

**3.1** This Part of the report provides a brief outline of the operation of the teacher labour market within Victoria and the functioning of work force planning within this market. More detailed information about the teacher labour market can be found in Part 4, *A statistical overview of teacher supply and demand*.

## TEACHER LABOUR MARKET

**3.2** The chart below provides a broad overview of the major inflows and outflows from the teacher labour market and the inter-relationships between various elements.

**CHART 3A  
MAIN FLOWS OF QUALIFIED TEACHERS**



Source: Victorian Auditor-General's Office.

### Teacher labour market segments

**3.3** The Victorian teacher labour market is segmented into primary and secondary schooling. Within secondary schooling, the market is further segmented into teaching subject areas. Labour market segmentation occurs when workers cannot accept or will not be offered employment because they lack the appropriate qualifications, prior experience or live too far from areas of employment.



**3.4** The teacher labour market is not, however, segmented by jurisdiction or by the type of employment contract as:

- A qualified teacher in the government sector with relevant experience is able to teach in an equivalent position in a neighbouring non-government school; and
- Casual, fixed-term and tenured teachers supply the same teacher services to schools as ongoing teachers. While differences exist according to their expected job duration and effective hourly wage rate, the content of services provided are the same.

### Teacher employment by occupation

**3.5** A teacher labour market, broadly speaking, incorporates people of employment age with appropriate teaching qualifications. It, therefore, includes people working in the education sector, people on leave and qualified teachers working in other professions. The employment status of qualified teachers aged 15 to 54 years analysed in 3B is based on the latest available Australian Bureau of Statistics (ABS) census data (1996). It is important to note that the 1996 census data will underestimate the current level of government sector teaching staff, as it was conducted during a period of lower government teacher employment.

**TABLE 3B**  
**LABOUR MARKET STATUS OF QUALIFIED TEACHERS, AGED 15 TO 54 YEARS**  
**PERCENTAGE DISTRIBUTION, VICTORIA, 1996**

Teaching qualification (a)	Occupation					Total
	Primary school teacher	Secondary school teacher	Other job	Unemployed	Not in the labour force	
Primary	45.6	1.1	36.0	2.2	15.1	100.0
Secondary	1.3	47.9	36.0	2.9	11.9	100.0
Primary or secondary	28.3	19.3	36.0	2.5	13.9	100.0

(a) Refers to highest qualification. Approximately 75 per cent of people with an education qualification (as one of their top 3 qualifications) identify education as their highest qualification. This is related to age. 93 per cent of 20 to 24 year olds who have an education qualification claim it is their highest qualification, compared with 66 per cent of 50 to 54 year olds (ABS 1997 Survey of Education and Training, unpublished data).

Source: Victorian Auditor-General's Office based on ABS 1996 Census of Population and Housing, unpublished data.

**3.6** The key features are as follows:

- A total of 36 per cent of all qualified teachers are employed in occupations other than teaching and another 13.9 per cent were not in the labour force. It is unclear whether these qualified teachers could be encouraged back into teaching;
- Fewer than half (45.6 per cent) of people with a primary teaching qualification were employed as primary teachers and 47.9 per cent of people with a secondary teaching qualification were employed as secondary teachers; and
- The unemployment rate, at between 2 and 3 per cent, was very low for both qualifications.

**3.7** For older qualified teachers (aged 55 years and over), about 71 per cent are not in the labour force, only 9 per cent are teaching, a further 19 per cent are in other occupations and one per cent are unemployed.

### **Factors influencing teacher demand and supply**

**3.8** The overall demand for teachers is largely driven by demographic factors, government budget considerations, educational policies and practices, school class sizes, school retention rates and student:teacher ratios set by the Victorian Government.

**3.9** While the number of Victorian government school teachers currently teaching is able to be quantified, the number of people qualified to teach but not currently teaching who might be willing to return to teaching is unknown. Population census data from 1996 indicates this could be a substantial number. For effective teacher work force planning to be undertaken, more knowledge is needed about this potential source of teachers.

**3.10** Specific factors affecting the supply of qualified teachers in each market segment include:

- relative financial and non-financial rewards of teaching compared with alternative occupations;
- job opportunities inside and outside of teaching and the ease of obtaining a preferred job;
- limits on the number of teacher education places on offer within universities;
- rate of net migration of teachers;
- costs of acquiring teaching qualifications;
- impact of various leave entitlements; and
- relative working conditions.

### **Entrants into and departures from the teaching profession**

**3.11** There are around 26 000 primary teachers and 28 000 secondary teachers employed across all education sectors in Victoria. Entrants into the teaching labour market come from the university sector, overseas and interstate, other occupations and those on leave or unemployed.



*Teacher and students at  
Old Orchard Primary School, Blackburn North.*

**3.12** The gross annual inflow into primary school teaching between 1996 and 2000 in Victoria was about 7 per cent (about 1 800 people). Most of these people were not working in the year prior to which they commenced teaching. Many would have been studying for their teaching qualifications but some would also have returned from employer-granted leave. Only 0.6 per cent (about 150 people) of the annual gross inflow rate into primary teaching were from other occupations. By contrast, the annual gross inflow rate into secondary teaching was about 3 per cent (about 800 people). There was, however, a relatively high rate of inflow into secondary teaching from other occupations.

**3.13** According to the data on teachers across all sectors exiting the profession, 5 per cent of primary school teachers (representing about 1 300 people) and 6 per cent of secondary teachers (about 1 700 people) leave teaching each year in Victoria. Only one in 6 of those who leave primary school education take up work in another occupation and the remainder presumably proceed onto family leave or retire. In contrast, just over a third of departing secondary teachers leave for other occupations. This reflects both the lower proportions of females in secondary teaching (and thus the reduced need to take family leave) and the more numerous career opportunities for secondary school teachers outside teaching.

### **Current state of the teacher labour market**

**3.14** It is difficult to establish whether the existing primary and secondary teacher labour market is currently or prospectively in surplus or shortage due to the lack of objective estimates on segments of the teacher labour market. Aggregated secondary school data<sup>1</sup> or aggregated primary and secondary data<sup>2</sup> provide only a partial perspective on the state of the teacher labour market. An overall surplus across the whole secondary sector may conceal shortages of teachers in selected subjects or geographic areas. Policies that are based on information that does not recognise the distinction between segments of the secondary school teacher labour market may therefore fail to address underlying supply problems.

**3.15** Where information is disaggregated by teaching subject, such as DEET surveys of recruitment difficulties, survey responses rely upon the schools' subjective views of the labour market. One of the major recommendations contained in Part 5 of this report is the need to develop a more robust and objective basis to identify subjects which are difficult to staff as well as schools with recruitment difficulties. Objective and comparable data are not currently obtained across the government and non-government school sectors. Under these circumstances, there may be a surplus in some segments of the secondary teacher labour market and shortages in other areas which are not addressed.

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<sup>1</sup> Barbara Preston (2000). *Teacher supply and demand to 2005: projections and context*, A report commissioned by the Australia Council of Deans of Education. See Tables E and F.

<sup>2</sup> Department of Education, Training and Youth Affairs (2001). *Demand and supply of primary and secondary school teachers in Australia*, prepared for CESCEO Working Party on Supply and Demand for Teachers.

**3.16** Our best estimate is that the State teacher work force has been moving from a position of surplus to one of overall balance. Our survey of government schools showed that for 93 per cent of vacancies, the position was filled by the required date. This was similar for both primary and secondary schools. However, strategies adopted by schools to cope with recruitment difficulties, such as changes to the curriculum, may mask the true extent of vacancies. In the move to self-management of schools, a Principal may restructure the curriculum offerings and a teacher may teach beyond their subject areas to satisfy the curriculum needs of their students. The Principal, however, must be satisfied that the teacher is capable of teaching the required curriculum. There is clear evidence that some subject areas in secondary schools, such as mathematics, science, information technology, technology studies and languages other than English (LOTE) are currently in shortage, as discussed in Part 7.

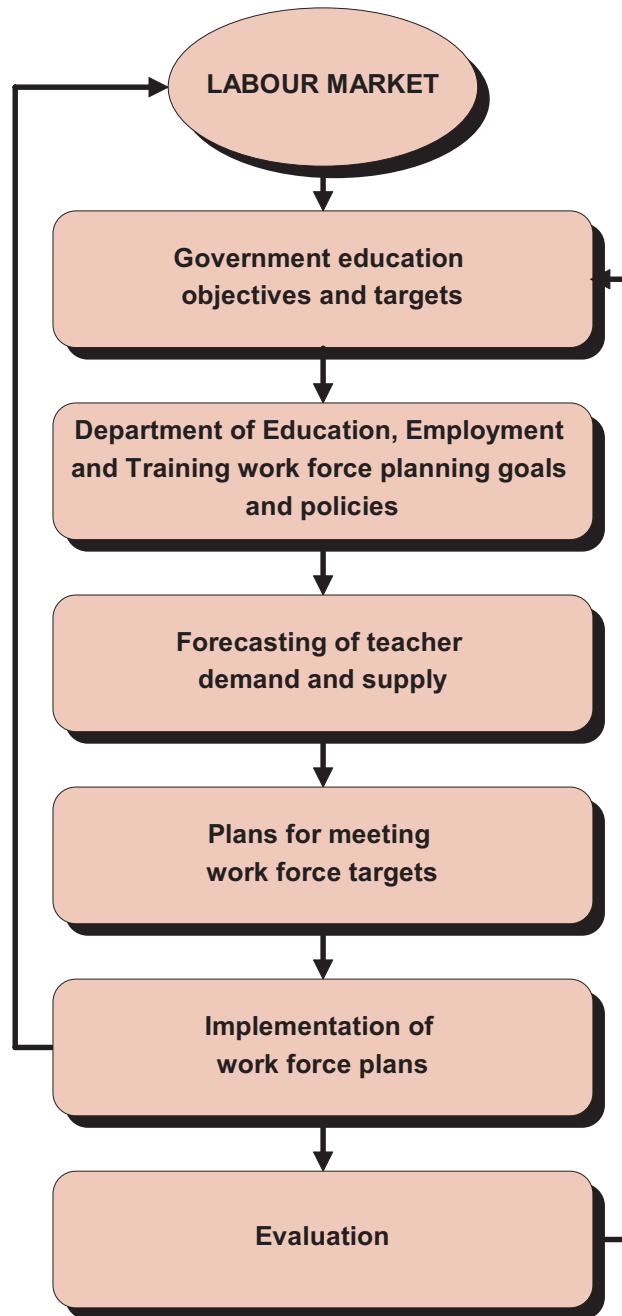
**3.17** The ageing of the government school work force, which is discussed in further detail later in this Part of the report, will mean that over the coming decade the rate of net increase in the supply of qualified teachers will have to rise (through higher training rates, net immigration and net inflows from other occupations) to meet increases in projected demand, particularly in secondary teaching.

### **TEACHER WORK FORCE PLANNING**

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**3.18** Work force planning involves the analysis of existing work force data, demographic statistics and other relevant information (e.g. government policies and directions) in order to project future work force demand and the supply. The overall purpose of work force planning is to provide information that will allow decisions to be made in advance so that the appropriate quantum of skilled personnel and resources will be in place to achieve the Government's policy goals and meet community needs. The teacher work force planning process is depicted in Chart 3C below.

CHART 3C  
TEACHER WORK FORCE PLANNING



Source: Victorian Auditor-General's Office.

**3.19** The importance of teacher work force planning is underlined by the critical role teachers will play in the achievement of the targets set for education and training outlined earlier in this report. We know that the most important and effective influence on student learning is the quality of teaching that occurs in classrooms. International<sup>3</sup> and Australian<sup>4</sup> research demonstrates that differences in the effectiveness of teaching are up to 4 times more important than differences between schools in explaining the variation in educational achievement among students. Research also supports the importance of lower class sizes particularly in the early years of learning. An adequate supply of high quality teachers is therefore a necessary pre-condition for raising student achievement levels.

**3.20** Teacher work force planning is also of vital importance at this time due to:

- shortages of teachers in key specialisations such as information technology, LOTE, science and mathematics; and
- the difficulties faced by some schools in attracting and retaining teachers, particularly schools in rural and isolated regions of Victoria.

**3.21** The complexity of teacher work force planning in Victoria will be exacerbated by:

- **Significant financial inducements for early resignation.** Government school teachers aged 45 years and over are likely to be members of the Revised Superannuation Scheme where there are financial advantages to resign at age 54 years 11 months. The impact of these incentives is evidenced by the relatively small proportion of teachers in the profession aged 55 years and over (7 per cent of the total government teacher work force);
- **The rapid ageing of the government school teaching work force.** As at February 2001, the number of government school primary and secondary teachers in the 45 to 49 (9 544) and 50 to 54 age categories (7 138) is particularly significant and constitutes 44 per cent of the total work force. With the inclusion of teachers 55 years of age and over, this percentage increases to 50 per cent of the total work force. DEET's estimate of the percentage of teachers leaving the government school system each year is expected to increase from 3.6 per cent (or about 1 400 teachers) in 1999 to 5.3 per cent (or about 2 000 teachers) in 2005. The increase is based solely on the ageing factor. The 1996 ABS census data suggests that the age bias is less marked in the non-government sector. However, teachers in general are comparatively older than the Victorian work force across all occupations;

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<sup>3</sup> Scheerens, J. (1992). *Effective schooling: Research, theory and practice*. London: Cassell.

<sup>4</sup> Hill, P.W., Holmes-Smith, P., and Rowe, K.J. (1993). *School and teacher effectiveness in Victoria: Key findings of the Victorian Quality Schools Project*.

- **Declining student enrolments in university teacher education in the 1990s.** The number of first year enrolments in teacher education courses in Victorian universities steadily declined from a high of 5 126 in 1991 to a low of 2 921 in 1995. The number of enrolments has since slowly increased with 2001 being the first time since 1991 that first year enrolments have exceeded 4 000 (4 150). (Refer to Part 4 of this report for further details on trends in teacher education.); and
- **Rising secondary school enrolments.** While student enrolments in primary schools are projected to decline in the long-term, DEET projects increases in secondary school enrolments peaking in 2006 in line with higher population growth forecasts. The achievement of recently announced government targets for increasing the completion rates for Year 12 level would result in further increases to enrolment rates.

### **Central work force planning constraints**

**3.22** Key teacher work force decisions are made by groups not necessarily driven by DEET labour force objectives. Factors outside of DEET's control include:

- the recruitment of teachers has been devolved to school Principals with a consequent lessening of central access to key work force information;
- the availability of teaching places at universities is driven by the level of overall Commonwealth funding for student places; and
- the allocation of student places across faculties, including education faculties, is determined by universities.

**3.23** These factors, in turn, pose particular challenges for DEET in having:

- reliable, robust and consolidated information on which to base planning for the supply and demand of primary and secondary teachers;
- work force planning processes that directly support schools in their staff recruitment and selection activity; and
- information to provide to universities regarding the State's need for teachers for particular subject areas.



## Part 4

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# A statistical overview of teacher supply and demand

## INTRODUCTION

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**4.1** The statistical information contained in this Part of the report provides further details of the teacher labour market as well as a context for the consideration of audit findings and recommendations which are presented later in the report. We obtained data from the following organisations:

- Victorian Tertiary Admissions Centre (VTAC) - applications for teaching places at Victorian universities and ENTER scores for undergraduate places;
- Department of Education, Employment and Training (DEET) - enrolments in undergraduate and postgraduate courses, the age structure and attrition rates of the teacher work force of government schools and difficult-to-fill teacher vacancies;
- Catholic Education Office (CEO) - the age structure of the teacher work force; and
- Graduate Careers Council of Australia (GCCA) - the destination of graduates after completing their courses.

## LIMITATIONS OF INFORMATION

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**4.2** There were a number of limitations regarding the availability and consistency of information collected from the organisations referred to above, including:

- **Applicants for teacher education places at Victorian universities.** We have used ENTER<sup>1</sup> results based on “Final Fringe”<sup>2</sup> scores. We consider these scores to be the most accurate representation of the results required for course acceptance as they encompass approximately 95 per cent of entrants. Available information, however, is not consistent as not all courses have “Final Fringe” data for all rounds of offers. In many instances, it was only available for the first round of offers. In addition, some universities do not provide any ENTER data;
- **Enrolments for teacher education courses.** Enrolment data is collected annually by DEET through a process of collaboration with universities. In recent years, some universities have not supplied first year enrolment data and DEET has had to estimate this information;
- **Teacher graduates.** There are inconsistencies in the way universities record graduate data. Some universities only record graduates who undertake a graduation ceremony. Consequently, there are no reliable data on the number of graduates from teacher education courses. As a *de facto* measure of teacher graduates, DEET collects final year enrolments on the assumption that the majority of students will complete their final year. Graduate information is not available for one year courses such as a Diploma of Education;

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<sup>1</sup> ENTER or “Equivalent National Tertiary Entrance Rank” is a percentile ranking showing an applicant's comparative placement in their VCE age group in that year on the basis of their VCE studies.

<sup>2</sup> Fringe scores are the most accurate representation of the tertiary entrance scores (ENTER) as they indicate the point at which 95 per cent of course offers are made. Fringe scores are available either for first round offers (R) or as an overall fringe score (F) for all offers.

- **Teacher destinations.** The Graduate Careers Council of Australia (GCCA) engages a contractor to undertake surveys of teacher graduates 4 months after course completion to ascertain their employment status. No follow-up surveys are undertaken. The GCCA only achieved a survey response rate of approximately 30 per cent of final year enrolments; and
- **Schools with recruitment difficulties and subjects which are difficult to staff.** The current DEET definitions used to identify schools with recruitment difficulties and subjects which are difficult to staff are not sufficiently robust. In Part 5 of this Report, we have suggested the development of more rigorous criteria to identify schools and subject areas in these categories.

**4.3** In addition to the above limitations, there are a number of inconsistencies in the time periods for which information is available. This is highlighted below:

- VTAC has teacher education course applicants available for first round 1997 and undergraduate courses and postgraduate courses from 1998;
- first year enrolment data has been collected by DEET since 1989;
- final year enrolment data by subject method has been collected since 1994, although no data is available for 1995; and
- graduate destination data has been collected by the GCCA since at least 1990.

**4.4** The availability and consistency of relevant data is crucial for successful teacher work force planning. The approach to data gathering has been characterised by a lack of overall co-ordination between the various organisations involved. We have suggested, in Part 8 of this report, the establishment of a body to improve co-ordination between stakeholders. Data issues should be considered and addressed by this body.

**4.5** Consideration of the following information should take into account the above limitations.

## **NUMBER OF SCHOOLS, STUDENTS AND POPULATION, STATEWIDE**

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**4.6** In Table 4A below, a summary is provided of the schools and students across the government, Catholic and independent sectors.

**TABLE 4A  
NUMBER OF SCHOOLS AND STUDENTS (FTE), FEBRUARY 2001**

School type	Government		Catholic		Independent	
	Schools	Students (FTE)	Schools	Students (FTE)	Schools	Students (FTE)
Primary	1 235	311 008	387	101 774	59	36 964
Primary-secondary	43	(a)	10	(a)	123	(a)
Secondary	264	217 557	87	78 920	15	59 345
Special	79	5 944	7	179	8	275
Language	4	903	-	-	-	-
<b>Total</b>	<b>1 625</b>	<b>535 412</b>	<b>491</b>	<b>180 873</b>	<b>205</b>	<b>96 584</b>

(a) Included under Primary or Secondary as applicable.

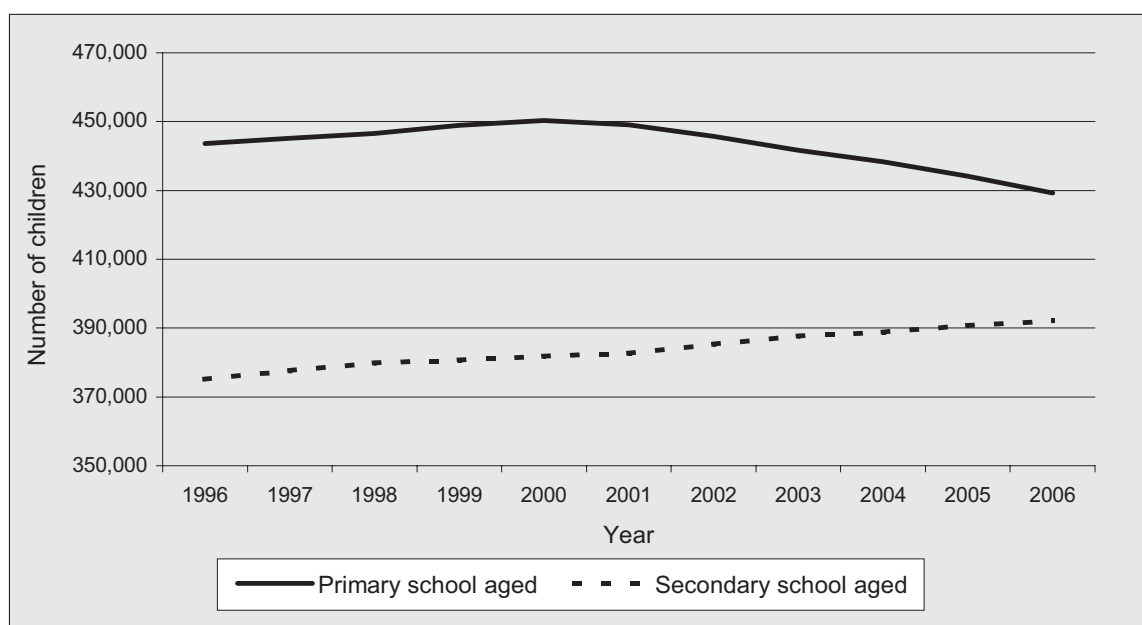
FTE means full-time equivalent.

Source: Office of School Education, DEET.

**4.7** Of the total number of primary and secondary students in Victoria at February 2001, approximately 66 per cent of all students attend a government school. The government school share of enrolments has fallen by almost 2 percentage points since 1992.

**4.8** Chart 4B shows the school-aged population in Victoria from 1996 (actual) to 2006 (based on Department of Infrastructure projections).

**CHART 4B  
SCHOOL-AGED POPULATION, 1996 TO 2006, VICTORIA**



Note: Primary school-aged is persons aged 5 to 11 years; secondary school-aged is persons aged 12 to 17 years.

Source: Victorian Auditor-General's Office based on the Department of Infrastructure publication, *Victoria in Future*, February 2000.

**4.9** The number of primary school-aged children peaked at about 450 300 in 2000 and is expected to fall by around 5 per cent to 429 300 by 2006. In contrast, the secondary school-aged population is projected to rise by about 2.5 per cent between 2000 and 2006 (and by a total of over 4 per cent over the whole 10 year period shown in Chart 4B). Both trends reflect changes in birth rates in the 1980s and 1990s and the contribution of future migration to Victoria.

**4.10** It should be noted that only about 70 per cent of the primary school aged population attend government schools. Fewer than half the secondary school aged population attend government schools (the remainder attend either non-government schools or do not complete their schooling).

### **SUPPLY OF TEACHERS FROM UNIVERSITIES**

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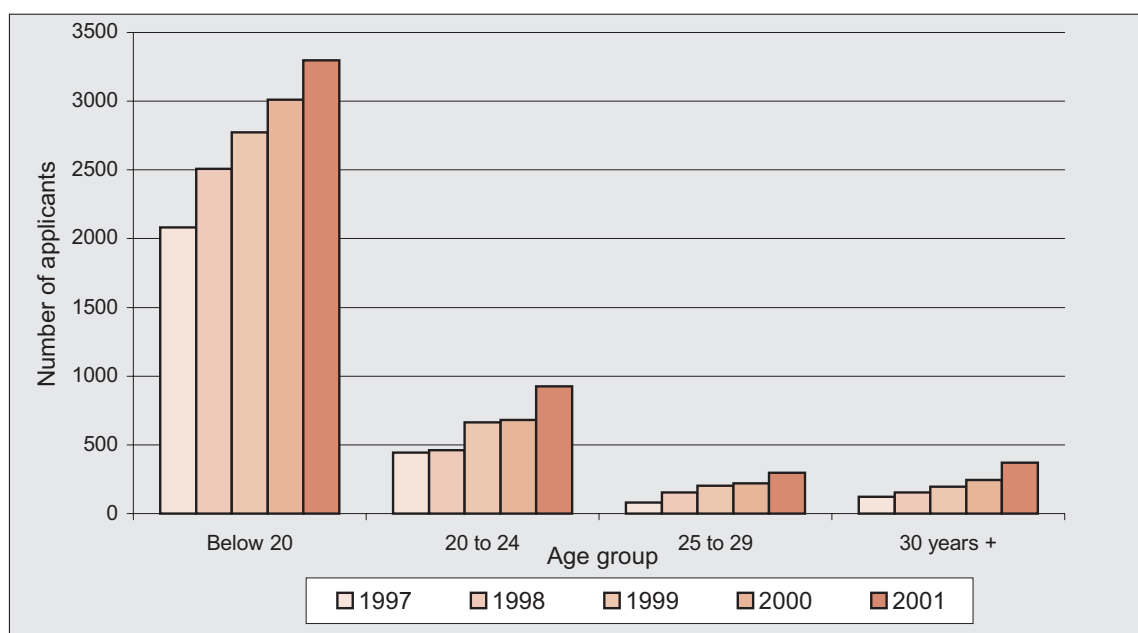
**4.11** There are 9 universities offering courses for Victorian teacher education. In 2000, Deakin University had the greatest number of undergraduate first year students, while the University of Melbourne had the highest number of post-graduate first year students. Overall, Deakin University and the University of Melbourne accounted for almost 40 per cent of first year enrolments, and Monash University accounted for a further 17 per cent.

**4.12** A typical undergraduate teaching course, such as the Bachelor of Education or Bachelor of Teaching, involves 4 years of full-time study. Most postgraduate students complete a Diploma of Education, which is usually a one year full-time course.

#### **Undergraduate applicants**

**4.13** Chart 4C shows undergraduate applicants for teacher education courses by age group.

**CHART 4C**  
**UNDERGRADUATE APPLICANTS FOR**  
**VICTORIAN TEACHER EDUCATION COURSES BY AGE, 1997 TO 2001**



Source: Victorian Auditor-General's Office based on data provided by DEET, Workforce Studies Unit.

#### 4.14 The main features shown in the chart are:

- Between 1997 and 2001, the number of applicants increased significantly in all age groups;
- Applicants aged under 20 years are still in the majority: 67 per cent of all applicants in 2001, down from 76 per cent in 1997;
- In terms of percentage rises, the strongest growth occurred in the 25 to 29 year age group and 30 years and over age group; and
- Applicants for primary education courses increased by 107 per cent in the 4 year period to reach 2 876 in 2001. The corresponding rise for secondary education course applicants was about 65 per cent to reach 1 091 in 2001.

### ENTER scores

**4.15** One indication of the quality of students enrolling in an undergraduate degree course is the VCE marks of the students. All students who pass their VCE are given an ENTER score which is based on their VCE results. Most undergraduate courses select prospective students, in part, based on achieving a minimum ENTER score. Generally, the higher the minimum ENTER score, the better the academic quality of the student commencing the course.

**4.16** Table 4D shows the minimum ENTER scores for entry into 4 undergraduate teacher courses for which the best data were available from 1997 to 2001. While all the data are not strictly comparable, there has been a general increase in these ENTER scores.

**TABLE 4D  
FRINGE ENTER SCORES FOR SELECTED EDUCATION COURSES, 1997 TO 2001**

University and course	1997	1998	1999	2000	2001
Melbourne - primary	65.70 (F)	76.55 (F)	68.35 (F)	77.15 (R)	73.7 (R)
Monash - primary	64.75 (F)	65.95 (R)	65.9 (R)	69.4 (R)	n.a.
Monash - secondary	n.a.	76.6 (R)	77.85 (R)	83.7 (R)	82 (R)
Deakin - secondary	64.4 (F)	69.05 (F)	n.a.	68.6 (R)	73.9 (R)

n.a. not available.

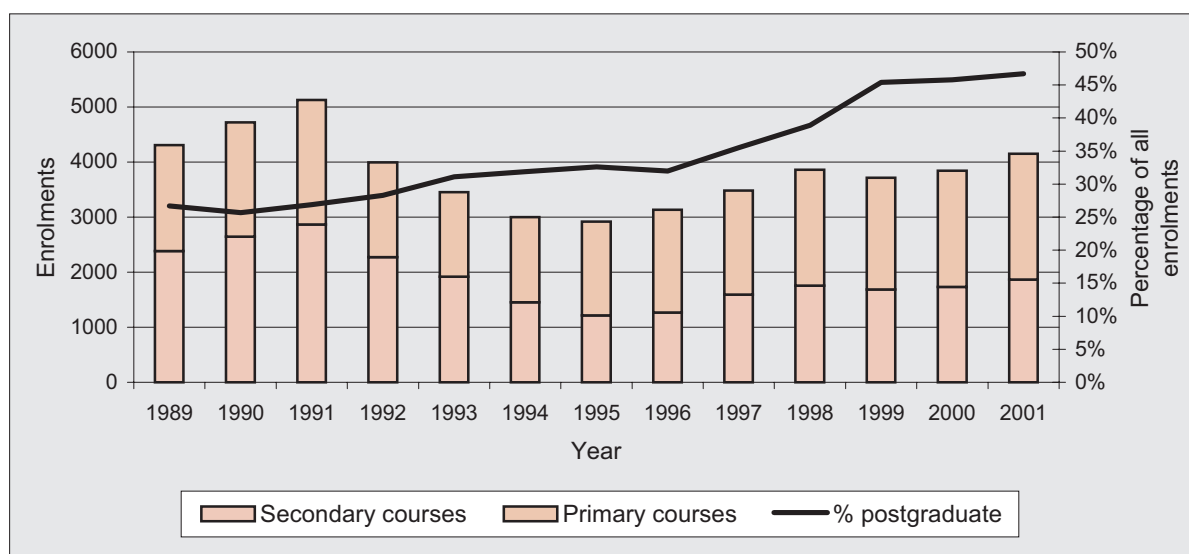
F and R: Fringe scores are the most accurate representation of the tertiary entrance scores (ENTER) as they indicate the point at which 95 per cent of course offers are made. Fringe scores are available either for first round offers (R) or as an overall fringe score (F) for all offers.

Source: Victorian Auditor-General's Office based on VTAC data.

### First year enrolments

**4.17** Chart 4E shows the trend in first year enrolments in Victorian teacher education courses since 1989.

**CHART 4E  
FIRST YEAR ENROLMENTS IN VICTORIAN TEACHER EDUCATION COURSES,  
1989 TO 2001**



Source: Victorian Auditor-General's Office based on data provided by DEET, Workforce Studies Unit.

**4.18** The number of first year enrolments reached a high of 5 126 in 1991 before declining to 2 921 in 1995. Since 1995, enrolments have steadily increased to 4 150 in 2001. Postgraduate enrolments have increased significantly from 1 153 in 1989 to 1 937 in 2001.

**4.19** The rise in applications for primary places may be related to a government policy initiative to reduce student:teacher ratios in the early years of schooling. This initiative increased demand for primary teachers in government schools and was publicised widely in 2000.

**4.20** Reflecting the nature of the teaching environment through the mid-1990s, there was a decline in teacher education enrolments. Since then, however, there has been an expansion in teaching jobs and higher wages, so that:

- there have been substantial increases in applications;
- first year enrolments have stabilised and seem to be increasing; and
- the completion rate (i.e. first year enrolments graduating) is increasing.

### Teacher supply continuum

**4.21** Table 4F provides details of the teacher supply continuum from application for a university place, first year enrolment to final year enrolment from 1998 to 2001.

**TABLE 4F  
TEACHER SUPPLY IN VICTORIA, 1998 TO 2001**

Course specification	Number of first round applicants				First year teacher education enrolments				Final year teacher education enrolments			
	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
Postgraduate -												
Primary (a)	806	995	1 136	1 556	436	518	545	648	282	343	421	611
Secondary	1 318	1 358	1 465	1 884	1 066	1 170	1 216	1 289	1 076	1 164	1 211	1 293
Undergraduate -												
Primary (a)	2 538	3 002	3 303	3 803	1 668	1 511	1 563	1 635	963	1 044	990	1 151
Secondary	736	834	855	1 091	692	517	519	578	264	281	309	319
<b>Total</b>	<b>5 398</b>	<b>6 189</b>	<b>6 759</b>	<b>8 334</b>	<b>3 862</b>	<b>3 716</b>	<b>3 843</b>	<b>4 150</b>	<b>2 585</b>	<b>2 832</b>	<b>2 931</b>	<b>3 374</b>

(a) includes primary-secondary teacher courses.

Source: Victorian Auditor-General's Office based on data provided by DEET, Workforce Studies Unit.

**4.22** The main features of the data are:

- The number of first round applicants to VTAC for teacher education increased from 5 398 in 1998 to 8 334 in 2001. The increased applications were mainly for primary teacher education;
- The resultant increase in first year teacher education enrolments was much smaller than the increase in applications. Enrolments rose from 3 862 (or 72 per cent of applications) in 1998 to 4 150 (50 per cent of applications) in 2001. Postgraduate enrolments accounted for all of the increase with undergraduate enrolments declining over the period; and
- Final year teacher education enrolments also increased from 2 585 students in 1998 to 3 374 in 2001. Primary postgraduate courses showed the largest increase.

**4.23** Table 4F indicates that university places are not keeping pace with the desire of students to become teachers. This is further evidenced by the rising ENTER scores discussed previously.



## Trend in postgraduate enrolments

**4.24** The proportion of postgraduate enrolments in teacher education has risen from about one-quarter of all enrolments in the early 1990s to close to one-half of all enrolments (about 47 per cent in 2001). Postgraduate students are more likely to be mature-age, having obtained their undergraduate degree some years before undertaking the Diploma of Education course and have several years work experience outside of teaching. Prospective teachers who have an undergraduate degree generally only require one year of teacher education to become a qualified teacher. In this sense, the teacher labour market is more flexible than that of many other professions.

**4.25** Table 4G shows final year enrolments in Victorian teacher education courses from 1997 to 2001.

**TABLE 4G**  
**FINAL YEAR ENROLMENTS IN VICTORIAN TEACHER EDUCATION COURSES,**  
**1997 TO 2001**

<i>Student type</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>
Secondary undergraduate	329	264	281	309	319
Secondary postgraduate	847	1 076	1 164	1 211	1 293
Primary undergraduate	793	963	1 044	990	1 151
Primary postgraduate	231	282	343	421	611
<b>Total</b>	<b>2 200</b>	<b>2 585</b>	<b>2 832</b>	<b>2 931</b>	<b>3 374</b>
Percentage post-graduate	49.0%	52.5%	53.2%	55.7%	56.4%

*Note:* Primary includes P-12 courses.

*Source:* Victorian Auditor-General's Office based on data provided by DEET, Workforce Studies Unit.

**4.26** The main features of the table are:

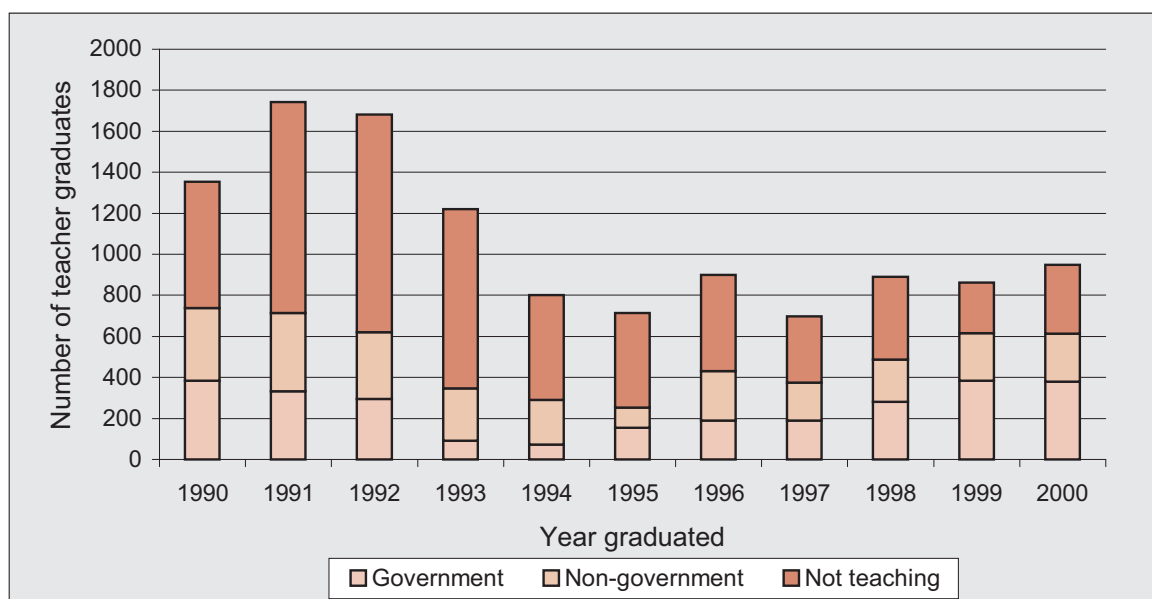
- Secondary final year enrolments rose from 1 176 in 1997 to 1 612 in 2001, a rise of about 37 per cent;
- Primary final year enrolments rose more strongly: from 1 024 in 1997 to 1 762 in 2001, a rise of around 72 per cent; and
- The proportion of postgraduate final year enrolments to total numbers of final year enrolments rose from 49 per cent in 1997 to about 56 per cent in 2001. These percentages are higher than the corresponding first year enrolments since postgraduate students are less likely to not complete their course.

**4.27** In 2001, over half the enrolments (55 per cent) in teacher education courses were in primary courses. In the early 1990s, primary enrolments accounted for about 45 per cent of all enrolments. It would appear that the availability of places is not keeping pace with the number of students wishing to study for primary education.

## Availability of graduates to teach

**4.28** Chart 4H presents graduate destination data from the GCCA which show whether graduates are employed as teachers approximately 4 months after course completion.

**CHART 4H**  
**DESTINATION OF VICTORIAN TEACHER GRADUATES,**  
**1990 TO 2000**



Note: Refer to paragraph 4.2 for limitations on the data.

Source: Victorian Auditor-General's Office based on data provided by GCCA.

**4.29** During the 1990s, the percentage of graduates who went directly to teaching was as low as 29 per cent (in 1993) and as high as 72 per cent (in 1999). In 2000, approximately 65 per cent of graduates were employed as teachers 4 months after completing their course.

**4.30** The number of graduates who went directly to teaching was 737 in 1990 and 613 in 2000. During the mid-1990s, the number fell to 254. Conversely, the number of graduates who did not go directly into teaching rose to over 1 000 in the early 1990s, and was 336 in 2000.

**4.31** The proportion of the share of new graduates in 2000 commencing teaching in government and non-government schools in 2001 was as follows:

- 66 per cent of primary graduates went directly to teaching. Of these, 73 per cent were employed in a government school; and
- 63 per cent of secondary graduates went directly to teaching. Of these, 52 per cent were employed in government schools.

**4.32** Based on these percentages, it can be calculated that the proportion of recent graduates who teach in a government school soon after their final year is 48 per cent for primary and 33 per cent for secondary teachers.

**4.33** Graduate Careers Council of Australia data can be compared with corresponding DEET data on projecting graduate teachers commencing in the government sector. DEET assume that 80 per cent of teacher graduates from both primary and secondary education go directly into teaching. DEET further assume that 70 per cent of these primary graduates and 61 per cent of these secondary graduates teach in the government sector. DEET, therefore, assume that 56 per cent of recent primary graduates go directly into teaching and 49 per cent of recent secondary graduates. The secondary school figure (49 per cent) is significantly different from the corresponding percentage derived from GCCA data (33 per cent).

**4.34** Information on the destination of teacher graduates shows that graduate teachers commencing in non-government schools have a significantly older age profile than 10 years ago. The increasing age profile of teacher graduates commencing in government schools is much less pronounced.

**4.35** In non-government schools, the proportion of commencing primary graduates aged under 25 years fell from 77 per cent of all commencing primary graduates in 1990 to 65 per cent in 2000. The corresponding change for teachers commencing in government schools reduced from 67 per cent in 1990 to 64 per cent in 2000. Similar trends occurred for secondary graduates during the 1990s.

## **DEMAND FOR TEACHERS BY SCHOOLS**

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### **Number of teachers**

**4.36** The overall demand for teachers is largely driven by demographic factors, government budget considerations, educational policies and practices, school class sizes, school retention rates and student:teacher ratios set by the Victorian Government.

**4.37** The Australian Bureau of Statistics (ABS) projects an overall population increase in Victoria in the range of 5 to 9 per cent by 2010. Within this overall growth, however, the school age population is anticipated to decline in the range between one and 7 per cent.

**4.38** Enrolments in government primary schools are projected to peak at 310 000 in 2002 and then decline by 8 per cent by 2010. Corresponding, secondary school enrolments have shown a historical decline of 7 per cent from a peak of 232 000 students in 1992 to a low of 215 000 in 1995-96. Student numbers are now predicted to rise by 4 per cent to a peak of 225 000 in 2006. These enrolment forecasts are broadly consistent with the higher population growth forecast of the ABS (referred to in the previous paragraph), which has proved to be most accurate.

**4.39** In 2001, almost half of all government teachers were employed in primary schools (48 per cent), a further 44 per cent were in secondary schools and 4 per cent in combined primary-secondary schools (see Table 4I). The remainder were either in special schools or non-school locations (4 per cent).

**TABLE 4I**  
**NUMBER OF TEACHING STAFF (a),**  
**GOVERNMENT SCHOOLS, RECEIVING PAY, 22 FEBRUARY 2001**

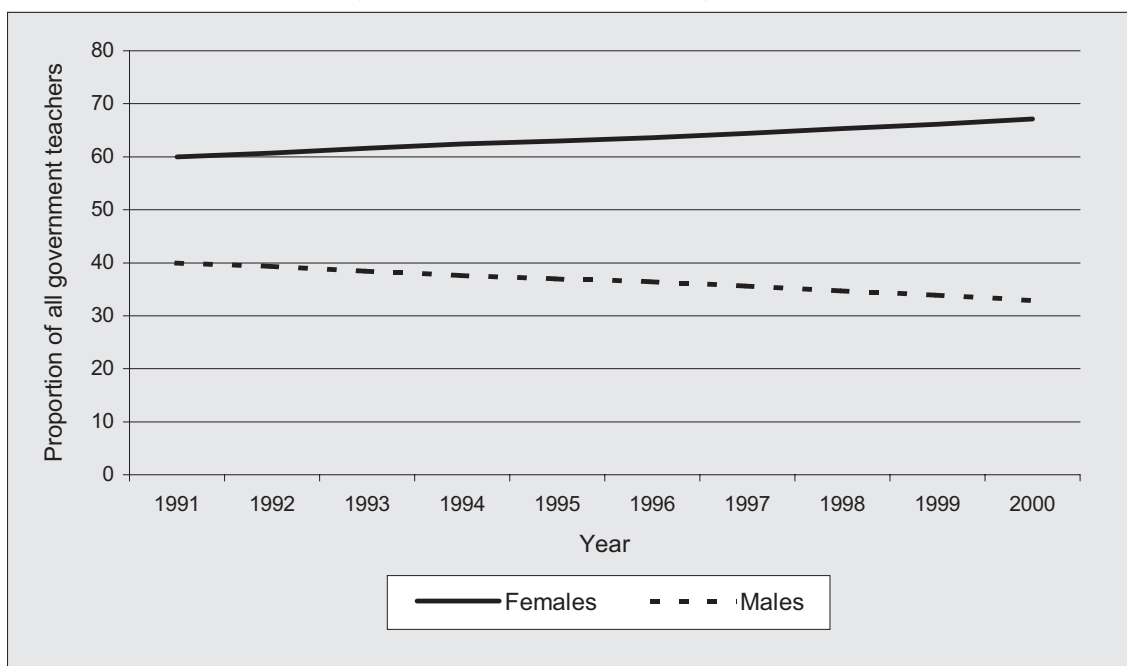
School type	Males		Females		Persons	
	Number	Per cent	Number	Per cent	Number	Per cent
Primary	3 897	31.3	15 304	56.1	19 201	48.3
Secondary	7 697	61.9	9 615	35.3	17 312	43.6
Primary-secondary	596	4.8	1 157	4.2	1 753	4.4
Special	206	1.7	1 127	4.1	1 333	3.4
Non-school locations	38	0.3	71	0.3	109	0.3
<b>Total</b>	<b>12 434</b>	<b>100.0</b>	<b>27 274</b>	<b>100.0</b>	<b>39 708</b>	<b>100.0</b>

(a) Derived from analysis of payroll. Includes all teachers in both school and non-school locations.

Source: Victorian Auditor-General's Office based on data provided by Human Resources Division, DEET.

**4.40** In terms of trends in the gender balance of government teachers, Chart 4J identifies the increased rate of feminisation in the work force from 1991 to 2000.

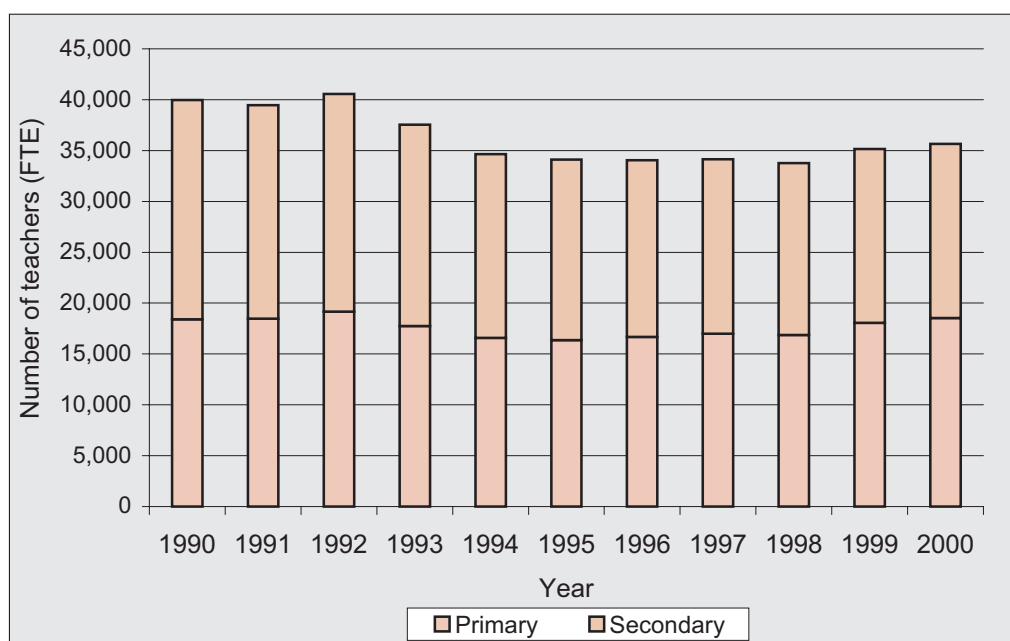
**CHART 4J**  
**PROPORTION OF TEACHING STAFF (FTE)**  
**BY SEX, GOVERNMENT SCHOOLS, 1991 TO 2000**



Source: Victorian Auditor-General's Office based on a publication by DEET, Workforce Studies Unit, *Workforce Statistics*, 2000.

4.41 Chart 4K shows the trend in teacher numbers in government schools since 1990.

**CHART 4K**  
**NUMBER OF SCHOOL-BASED TEACHING STAFF (FTE)**  
**GOVERNMENT SCHOOLS, 1990 TO 2000**



Note: Data in this chart is based on ABS data and therefore not strictly comparable with staffing estimates based on DEET payroll.

Source: Victorian Auditor-General's Office based on ABS, *Schools Australia*, catalogue no. 4221.0, various issues.

4.42 The number of government primary teachers peaked at 19 178 in 1992 before falling to 16 376 in 1995. Since then, the number has steadily grown and was 18 526 in 2000. The movement for government secondary school teachers was similar: a peak in 1992 (21 372), a low point in 1998 (16 881) and a slow increase to 17 134 in 2000.

### Student:teacher ratios

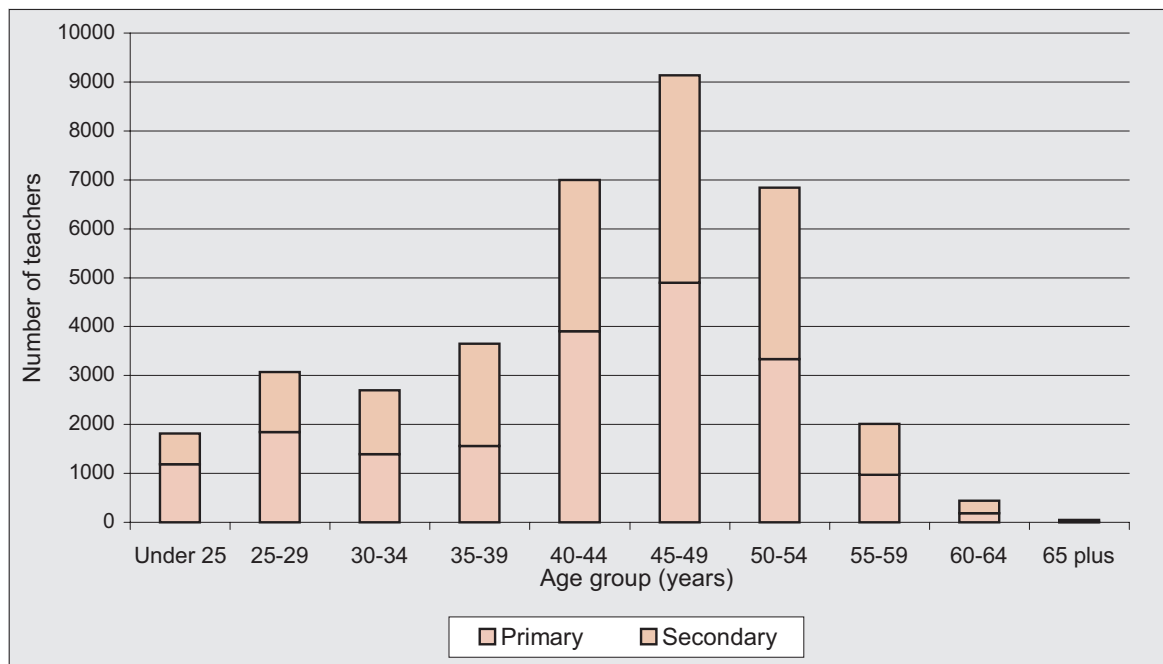
4.43 The actual student:teacher ratio for government schools in Victoria is similar to the national average. In 2000, the student:teacher ratios in Victoria were 16.9:1 for primary schools (17.1:1 nationally) and 12.5:1 for secondary schools (12.4:1 nationally).

4.44 The student:teacher ratios have declined in Victoria in recent years. For government primary schools, the ratio has fallen significantly by 1.3 between 1998 and 2000. The corresponding fall for government secondary schools was 0.2 of a percentage point. In 2000, the Victorian Government instituted a target of a maximum class ratio of 1:21 for Preparatory to Year 2 in government primary schools. As a result, more teachers have been required at the junior primary levels. Student:teacher ratios have not been set for any other year levels in either primary or secondary.

### Age structure

4.45 Chart 4L shows the age structure of teachers in government schools (head-count basis).

**CHART 4L  
TEACHERS IN GOVERNMENT SCHOOLS BY AGE,  
VICTORIA, FEBRUARY 2001**



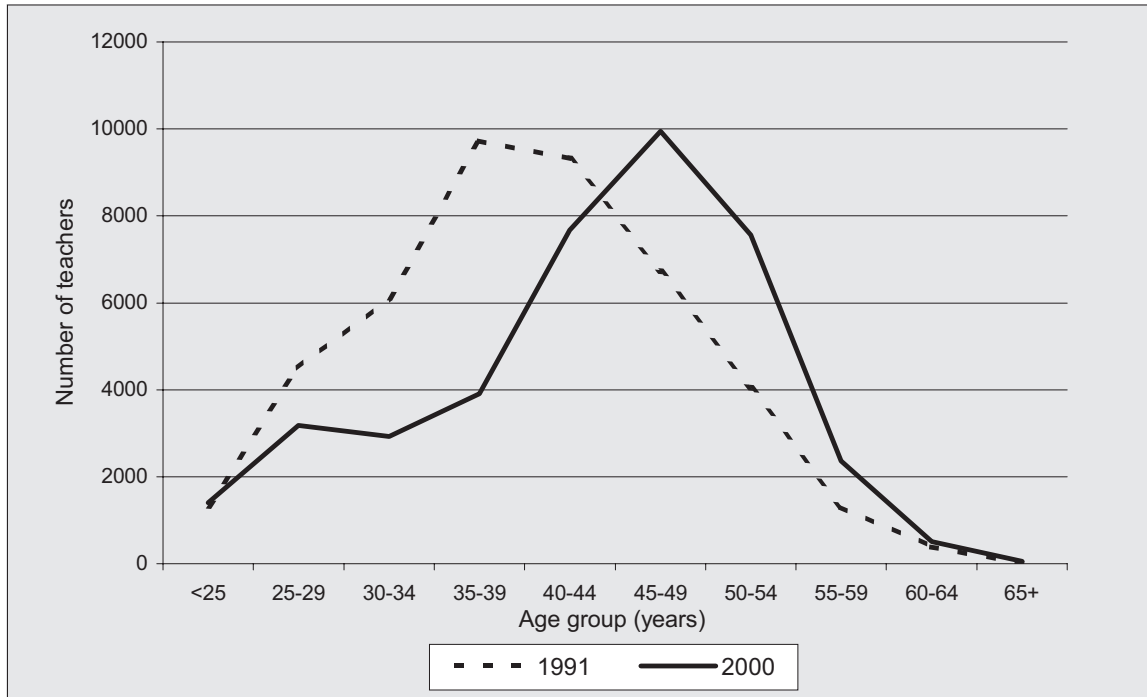
(a) Derived from analysis of payroll. Includes all teachers in both school and non-school locations.

Source: Victorian Auditor-General's Office based on data provided by Human Resources Division, DEET.

4.46 About 69 per cent of all teaching staff in both primary and secondary schools were aged 40 years or more. Approximately 7 000 teachers (19 per cent) were in the 50 to 54 age group. Only around 7 per cent were aged 55 years or more. The mean age of teachers was almost 43 years (primary) and almost 44 years (secondary).

4.47 Chart 4M shows that the teacher work force has aged considerably during the 1990s. The mean age of teachers rose from almost 39 years in 1991 to about 43 years in 2000.

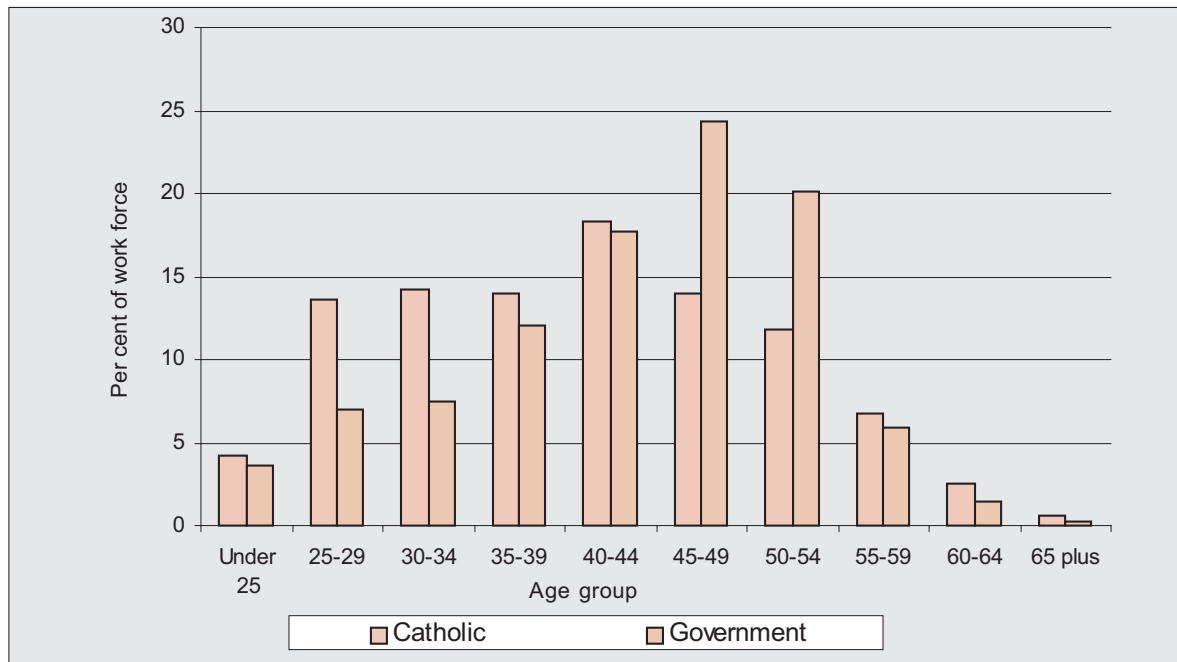
**CHART 4M**  
**TEACHERS IN GOVERNMENT SCHOOLS BY AGE,**  
**VICTORIA, DECEMBER 1991 AND 2000**



Source: Victorian Auditor-General's Office based on publication by DEET, *Workforce Statistics 2000*, Workforce Studies Unit.

**4.48** Chart 4N compares the age structure of Government and Catholic secondary school teachers.

**CHART 4N  
TEACHING STAFF, CATHOLIC AND GOVERNMENT SECONDARY SCHOOLS BY AGE,  
VICTORIA**



Note: Catholic school data are for February 2000. Government school data are for 22 February 2001.

Source: Victorian Auditor-General's Office based on DEET, HR payroll data and Catholic Education Office data.

**4.49** The teacher work force in government schools is significantly older than that of Catholic schools. The age structure of teachers at independent schools is unknown since this information is not available from these schools.

**4.50** Whereas approximately 32 per cent of Catholic secondary school teachers were aged under 35 years, this was the case for only about 18 per cent of government secondary school teachers. On the other hand, almost 26 per cent of Catholic secondary teachers were aged 45 to 54 age groups compared with around 45 per cent for their government school counterparts. The differences for primary school teachers are similar.

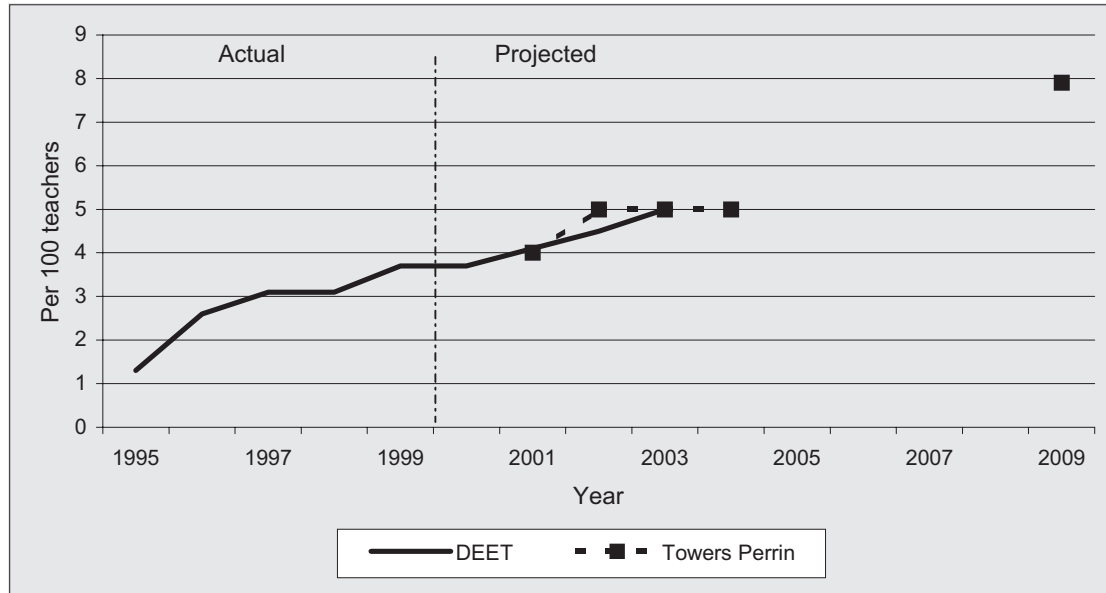
**4.51** It is interesting that Catholic secondary schools have a higher percentage of teachers aged 55 years and over than government secondary schools (about 10 per cent versus around 8 per cent). This probably relates to the financial incentives to resign prior to age 55 under the State Government's Revised Superannuation Scheme.

### Attrition rates

**4.52** Chart 4O shows attrition rates from 1995 to 1999 (actual) and from 2000 to 2009 (projected).



**CHART 40**  
**TEACHING SERVICE ATTRITION RATES(a), GOVERNMENT SCHOOLS,**  
**1995 TO 1999 (ACTUAL) AND 2000 TO 2009 (PROJECTED)**



(a) The attrition rate excludes those teachers finishing their fixed-term employment agreements.

Source: Victorian Auditor-General's Office based on DEET, *Workforce Statistics 2000*, Workforce Studies Unit and Towers Perrin report prepared for DEET, August 2000.

**4.53** In 1999, the attrition rate was around 4 per cent. Based solely on ageing of the work force, this proportion is expected to rise to 5 per cent by 2003 and almost 8 per cent in 2009. Forecasts of attrition rates were undertaken for the Department by actuaries Towers Perrin in 2000 based on data supplied by the Government Superannuation Office.

### Teacher demand by subject

**4.54** Enrolments in secondary teacher education by subject teaching method should reflect the level of demand for those subjects within school timetables. Therefore, it may be the case that a small number of teacher enrolments may be appropriate for subjects that are not in high demand by schools or students.

**4.55** Data on the number of teachers by subject are not collected. However, data on difficult-to-fill vacancies by subject in government schools are available and can be used as an indicator of demand. The Key Learning Areas (KLAs) shown are the ones identified by DEET as covering the subject areas which are difficult to staff<sup>3</sup>. Vacancies for positions with a "dual tag" (e.g. Maths/Science teacher) have the time fractions for both components identified separately (e.g. 0.4 of an Equivalent Full-time (EFT) position for Maths and 0.6 EFT for Science).

**4.56** Table 4P shows the number of new graduates who are expected to teach in a government school (in 2002) divided by the number of difficult-to-fill vacancies (in 2001).

<sup>3</sup> Not all individual subjects within the KLAs shown here are difficult to staff. There are also some individual subjects outside of these KLAs that have a significant number of vacancies.

**TABLE 4P**  
**DIFFICULT-TO-FILL VACANCIES IN SECONDARY SCHOOLS, 2001, AND NUMBER OF NEW GRADUATE TEACHERS PER GOVERNMENT SCHOOL VACANCY**

<i>Subject</i>	<i>KLA</i>	<i>Number of difficult-to-fill vacancies, 2001</i>	<i>Estimated new government teachers available (a) in 2002</i>	<i>Graduates per vacancy</i>
Indonesian	LOTE	30.6	9.3	0.31
Japanese	LOTE	17.4	10.0	0.57
German	LOTE	16.1	2.3	0.14
French	LOTE	13.9	5.3	0.38
Italian	LOTE	11	2.3	0.21
Chinese (Mandarin)	LOTE	3.4	5.0	1.47
Korean	LOTE	0.8	0.3	0.42
LOTE – other	LOTE	-	10.7	-
LOTE – total	LOTE	93.2	45.3	0.49
Mathematics - total	Mathematics	80.6	56.3	0.70
Biology	Science	1.3	72.0	55.38
Chemistry	Science	6.5	24.3	3.74
Physics	Science	12.7	8.7	0.68
Psychology	Science	2.4	48.0	20.00
Science general/Senior	Science	43.5	94.3	2.17
Computer studies/IT	Technology	30.8	35.7	1.16
Technology - general	Technology	25	1.0	0.04
Other technol. (inc. VET)	Technology	34.1	9.0	0.26

(a) Calculated as one-third the number of final year teacher enrolments in 2001, since approximately one in 3 final year secondary graduates end up teaching in a government school the following year.

Source: Victorian Auditor-General's Office based on DEET, Teacher recruitment difficulties survey, 2001.

**4.57** A low number of potential graduates per vacancy (for example, less than one) is an indication that it may be difficult to find the appropriate number of teachers for that subject area in 2002. The subject areas with the lowest number of expected graduate teachers per vacancy are:

- LOTE (including German, Italian, Indonesian and French);
- Technology - General and Other technology (including Vocational Education and Training (VET));
- Physics;
- Mathematics; and
- Computer studies (including information technology (IT)).

**4.58** Biology and psychology have the highest number of expected graduate teachers per vacancy.

**4.59** Some science subjects also had a fairly high number of expected graduate teachers per vacancy. This implies that, in future, reports of shortages in these subjects may not be widespread. However, restructuring of curriculum offerings in schools and teachers teaching out of subject areas may mask the true extent of difficult to fill vacancies (refer to Part 6 of this report).

**4.60** Table 4Q shows final year enrolments in secondary teaching methods in the key learning areas (KLAs) of LOTE, mathematics, science and technology for 1994, 1997, 2000 and 2001.

**TABLE 4Q  
FINAL YEAR ENROLMENTS IN SELECTED SECONDARY  
TEACHING METHODS 1994 TO 2001**

		<i>Final year enrolments</i>			
		1994	1997	2000	2001
Indonesian	LOTE	14	11	19	28
Japanese	LOTE	23	15	29	30
German	LOTE	6	13	12	7
French	LOTE	16	13	14	16
Italian	LOTE	15	8	6	7
Chinese (Mandarin)	LOTE	22	20	8	15
Korean	LOTE	-	-	-	1
LOTE – other	LOTE	63	54	35	32
LOTE – total	LOTE	159	134	123	136
Mathematics - total	Mathematics	220	117	179	169
Biology	Science	143	105	216	216
Chemistry	Science	71	42	85	73
Physics	Science	41	26	41	26
Psychology	Science	93	103	165	144
Science – General/Senior	Science	335	265	303	283
Computer studies/IT	Technology	54	58	67	107
Technology - General	Technology	37	24	1	3
Other technol. (inc. VET)	Technology	-	-	-	27

Source: Victorian Auditor-General's Office based on data provided by DEET, Quality Unit.

**4.61** Of the 4 KLAs shown in the table, the subjects with the greatest number of final year enrolments in 2001 were:

- Science (general and senior) with 283 enrolments (a fall of almost 16 per cent since 1994);
- Biology with 216 enrolments (a rise of 73 per cent since 1994);
- Mathematics with 169 enrolments (a fall of about 23 per cent since 1994); and
- Psychology with 144 enrolments (an increase of around 55 per cent since 1994).

## Schools with recruitment difficulties

**4.62** In February 2001, there were 442 primary and secondary government schools that reported difficulties recruiting teaching staff. This represented 29 per cent of all government schools (see Table 4R).

**TABLE 4R**  
**SCHOOLS WITH DIFFICULTIES RECRUITING TEACHERS**  
**BY SCHOOL TYPE AND REGION, 2001**  
 (per cent)

<i>Region</i>	<i>Primary</i>	<i>Primary- secondary</i>	<i>Secondary</i>	<i>Total</i>
Barwon South Western	11	56	43	19
Central Highlands Wimmera	14	33	76	23
Loddon Campaspe Mallee	24	40	68	31
Goulburn North Eastern	19	100	70	28
Gippsland	18	-	58	23
<b>Average for country regions</b>	17	45	63	25
Eastern Metropolitan	21	-	54	27
Western Metropolitan	37	100	52	42
Southern Metropolitan	23	50	58	30
Northern Metropolitan	30	50	63	37
<b>Average for metropolitan regions</b>	26	54	57	33
<b>Average for Victoria</b>	<b>22</b>	<b>48</b>	<b>59</b>	<b>29</b>

Source: Victorian Auditor-General's Office based on DEET data.

**4.63** The proportion of schools that reported recruitment difficulties was much higher for secondary schools (59 per cent) and primary-secondary schools (48 per cent) than for primary schools (22 per cent).

**4.64** There were some marked differences across regions. Generally, country regions had a lower proportion of difficult-to-staff primary schools compared with primary schools in metropolitan regions. However, country regions generally had a higher proportion of difficult-to-staff secondary schools compared with metropolitan regions. For example, only 11 per cent of primary schools in Barwon South Western had difficulties in recruiting staff (compared to the State average of 22 per cent). At the same time 76 per cent of secondary schools in Central Highlands Wimmera reported difficulties in recruiting teachers (compared to the State average of 59 per cent). These figures imply that recruiting specialist teachers (most of whom are secondary teachers) is more difficult outside metropolitan areas. Attracting generalist teachers (mainly in primary schools) is much less of a problem overall.

## KEY ISSUES AND TRENDS EMERGING FROM DATA ANALYSIS

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**4.65** There are a number of significant issues arising from the analysis of the above data namely:

- The increasing secondary school-aged population and declining number of children of primary school age;
- The large proportion of primary and secondary teachers over 40 years old and particularly in the 45 to 49 and 50 to 54 age groups;
- The projected increase in attrition rates to nearly 8 per cent in 2009 (see Chart 4O) due to the ageing of the work force as well as incentives in the superannuation scheme to resign before 55 years of age;
- The increasing proportion of female teachers as part of the government teaching work force (the female proportion of all teachers rising from 60 to 67 per cent during the 1990s);
- The heightened level of interest in teaching driven largely by improved employment prospects. The increase in the number of places on offer from universities has not been sufficient to meet this demand;
- The ENTER score for undergraduate teaching courses has increased indicating a rise in the academic quality of applicants;
- Low or static teacher education enrolments in secondary subject areas of shortage;
- The age profile of commencing undergraduates for teaching is rising which suggests that there is a significant proportion of people applying for teaching courses who have had alternative careers;
- The increase in the proportion of postgraduate enrolments in teacher education courses during the 1990s; and
- The significant proportion of graduates who do not take up teaching.

**4.66** These issues are considered in further detail throughout this report.

## Part 5

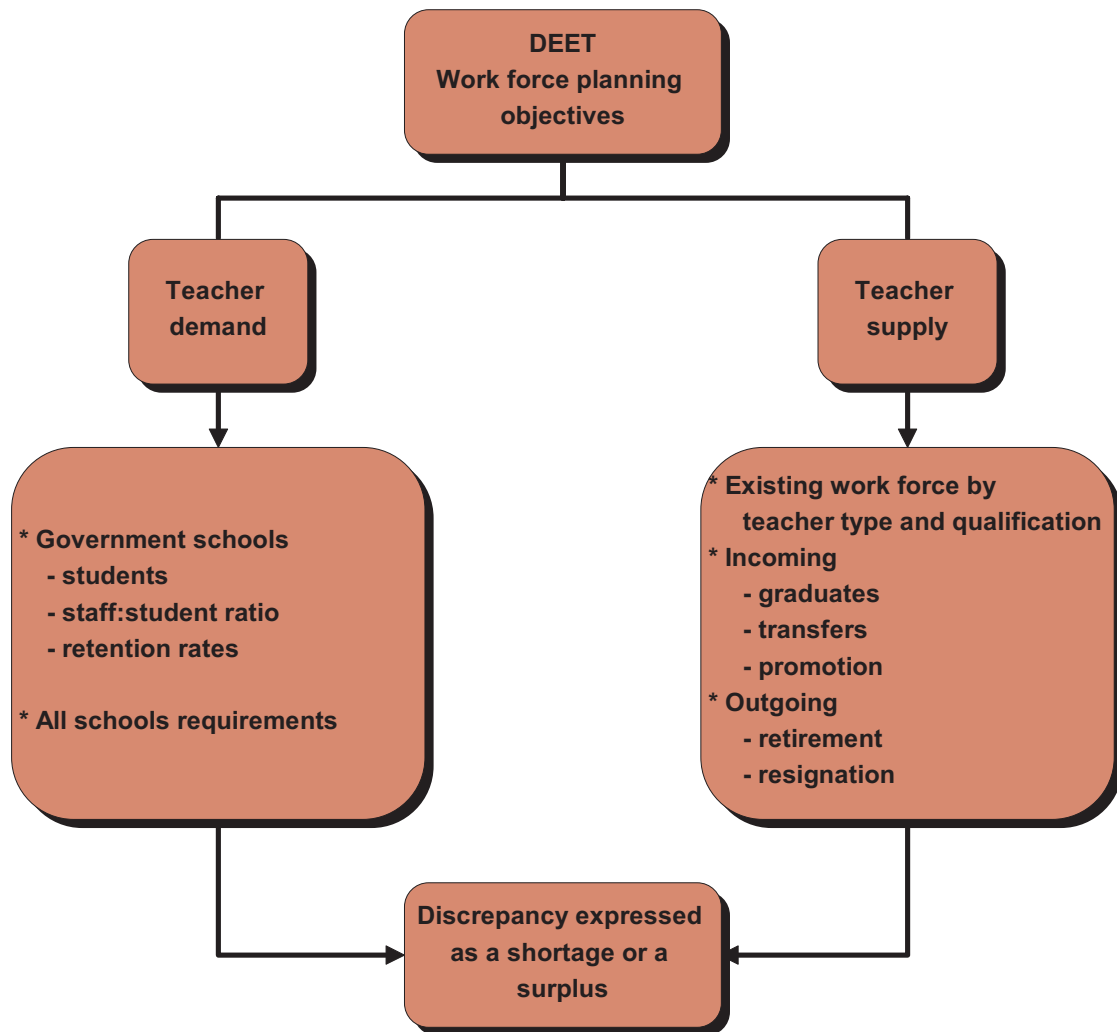
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# DEET projections of teacher supply and demand

## INTRODUCTION

**5.1** We have examined the Department of Education, Employment and Training’s (DEET’s) approach at a central level to teacher work force planning, focusing on the work of the Workforce Studies Unit. Following this examination, a program for upgrading the work force planning function was identified by audit in the light of its critical role in providing input into DEET’s planning and policy formulation processes which are in turn directed to achieving the government’s education and training goals. The process for forecasting teacher supply and demand is outlined in Chart 5A below.

**CHART 5A  
PROCESS FOR FORECASTING TEACHER SUPPLY AND DEMAND**



Source: Victorian Auditor-General’s Office.

## CURRENT APPROACH

### The Workforce Studies Unit

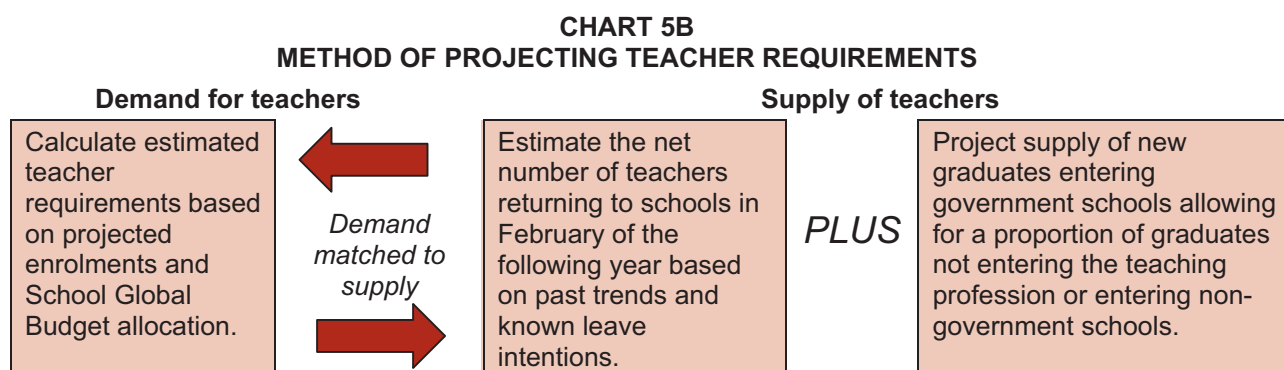
**5.2** DEET has a Workforce Studies Unit consisting of 2 staff to undertake teacher work force planning. The unit has a salary budget of approximately \$140 000. In addition, the Unit undertakes a range of analysis and monitoring activities for DEET that are not directly related to work force planning.

**5.3** The Workforce Studies Unit was established in 1993 to identify data needs for work force planning across the (then) Directorate of School Education. In the mid-1990s, the Unit also undertook teacher projections for individual government schools and the government school system as a whole. The predominant focus of DEET's work force planning is on the government school system although, since 1999, the Unit has also provided teacher estimates for the total non-government sector.

**5.4** The original intention of the teacher supply and demand projections was to provide an estimate of the number of teachers in the government system in excess of requirements at the commencement of the school year. The methods used to arrive at these projected numbers of teachers have remained relatively unchanged since the mid-1990s.

### Projection of ongoing and contract government teachers

**5.5** The major method of projecting ongoing and contract government teacher requirements is outlined in Chart 5B.



Source: Victorian Auditor-General's Office.

**5.6** Future teacher demand is based on enrolment projections which are prepared in the Office of School Education in DEET. Future enrolments are based on past trends. Fifteen year projections are calculated each year based on the current year's February census enrolments and the projected transition rates for each year level. These transition rates are based on recent trends. The projected new preparatory enrolments are based on the number of children in the relevant age range in population projections supplied by the Australian Bureau of Statistics (ABS).



**5.7** The teacher supply and demand model has predicted a gap between the number of government teachers required and the supply of graduates to that sector in 2000 and 2001. DEET has indicated that the shortfall has been made up from the pool of qualified teachers located outside the government school system. DEET, however, has limited knowledge of the size and composition of this pool and whether it is expanding or contracting. As such, forecast results are not fully useful as input into DEET's planning and policy making processes.

**5.8** The Workforce Studies Unit supplements its forecasting of teacher supply and demand with a range of work force surveys. There are currently 4 regular work force surveys conducted either by DEET or on behalf of DEET. These are:

- **Teacher Recruitment Difficulties Census** (collected at the same time as the annual February enrolment census). The census collects information from all government schools on the number of teachers employed, and whether the school had any difficulties recruiting teachers. The subject area and year level of the difficult-to-fill vacancy is collected, actions taken to fill the vacancy and any incentives provided to fill the vacancy;
- **a biennial survey, Forecasting Teacher Demand by Subject.** A sample of 100 government secondary and combined primary and secondary schools is selected and surveyed. In the first part of the survey, Principals are requested to identify subjects where there is expected to be an increase in, or a decrease in, demand for teachers. In the second part, teachers are requested to record the time spent teaching each subject. This information is matched to payroll information on individual teachers (such as age and sex);
- **Annual August school census.** The census collects information from all government schools on the number and characteristics of students and school staff; and
- **Casual Relief Teacher (CRT) Recruitment Survey.** This survey is conducted at the same time as the August school census. It collects information on the number of CRTs employed, difficulties in recruiting CRTs by subject area and action taken if no CRTs can be engaged.

**5.9** In addition, annual data on final year students in teacher education by learning area is obtained from universities. This is checked against the Commonwealth Department of Education, Training and Youth Affairs data. Data on new enrolments are also collected.

### **Identifying schools with recruitment difficulties and subjects which are difficult to staff**

**5.10** DEET defines schools with recruitment difficulties as those with vacancies where no suitable qualified applicants responded to the initial advertisement. In 2001, a total of 442 Victorian government primary and secondary schools (29 per cent of all government schools) were identified in this category.

**5.11** In February 2001, DEET's Teacher Recruitment Difficulties Census identified 878 positions nominated by schools as difficult-to-fill in 2001. Of these, 191 remained unfilled at the time of the survey. The following subject areas were identified as the most difficult-to-fill in secondary schools.

- Technology vacancies account for 20 per cent of all difficult-to-fill subjects, especially Information Technology (20 per cent in 2000);
- LOTE accounts for 20 per cent especially Indonesian, Japanese, German and French (20 per cent in 2000);
- Mathematics accounts for 18 per cent (16 per cent in 2000); and
- Science accounts for 14 per cent (13 per cent in 2000).

**5.12** More detailed information on subjects which are difficult to staff and schools with recruitment difficulties has been presented in Part 4.

### **Assessment of current approach to work force planning**

**5.13** DEET's work force planning methodology is deficient in a number of areas:

- **the focus of work force planning is defined too narrowly.** DEET has a role in overseeing the provision of an adequate number of qualified teachers each year in the government, Catholic and independent sectors to meet the demand from Victorian households for teaching services. It also has to discharge its responsibilities as the major employer of teachers for the Government system;
- **the approach does not fully reflect the operation of the teacher labour market.** The teacher work force consists of a number of segments, including primary and secondary teachers. Secondary teaching is further segmented into subject areas. While monitoring the aggregate number of teachers is important from an overall budgetary perspective, work force planning should concentrate on the particular segments of the teacher work force. The current approach of projecting aggregate teacher demand provides an initial assessment of overall teacher demand, but further work on the composition of the demand needs to be developed for more comprehensive work force planning; and
- **the identification of schools with recruitment difficulties and subjects which are difficult to staff is inadequate.** The definitions used to identify schools with recruitment difficulties and subjects which are difficult to staff are based on each school Principal's assessment of difficult-to-fill vacancies. This process is not sufficiently robust to provide a sound basis to identify those schools and subjects in these categories.

## **FUTURE PROGRAM FOR WORK FORCE PLANNING**

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**5.14** In the light of our examination of current work force planning approaches, we have suggested a number of improvements as outlined below.

### **Defining the work force planning charter**

**5.15** DEET does not have a clear statement of the mandate of their work force planning functions.

#### **Recommendation**

**5.16** We recommend that a work force planning charter, outlining roles, responsibilities and areas of authority, be developed that reflects DEET's broader responsibilities in overseeing the provision of educational services in Victoria across all education sectors.

### **State-based work force planning**

**5.17** The Commonwealth Government auspices national work force planning exercises in which DEET participates. However, we support the maintenance of a State-based approach given the unique characteristics of the Victorian educational context. This includes:

- the higher proportion of non-government school students in Victoria than any other State;
- the financial incentives for Victorian government teachers to resign prior to 55 years of age if they are members of the Revised Superannuation Scheme;
- the high level of delegation of decision-making to the school level; and
- the relatively small number of remote and isolated schools compared to other States.

#### **Recommendation**

**5.18** We recommend that DEET maintain a State-based teacher work force planning model which reflects the particular characteristics of Victoria's teacher work force requirements, while continuing to participate in national activities including Commonwealth Government teacher planning working parties.

### **Upgrading work force planning approach**

**5.19** Work force planning should:

- embrace both the government and non-government sectors; and
- focus on segments of the teacher labour market such as subject areas within secondary teaching.

**5.20** Currently, schools are identified as having recruitment difficulties if, after posting an initial advertisement for a vacancy, they are unable to recruit a suitably qualified applicant. Subjects which are difficult to staff are those with the highest proportions of unfilled vacancies across all government schools.

**5.21** Teacher recruitment can be affected by a number of factors, such as the time of year at which the vacancy was advertised. We believe that if government resources are to be directed to areas of greatest need, there should be rigorous criteria developed to identify schools with recruitment difficulties based on:

- a 3-year work force plan supporting the need for the particular numbers or types of teachers;
- the length of time vacancies have remained unfilled;
- the number and quality of applicants;
- measures of the degree of difficulty in filling positions (e.g. changes in preferred subject tags for vacancies to assist in recruitment); and
- the extent of teacher turnover within the school.

**5.22** This assessment should be undertaken over a sufficient time frame to identify those schools with persistent recruitment difficulties.

**5.23** In developing definitions of difficult-to-fill subject areas, a Statewide perspective of areas of subject shortage is particularly important to order to differentiate from schools that have endemic recruitment difficulties. These definitions of difficult-to-fill subject areas should at least incorporate the first 4 points above.

**5.24** Definitions of areas of recruitment difficulty are discussed in the context of the Teaching Scholarship Scheme, but they have broad applicability throughout DEET in terms of planning and policy and program development.

**5.25** While our analyses throughout this report are based on the current DEET definitions of schools with recruitment difficulties and difficult-to-fill subjects, we believe there is considerable scope to better define areas of teacher recruitment difficulties.

**5.26** Targets introduced by the State Government on education and training within Victoria are directed to raising standards throughout the State. Work force planning by DEET therefore must include coverage of all education sectors. As well as enhancements suggested below, we suggest changes to data collection processes later in this Part of the report to support the focus on segments of the teacher labour market and teacher employment across all sectors.

**5.27** In upgrading work force planning methods, DEET could consider additional indicators, including:

- Long-range warning indicators which set upper and lower numerical boundary estimates of the level of new graduates and other entrants needed to keep segments of the teacher work force in balance in the long-term. A rate of entry of teachers into the Victorian economy which lies beyond either boundary is a warning of likely mismatch between teacher demand and supply. These indicators should include a lengthy projection horizon of perhaps at least 5 years; and
- Short-range indicators such as vacancy and unemployment indices within various segments of the teaching work force. These indicators have relatively short forecasting horizons.

### **Recommendation**

**5.28** We recommend that:

- work force projections include comprehensive coverage of government and non-government sectors;
- work force projections ensure specific segments of the teacher labour market are focused on and that these projections include both short and long-term indicators; and
- rigorous criteria be developed to properly identify schools with recruitment difficulties and subjects which are difficult to staff.

### **Improving work force planning information available centrally**

**5.29** The planned Victorian Institute of Teaching has, as one of its responsibilities, the annual registration of teachers who meet standards of professional practice and conduct set by the Institute. All Victorian schools, both government and non-government, will be required to employ registered teachers. The registration system has the potential to provide the data needed to improve work force planning across the system as a whole, however, it will not be in operation in the immediate future. The Institute is likely to commence operation in 2002.

**5.30** In order to maximise the benefits of this initiative as a work force planning tool, teacher registration should ideally be renewed annually. Subject to cost and privacy considerations, basic details such as a teacher's qualification, year of completion and the area of subject qualification could be supplemented by additional information including:

- if the teacher is no longer teaching, their current occupation; and
- if the teacher is employed in another occupation or no longer in the work force, their future intentions to teach.

**5.31** Many teachers have an extended period away from the profession. While some will have definite plans of returning to teaching in the short to medium-term, others may have only a slight interest in teaching again. At the time of our audit, the cost of registration had yet to be determined. It is important for work force planning purposes that all qualified teachers, whether currently teaching or not, are encouraged to register.

### **Recommendation**

**5.32** We recommend that information sought from teachers as part of the teacher registration process includes details from those no longer teaching such as current occupation and future intentions to teach. Subject to cost and privacy considerations, this information should be updated annually.

### **Upgrading the Human Resources Management System**

**5.33** The devolution of responsibility to schools has resulted in a significant reduction in work force planning data available centrally within DEET. In order to offset this deficiency, DEET undertakes surveys of schools as outlined earlier in this Part of the report. The ability to access data in a timely and ongoing manner for work force planning purposes depends substantially on the quality of DEET's management information systems. DEET's major Human Resource Management System (HRMS) has significant limitations in its ability to support teacher work force planning.

**5.34** HRMS was introduced in 1998 with schools being progressively provided with software from April 1999. The system is primarily used as a payroll system for most staff, including ongoing and contract teachers, and for recording leave details. One of the initial intentions for HRMS was its use for work force planning purposes, however it currently has only a limited capacity in this regard. For example, it is unable to adequately provide basic work force planning information such as:

- the source of new teachers into the government school system (e.g. new graduate, existing teacher from Catholic or independent schools, interstate or overseas, or those returning to teaching after working in other occupations);
- the subject areas teachers are qualified to teach in;
- subjects taught by teachers; and
- teachers' workload per subject.

**5.35** In order to extract work force planning information from HRMS, it is necessary to write individual programs to address specific queries. DEET staff have indicated that as data on HRMS is being continuously updated and that areas sometimes seek information at different times, similar reports to management can produce different results.

**5.36** It is apparent that the upgrading of HRMS is likely to be a costly exercise. For example, advice from DEET indicates that the capacity of the system to collect information on teacher workload by subject area will require the purchase of an additional module from the software vendor.

**5.37** Given the importance, from a policy and planning perspective, of improving ready access to work force information at a central level and to assist schools in local work force planning, it is suggested that:

- a clear specification of the information needs of users be obtained;
- these information needs be consolidated and prioritised;
- an assessment be conducted of the HRMS's capacity to accommodate proposed information upgrades including the identification of resourcing and timing implications; and
- a business case be developed to determine whether the upgrading of HRMS can be supported.

### **Recommendation**

**5.38** We recommend that a business case be developed to consider the upgrading of HRMS.

### **Improving the quality of survey data**

**5.39** The annual February Teacher Recruitment Difficulties Census and the biennial Teacher Demand and Supply by Subject Survey, which is conducted on a sample basis, should be replaced by a single survey of all schools covering teacher shortages and surpluses by primary and secondary level and subject. This survey would cover segments of the teacher labour market in both the government and non-government sectors. Information such as recent recruitment experiences, numbers of applicants per position and methods used to cover shortages (e.g. curriculum changes) could be collected.

**5.40** There has been heavy reliance in DEET work force planning on plentiful school census and survey data covering the government sector. The lack of data concerning the non-government sector could be addressed by a cross-sector sample survey as discussed above. In addition, greater use of unpublished ABS data could be made.

**5.41** Additional ABS and graduate destination survey data could be accessed to provide information on teachers' employment and the extent of qualified teachers working outside of teaching. Surpluses of teachers in some segments of the teacher labour market can then be considered as well as shortages.

**5.42** The following ABS surveys could provide relevant data on the teaching profession: Labour Mobility, Education and Training Experience, Transition from Education to Work, Retirement and Retirement Intentions, Retrenchment and Redundancy and Employee Earning and Hours.

**5.43** We also support the development of a Resignation and Retirement Intention Survey which would be targeted to government teachers in the 50 to 54 age group. The combination of a significant proportion of teachers in this age category and the financial incentives to resign at age 54 years, constitutes the major teacher work force planning challenge for DEET in the next few years. The development of the survey should involve consultations with relevant Principals' Associations, Industry Associations and the Australian Education Union on appropriate safeguards over privacy issues.

### **Recommendation**

**5.44** We recommend that the quality and availability of existing survey data be improved through:

- consolidation of some existing surveys and the extension of coverage to non-government sectors;
- the use of additional ABS and other data; and
- introduction of a new survey to seek resignation and retirement intentions of teachers in the 50 to 54 age group, subject to privacy safeguards.

### **Improved management reporting**

**5.45** We have made a number of suggestions for upgrading DEET's work force planning capacity which will influence the level of reporting to management. We envisage four levels of regular internal reporting on teacher work force planning which would be undertaken on either an annual or ongoing basis depending on the issues concerned. These reporting levels would include the:

- **Executive Management Team and Ministerial level** covering all education sectors. We would envisage annual reporting at this level to include 5 yearly projections by segment of the teacher work force as well as macro data analyses such as inflows and outflows from the teaching profession and the extent of teacher movements between the government and non-government sectors. Regular updates could be provided on the government school sector such as actual vacancy rates within work force segments and the extent of "hidden" vacancies (e.g. teachers teaching out of their subject area.);
- **Central divisional level** covering all schools within the government school sector. This would include similar information presented to the corporate/Ministerial level on the government school sector;
- **Regional level** providing information on area or cluster work force planning issues; and



- **School level** covering work force planning data at the individual school level. This could include details such as:
  - age profile of teachers;
  - percentage of contract teachers;
  - proportion of new graduates;
  - percentage of teachers with 10 years or more of teaching experience; and
  - staff turnover calculated as a percentage of total staff, adjusted for internal promotions.

### **Recommendation**

**5.46** We recommend that a hierarchical work force planning management reporting model be adopted that reflects the relevant roles and responsibilities of each level of management.

## Part 6

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# School work force planning

## INTRODUCTION

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**6.1** Devolution of authority to schools in Victoria by successive Governments has been accompanied by a progressive transfer of significant responsibility for the management of funds and other resources to the school level. As part of this process, decisions on the recruitment of staff are now taken at the school level. This requires effective and efficient local work force planning to minimise staffing shortages and to plan for the recruitment of teachers with the appropriate skills, experience and qualifications.

**6.2** This Part of the report examines how well work force planning has been undertaken at the school level and the potential to introduce improvements in this regard.

## OUR AUDIT METHODOLOGY

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**6.3** The audit methodology we employed to examine school work force planning included the:

- development, piloting and distribution of a school questionnaire;
- engagement and management of experienced external school reviewers to conduct on-site examinations; and
- completion of a standard pro forma by school reviewers as part of the on-site school review process to confirm responses contained in the questionnaire and to examine and assess specific areas of work force planning.

### School questionnaire

**6.4** We distributed questionnaires to 119 primary and secondary schools which were selected by stratified random sample out of the total of 1 542 government schools across Victoria. The sample included 64 primary schools and 55 secondary schools, with the latter including 9 primary-secondary schools. The strata used to select the sample included:

- school type (i.e. primary or secondary);
- location (metropolitan, provincial or rural); and
- size of school (“big” or “small”, based on February 2001 enrolments).

**6.5** All schools completed the questionnaire within the allowed time frame. Due to the design of the sample frame and the 100 per cent response rate, the survey results are accurate to a 90 per cent confidence level for both primary and secondary schools.

### On-site examinations

**6.6** Reviewers visited the 119 schools that formed part of the random sample of schools and sought details from Principals (or their representative) based on the completion of a standard set of questions covering the:

- compilation of work force plans;

- type of information collected to support work force planning;
- methods used in work force planning; and
- level of documentation supporting the process.

**6.7** Schools were requested to make available for examination on the day of the school review other relevant documentation such as School Global Budgets.

**6.8** The results of the analysis of the questionnaire and the on-site examinations have been summarised under the following areas:

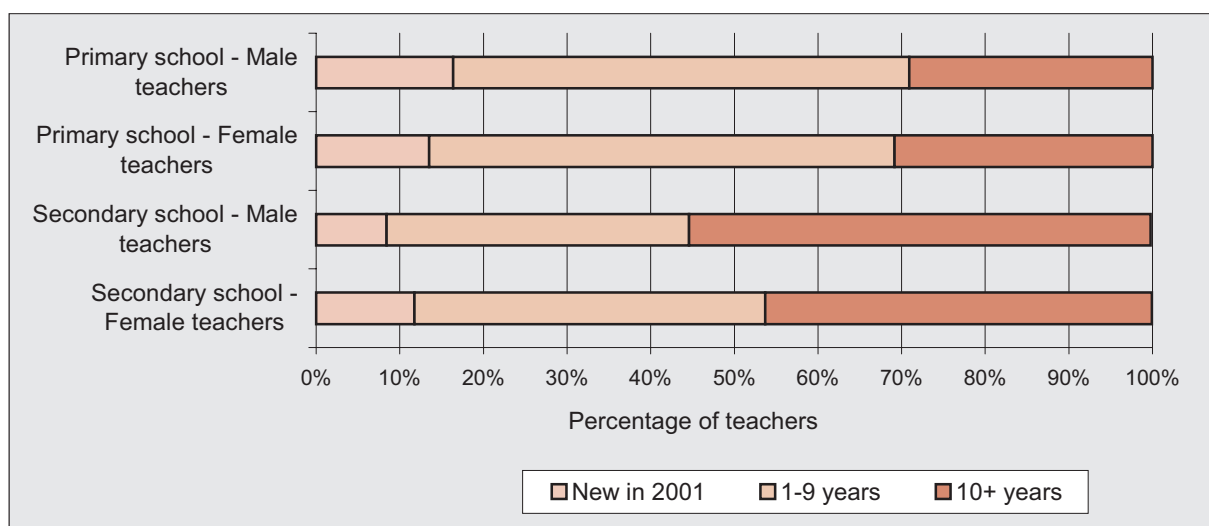
- work force planning factors; and
- work force planning findings and recommendations.

## WORK FORCE PLANNING FACTORS

### Work force mobility

**6.9** The survey found that half of the secondary school teachers and almost one-third of primary school teachers have worked at the same school for 10 years or more (see Chart 6A).

**CHART 6A  
YEARS TEACHING AT SAME SCHOOL, 2001**



Source: Victorian Auditor-General's Office.

**6.10** Fifty-two per cent of males and 41 per cent of females had worked in the same school for 10 years or more. These percentages are almost double the average for the Australian work force as a whole (27 per cent for males and 21 per cent for females, according to the ABS Labour Mobility Survey, 2000) demonstrating that there is less work force mobility for teachers than for most other occupations.

## Reasons for vacancies

**6.11** An examination of the 1 160 vacancies for ongoing and contracted teachers in the sample of 119 schools revealed that the main reasons for vacancies were:

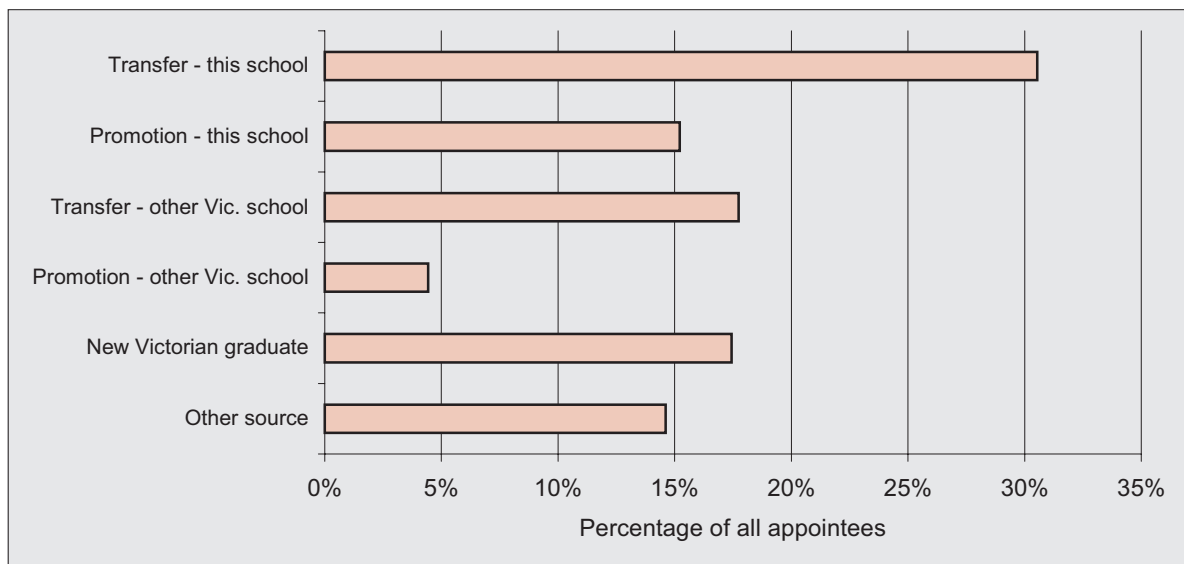
- to replace a teacher going on family leave, long-service leave or leave without pay (18 per cent of all vacancies);
- demand for a teacher to teach a new subject (17 per cent);
- extension of a contract of the same contract teacher (16 per cent);
- to replace a teacher transferring to, or being promoted to, another school (14 per cent); and
- projected enrolment changes (11 per cent).

**6.12** For 93 per cent of vacancies, the position was filled by the required date. In a further 3 per cent of cases, the position was unfilled for up to a school term. In a further 4 per cent of cases, the position was unfilled for longer than a school term.

## Where did the appointee come from?

**6.13** Most vacancies in the school are filled by teachers being promoted to or transferring to the position (see Chart 6B).

**CHART 6B**  
**SOURCE OF APPOINTEE FOR VACANCY, 2001**



Source: Victorian Auditor-General's Office.

**6.14** A transfer normally involves a teacher moving from a contract position to either a new contract or to an ongoing position.

**6.15** The main sources of an appointee for a teaching position were:

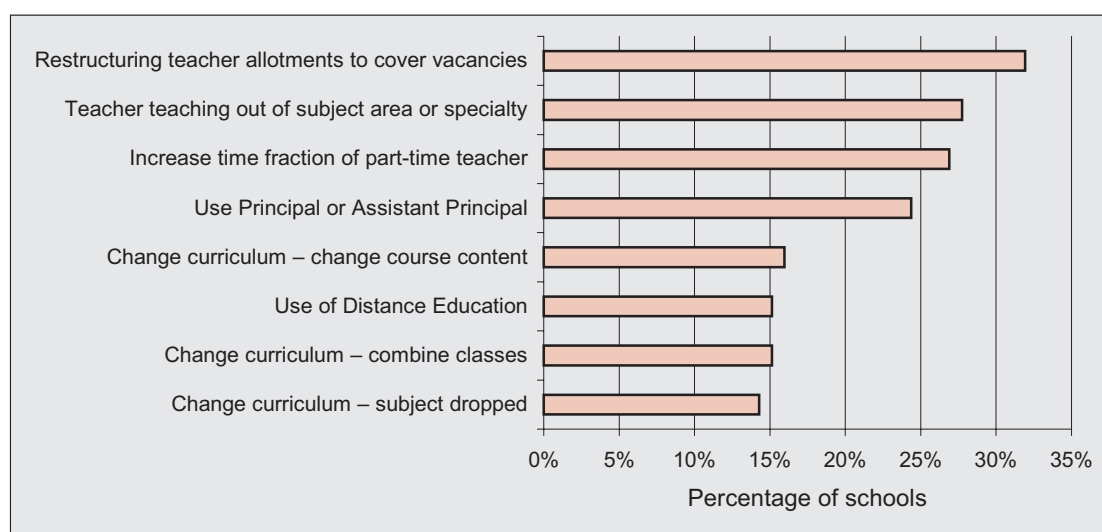
- a teacher from the same school, either as a transfer (31 per cent) or as a promotion (15 per cent);
- a teacher transferring (18 per cent) or being promoted to the school from another Victorian government school (4 per cent); and
- a new graduate from Victoria (17 per cent).

**6.16** There were no major differences in source of appointees between metropolitan and country schools. Smaller schools filled vacancies with more internal staff transfers and fewer internal staff promotions compared with bigger schools. There was no evidence from our survey that teachers from overseas or interstate form a significant source of recruitment.

### Strategies to fill vacancies and incentives

**6.17** Schools were asked to identify strategies used in dealing with difficult-to-fill positions (refer to Chart 6C).

**CHART 6C**  
**MAIN STRATEGIES USED IN DEALING WITH DIFFICULT-TO-FILL POSITIONS,**  
**PERCENTAGE OF SCHOOLS THAT HAVE USED THE STRATEGY IN PAST 12 MONTHS, 2001**



Source: Victorian Auditor-General’s Office.

**6.18** The most common ways schools dealt with difficult-to-fill positions was to restructure teacher allotments (32 per cent of schools), have a teacher teach out of their subject area or specialty (28 per cent), increase the time fraction of a part-time teacher (27 per cent) or use the Principal or Assistant Principal to take classes (24 per cent). Of the schools that employ these strategies, two-thirds stated that they use them “sometimes” while the remaining third indicated that they use them “frequently”.

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## WORK FORCE PLANNING FINDINGS AND RECOMMENDATIONS

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**6.19** The findings arising from our questionnaire and school review process are as follows.

### Preparation of work force plans

**6.20** Although schools now play a significant role in the recruitment, promotion and remuneration of teachers, there is no requirement that they develop a documented work force plan.

**6.21** The *School Staffing Handbook, February 2001* states, however, that schools should complete a work force plan. This plan should reflect the school charter goals and priorities, identify funding arrangements for staff over at least a 3-year period and include known or projected school enrolments or staff movements. Despite this, our survey found that:

- over 20 per cent of large schools and nearly 50 per cent of small schools had no written work force plan; and
- only 20 per cent of schools had a work force plan that extended for 3 years or more.

**6.22** Comments provided by some school reviewers indicated that there was a limited understanding of how the results of work force planning could be used in overall school planning, particularly long-term planning.

### Recommendation

**6.23** We recommend that DEET:

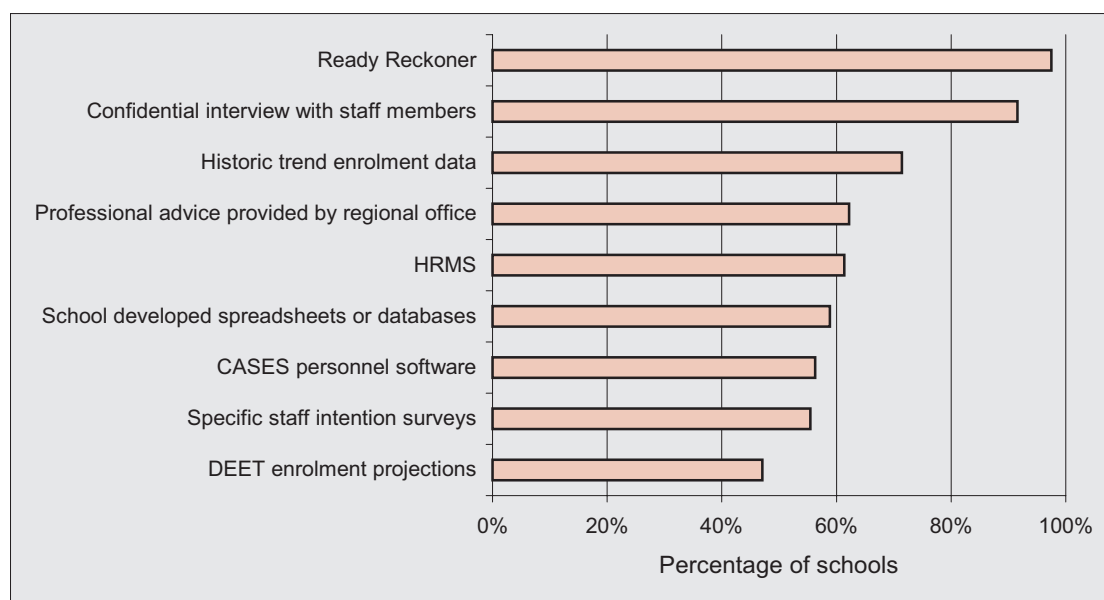
- reinforce with Principals that a documented work force plan should be prepared annually and should cover at least 3 years;
- provide professional development opportunities for schools on work force planning and the relationship of work force planning to overall school strategic planning and decision-making processes;
- ensure that the school annual report includes a summary of the work force plan; and
- ensure that school work force planning projections are collated or interpreted at a regional level and in turn considered as part of DEET's central work force planning.

### Work force planning methods

**6.24** The key tool provided by DEET to support work force planning is a web-based Ready Reckoner. This is a sophisticated interactive tool that includes staff planning sheets and models the specific impact of different work force scenarios. DEET has advised that a version of the Ready Reckoner available to schools from 2002 will include a link to the payroll system.

**6.25** Chart 6D shows the most useful tools or methods identified by schools in the survey.

**CHART 6D**  
**MOST USEFUL TOOLS/METHOD USED IN WORK FORCE PLANNING**  
**PERCENTAGE OF SCHOOLS THOUGHT TOOL SOME USE OR VERY USEFUL, 2001**



Source: Victorian Auditor-General's Office.

**6.26** The main findings from the survey show that:

- all schools used the indicative School Global Budget and almost all used the Ready Reckoner planning tool;
- just over 60 per cent of schools obtained professional advice on work force planning from DEET regional offices. Generally, schools found regional office staff to be available when needed and had useful local knowledge;
- nearly 60 per cent of schools had developed their own spreadsheets in preference to DEET spreadsheets; and
- management information systems such as HRMS were assessed as being of some use by approximately 60 per cent of schools. Feedback from reviewers indicates that schools are generally using HRMS for payroll and leave purposes rather than as a work force planning tool.

**6.27** The reasons why certain tools were not utilised for work force planning purposes include:

- Half of the schools not using HRMS for work force planning indicated they were unaware HRMS could be used for such purposes, or had decided that it was not useful for planning; and



- Over half of the schools not using DEET enrolment projections as an input to work force planning stated that the information was not accurate. A further 17 per cent indicated that they did not have access to the projections.

**6.28** Schools identified the need for a number of improvements to work force planning tools. They include:

- the better linking of work force planning tools to allow information to be transferred from one tool to another (e.g. information downloaded from HRMS to the Ready Reckoner which could be linked in turn to DEET spreadsheets);
- ascertaining the level of accuracy of DEET enrolment projections and taking remedial action if required; and
- consolidating sources of information available to schools regarding work force planning.

### **Recommendation**

**6.29** We recommend that DEET improve the quality of and access to work force planning advice tools, through:

- increased use of HRMS for work force planning purposes;
- better linking of work force planning tools;
- the setting up of a consolidated source of information regarding work force planning; and
- making schools aware of DEET enrolment projections and their limitations for work force planning purposes.

### **Use of recruitment incentives**

**6.30** There was limited use of incentives to attract teachers to a particular school. The most common incentive was to offer an applicant security of tenure (37 per cent of schools), or advise an applicant of the potential for promotion (20 per cent). Eight per cent of schools reported that applicants were offered special payments for additional responsibilities.

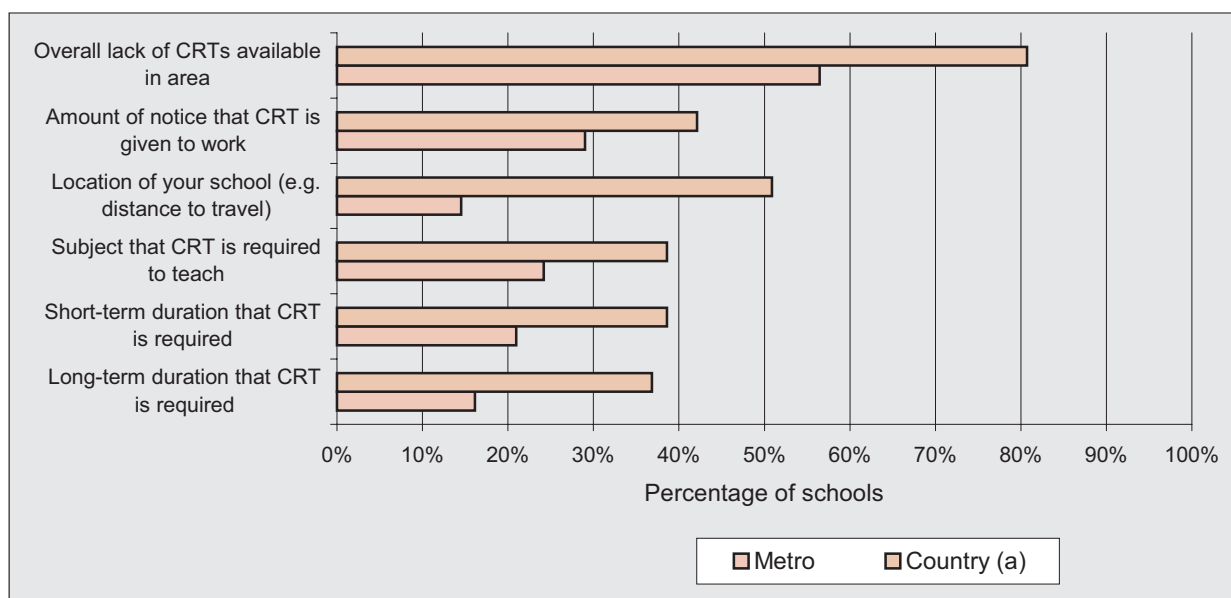
**6.31** Government school Principals' reluctance to use financial incentives was strongly influenced by the concern likely to be generated among the existing school staff if new teaching staff were offered additional financial payments. In contrast, independent schools have demonstrated a preparedness to consider a salary package differential to attract teachers into subject areas which are difficult to staff.

### **Provision of Casual Relief Teachers (CRTs)**

**6.32** The availability of Casual Relief Teachers (CRTs) varies throughout the year. They form part of the same pool from which schools employ ongoing and contract teachers. As the number of ongoing and contract positions are filled, the availability of CRTs declines.

**6.33** During on-site reviews, schools were requested to confirm the number of CRTs teaching on that day. The views of schools were also sought regarding their degree of difficulty in obtaining CRTs (refer to Chart 6E).

**CHART 6E**  
**MAIN FACTORS MAKING CRT RECRUITMENT DIFFICULT,**  
**PERCENTAGE OF SCHOOLS THAT INDICATED THIS WAS A FACTOR, 2001**



(a) Country includes both provincial and rural schools.

Source: Victorian Auditor-General's Office.

**6.34** The main findings regarding CRTs were:

- Approximately two-thirds of schools had a CRT employed on the day of the site visit, with most of these schools having one (47 per cent) or 2 (22 per cent) CRTs;
- Over three-quarters of schools indicated that they have some difficulty in finding CRTs. The most common reason was the Statewide lack of CRTs. This reason was cited by 81 per cent of country schools and 56 per cent of metropolitan schools. The location of the school was also a significant factor for 62 per cent of rural schools (but only 15 per cent of metropolitan schools); and
- Overall, 70 per cent of schools indicated that it was becoming more difficult to recruit CRTs, with only 3 per cent suggesting it has become easier for schools. Large schools reported relatively more difficulties in engaging CRTs. Of those schools that stated that CRT recruitment was becoming more difficult, the most common reasons cited were that CRTs were accepting contract or ongoing positions or that there was simply a lack of CRTs in the vicinity of the school.

**6.35** A CRT Recruitment Survey was conducted by DEET in August 2000. A further survey was conducted in August 2001 although, at the time of our audit, the results of this survey were not available. The results of the CRT Recruitment Survey in 2000 were similar to the results obtained from the questionnaire process that formed part of our audit.

**6.36** We believe that, because of the critical importance of CRTs to the proper functioning of schools, there should be a follow-up survey of those schools that were identified as having CRT recruitment difficulties. This would identify any seasonal factors associated with CRT recruitment and detect schools with persistent difficulties.

**6.37** Depending on the results of these surveys, there may be sufficient evidence to justify initiatives to increase the pool of CRTs within specific areas, potentially through a targeted regional recruitment campaign.

### **Recommendation**

**6.38** We recommend that:

- a follow-up survey be conducted of those schools that were identified in the CRT Recruitment Survey as having recruitment difficulties; and
- the results be analysed to determine whether sufficient justification exists to consider initiatives to increase the CRT pool in areas of greatest need.

## Part 7

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# Initiatives to increase teacher supply

## INTRODUCTION

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**7.1** Initiatives to influence the supply and distribution of teachers are an important responsibility of the Department of Education, Employment and Training (DEET) in co-operation with schools and universities. Initiatives can be:

- generic, aimed at increasing the overall supply of teachers, such as increasing the attractiveness of the vocation and its rewards; and
- targeted, aimed at addressing shortages in schools with recruitment difficulties and subjects which are difficult to staff.

**7.2** This Part of the report:

- outlines existing incentives used to increase teacher supply;
- evaluates major programs introduced by DEET, namely, the Teaching Scholarship Scheme and the Graduate Recruitment Program; and
- identifies possible options for addressing teacher supply concerns in schools with recruitment difficulties and difficult-to-fill subject areas.

**7.3** While the quantum of teaching places at universities is largely influenced by the level of Commonwealth Government funding, the responsibility for addressing teacher supply and distribution primarily rests with DEET, as acknowledged in the *DEET Annual Report 1999-2000*. The Report in part stated:

*“One of the Department’s priorities is to address the issue of potential staffing shortfalls in specific subject and geographic areas.”*

**7.4** The Report goes on to state:

*“During 1999-2000 the Department examined teacher supply and demand in Victorian Government Schools. Analysis of staffing projections revealed potential shortfalls in specific subject areas and in particular schools.”*

## EXISTING INITIATIVES

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**7.5** In April 2001, the *Victorian Government Schools Agreement 2001* provided for salary increases for all Victorian government primary and secondary school teachers within a 4 level classification salary scale. Currently the salary for a Beginning Teacher in the first year of service is \$38 630, resulting in Victoria having the highest commencing salary for teaching graduates in Australia. These salary increases should have the impact of increasing the attractiveness of teaching as a career option and encouraging the retention of teachers. We have noted that although there has been a substantial increase in the level of interest in teacher education positions at universities in recent years, these trends were evident before the introduction of the Agreement and tend to reflect improved employment prospects for teachers.



*VCE students with teacher reading employment section of paper, Wellington Secondary College, Mulgrave.*

**7.6** The new Agreement is designed to give Principals maximum flexibility to determine their staffing requirements. Movement up the increment scale is based on the Principal's annual assessment of teaching staff against Statewide professional teacher standards. The new Agreement also allows Principals to appoint Beginning Teachers to higher classification levels if they meet merit selection standards. Under certain budgetary circumstances, this could assist Principals with recruitment difficulties.

**7.7** Rural and remote schools receive additional funding through the School Global Budget in terms of a Rurality and Isolation component. Remote locality allowances are available to Victorian government school teachers, although these are limited in scope and have remained unaltered since March 1996. Schools are designated as either Remote A or B. Teachers appointed to schools in these categories receive the following annual allowances:

- **Remote A.** \$281 without dependants and \$439 with dependants; and
- **Remote B.** \$169 without dependants and \$259 with dependants.

**7.8** Some State education departments provide incentives for teachers to relocate to remote areas. In States such as Western Australia, this has proven to be relatively successful. These incentives generally involve significant costs to government and reflect the high levels of isolation of rural communities in these States; the scale of which cannot be compared with a geographically less diverse State such as Victoria. In the later sections of this Part of the report, we have suggested a range of alternative cost-effective options to address the staffing difficulties faced by remote schools and other schools with recruitment difficulties.

**7.9** The most important DEET initiatives to increase teacher supply into the government school system are the 2001 Teaching Scholarship Scheme and the Teacher Graduate Recruitment Program. The Teaching Scholarship Scheme is a targeted initiative designed to attract graduate teachers into areas of recruitment difficulty.

### **THE TEACHING SCHOLARSHIP SCHEME**

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**7.10** The Teaching Scholarship Scheme is DEET's main strategy to address the issue of government schools with recruitment difficulties and difficult-to-fill subjects. The Scheme has the following features:

- **Eligibility.** Students are eligible to apply for a scholarship if they are completing an approved one year Diploma of Education, the second year of an approved 2 year post-graduate degree or the final year of an approved teaching degree course.
- **Selection criteria.** The Scheme targets the "best and brightest" students as well as concentrating on difficult-to-fill subject areas and schools with recruitment difficulties.
- **Conditions.** Scholarship holders are offered ongoing employment at a particular school and the ability to undertake their practicum (supervised school-based teacher education) in the school in which they are likely to be employed. Scholarship holders are expected to remain employed in the government school system for at least a 2-year period. Principals could make offers of scholarships in 2000 and 2001 for ongoing employment at their school from January 2002. DEET has provided funding for 220 scholarship places. 220 scholarship places also will be available from January 2003 and 2004.
- **Benefits.** Apart from the benefit of ongoing employment, a DEET-funded payment of \$3 500 is made to students who have been selected by Principals.

**7.11** By the end of August 2001, schools had nominated 104 scholarship vacancies out of a possible 220 positions. While the school response to the Teaching Scholarship Scheme has been slower than DEET anticipated, there has been significant interest from potential teacher graduates, with over 600 eligible scholarship applications. Applicants register their resumes with DEET and these are matched against vacancies in the applicant's nominated regions. Despite the large number of potential scholarship applicants, there are a number of vacancies that cannot be filled due to a shortage of applicants within certain subject specialisations and a lack of applicants prepared to teach in some regions of Victoria.

**7.12** At the time of preparation of this Report, of the 104 nominated scholarship vacancies:

- 57 scholarships had been awarded (5 as a result of only one application per vacancy) with:
  - 31 scholarships awarded in 21 secondary schools (equivalent to 52 per cent of all nominated secondary school vacancies); and
  - 26 scholarships awarded in 22 primary schools (equivalent to 76 per cent of all nominated primary school vacancies);
- 27 scholarships had not been finalised; and
- 20 vacancies were unable to be filled due to either no applicants or no suitable applicants.

**7.13** Our evaluation of the Teaching Scholarship Scheme is confined to the period up until the end of August 2001, although the current round of the scholarship application and selection process continues until the end of 2001. Our analysis concentrated on examining the extent to which the scholarship selection criteria had been met.

**7.14** In our opinion, an assessment of whether applicants met the “best and brightest” criteria is a judgement that can only be made at the school level based on face-to-face interviews, the applicant’s relevant work experience, referee checks and academic results. As a consequence, we concentrated on assessing the extent to which government funding for the scholarship initiative has been applied to the areas of the greatest need, namely:

- schools with recruitment difficulties; and
- subject areas where there are shortages in teacher supply.

### **Does the Teaching Scholarship Scheme meet its objectives?**

**7.15** While DEET has a stated objective that the Teaching Scholarship Scheme is directed to schools with recruitment difficulties, there are no limits on school eligibility for the Scheme. All Victorian government schools can nominate any number of scholarship vacancies providing they have capacity to fund vacancies within their budget.

**7.16** Table 7A outlines the number of awarded scholarships against schools designated as difficult-to-staff by region.



**TABLE 7A**  
**AWARDED SCHOLARSHIPS BY SCHOOLS WITH RECRUITMENT**  
**DIFFICULTIES AND REGION, 2001**

Region	Difficult-to-staff school		
	No	Yes	Total
Barwon South Western	-	2	2
Central Highlands Wimmera	1	1	2
Loddon Campaspe Mallee	-	3	3
Goulburn North Eastern	2	8	10
Gippsland	3	1	4
Eastern Metropolitan	3	4	7
Western Metropolitan	1	7	8
Southern Metropolitan	8	7	15
Northern Metropolitan	3	3	6
<b>Grand total</b>	<b>21</b>	<b>36</b>	<b>57</b>

Source: Victorian Auditor-General's Office based on DEET data.

**7.17** To date, 36 scholarships have been awarded in schools defined as being difficult-to-staff. This constitutes 63 per cent of all scholarships awarded.

**7.18** Significant staffing difficulties were evident for at least 9 schools where, despite the financial incentive of a scholarship, there were no applicants for the vacancies. The location of these schools are shown in Table 7B together with the subject area of the vacancy.

**TABLE 7B**  
**SCHOOLS WITH NO SCHOLARSHIP APPLICANTS BY MUNICIPALITY, SUBJECT, KEY**  
**LEARNING AREA (KLA), 2001**

School type	Municipality	Subject	KLA
Secondary	City of Ballarat	Technology	Tech.
Secondary	City of Ballarat	Woodcraft/Metalcraft	Tech.
Secondary	City of Melton	Carpentry/Woodcraft	Tech.
Secondary	Rural City of Mildura	Italian	LOTE
Secondary	Rural City of Swan Hill	Indonesian	LOTE
Secondary	Shire of Latrobe	Indonesian	LOTE
Secondary	Shire of South Gippsland	Indonesian	LOTE
Secondary	City of Darebin	Indonesian	LOTE
Secondary	Rural City of Wangaratta	Italian	LOTE

Source: Victorian Auditor-General's Office based on DEET data.

**7.19** These vacancies were in difficult-to-fill subject areas, with 6 unfilled vacancies in secondary LOTE, and 3 unfilled vacancies in Technology Studies. Given that these schools are unable to attract applicants with the current financial incentives, it is likely that these schools will encounter difficulties in filling these positions by the beginning of 2002.

**Subject areas which are difficult to staff**

**7.20** In relation to the Teacher Scholarship Scheme, only 67 vacancies were listed for secondary scholarships with 53 vacancies or 79 per cent falling into the difficult-to-fill subject areas. Table 7C shows the vacancies by KLA and the number of scholarships awarded.

**TABLE 7C  
SECONDARY SCHOOL SCHOLARSHIP VACANCIES BY DIFFICULT-TO-FILL SUBJECT, 2001**

<i>Difficult-to-fill KLA</i>	<i>Number of vacancies</i>	<i>Percentage of all secondary scholarship vacancies</i>	<i>Scholarships awarded</i>	<i>Scholarships awarded as percentage of vacancies</i>	<i>No applicant</i>	<i>Not finalised</i>	<i>On hold</i>	<i>No appointment</i>
Technology	12.5	19%	5	40%	3	4	-	0.5
LOTE	14.5	22%	6.5	45%	6	2	-	-
Maths	11	16%	6	55%	-	4	0.5	0.5
Science	15	22%	7	47%	-	4.5	0.5	3
<b>Total</b>	<b>53</b>	<b>79%</b>	<b>24.5</b>	<b>46%</b>	<b>9</b>	<b>14.5</b>	<b>1</b>	<b>4</b>
Other	14	21%	6.5	46%	-	4	-	3.5
<b>Total</b>	<b>67</b>	<b>100%</b>	<b>31</b>	<b>46%</b>	<b>9</b>	<b>18.5</b>	<b>1</b>	<b>7.5</b>

*NOTE:* The majority of secondary scholarships are for dual subject areas such as Maths and Science. For the purposes of our analysis, these subjects are identified as 0.5 of a scholarship position each.

*Source:* Victorian Auditor-General's Office based on DEET data.

**7.21** Most secondary school scholarship vacancies were for applicants with dual qualifications such as Maths and Science. Our analysis shows that 24.5 secondary school scholarships were awarded in difficult-to-fill subjects. In the areas of LOTE, Technology and Senior Science there were low applicant numbers. In the case of Indonesian, for example, the highest number of applicants for any one position was 3. The majority of Indonesian language vacancies had only one applicant. Six of the secondary LOTE vacancies had no applicants at all.

**7.22** In primary schools, there are comparatively few positions other than Generalist classroom teachers. Generalist teaching positions accounted for 57 per cent of all difficult-to-fill primary subject vacancies in 2001 as determined by DEET's Teacher Recruitment Difficulty Census.

**7.23** Positions for Primary LOTE accounted for 19 per cent of difficult-to-fill vacancies in 2001. This was especially the case for Japanese, Indonesian and Italian. In addition, Reading Recovery and Arts constituted 6 per cent each of difficult-to-fill vacancies. All 34 primary school scholarships awarded were in identified difficult-to-fill areas, namely, Generalist Primary positions and LOTE. Applications for Generalist Primary positions were high in all regions of Victoria. The lowest number of applicants for any one position was 25, with the highest at 112. The high ratio of applicants to positions is due to the low participation rate of primary schools in the Teaching Scholarship Scheme. Of the 1 235 government primary schools in Victoria, only 22 have participated in the scholarship scheme.

## Summary of Teaching Scholarship Scheme findings

**7.24** Schools have been slow to nominate vacancies for the Teaching Scholarship Scheme with only 104 schools listing vacancies:

- While 442 Victorian government schools are identified as difficult-to-staff, only 36 scholarships were awarded in these schools;
- 37 per cent of scholarships were awarded in schools **not** identified as having staffing difficulties; and
- There were insufficient scholarship applicants in LOTE and Technology Studies to meet school demand and low numbers of applicants for Senior Science vacancies.

### Survey of schools

**7.25** We conducted a telephone survey of the 43 schools that have awarded scholarships to seek their views on the Teaching Scholarship Scheme. The major findings of the survey were as follows:

- Over 50 per cent of schools thought the marketing of the Teaching Scholarship Scheme to school Principals could be improved. Suggestions included publicising success stories and providing information on common questions and answers;
- About 40 per cent of schools commented that information provided on application forms was insufficient to make judgements on the quality of applicants. Suggestions included requiring applicants to address standard key selection criteria and to produce key documents such as practicum supervisor's reports as part of their application. Other suggestions included further professional development to better equip applicants to prepare resumes and attend interviews;
- Nearly 30 per cent of schools indicated that the number of applications for the scholarship vacancies placed a substantial administrative burden on school resources. These were mainly primary schools where applications in some instances exceeded 100. While some schools were in favour of screening applications by Regional Offices and the provision of a short list, others schools were opposed to this; and
- Nearly 20 per cent of schools commented that the time elapsed between application and interview was so long that applications had become outdated and applicants were unclear about the process. Suggestions included providing mechanisms to regularly inform applicants of their application status.

**7.26** All schools commented very favourably on the level of advice and support provided centrally by DEET.

**7.27** The number of vacancies earmarked by schools for filling by scholarship holders has been low. Most of the schools in our survey identified future budgetary uncertainty as the major reason that schools would not commit to funding an ongoing scholarship position. A proportion of schools indicated that they were deterred by the requirement to offer an ongoing position to a teaching graduate who was unproven in a classroom environment.

### **Suggested changes**

**7.28** The Teaching Scholarship Scheme is open to all graduates of Victorian universities in the final year of their teacher education courses. In addition, all government schools are eligible to participate providing they can fund an ongoing position for the successful applicant.

**7.29** The original intention of the Teaching Scholarship Scheme should be strictly enforced, with the Scheme restricted to schools with recruitment difficulties and difficult-to-fill subjects. It is possible that under the current arrangements, scholarships are being awarded to applicants who would have taken a position in a school without a financial incentive.

**7.30** Scholarship payments should vary according to levels of recruitment difficulty whereby:

- A difficult-to-fill subject position in a school with recruitment difficulties would attract the highest scholarship payment;
- A teaching position in a school with recruitment difficulties would attract an intermediate level payment; and
- A difficult-to-fill subject position in a school not designated as having staffing difficulties would attract the lowest payment.

**7.31** Future marketing of the financial and other benefits of the Teaching Scholarship Scheme should target students who are prepared to undertake practicum and have expressed an interest in future employment in schools with staffing difficulties. Marketing should also be directed to students with qualifications in the areas of greatest subject demand who may be prepared to undertake teacher education such as a one year Diploma of Education course.

**7.32** Reflecting the low level of schools offering places and the comments made by Principals, the scheme could be better marketed to Principals and administration. The application process in particular could be improved.

**7.33** The proposed restructuring of the Teaching Scholarship Scheme should be monitored and evaluated by DEET to enable fine-tuning of features of the scheme.

## Recommendation

**7.34** We recommend that the Teaching Scholarship Scheme be upgraded through:

- ensuring that the Scheme is restructured to target schools and subject areas where recruitment difficulties exist, with varying levels of scholarship payments to reflect the relative difficulty that each school has in filling vacancies;
- marketing of the Scheme to undergraduates with required subject qualifications to encourage them to undertake post-graduate teacher education in difficult-to-fill subject areas;
- ongoing marketing of the benefits of the Scheme to Principals;
- enhancing key aspects of the administration of the Scheme such as the application process; and
- monitoring and evaluating changes to the Scheme.

## TEACHER GRADUATE RECRUITMENT PROGRAM

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**7.35** The 2001 Teacher Graduate Recruitment Program, announced in 2000, is available to all primary, specialist and secondary schools. It allows Principals to earmark vacancies that can only be filled by graduate recruits. Principals select graduates for their school through the normal merit selection process.

**7.36** The Teacher Graduate Recruitment Program is funded from the budgets of Victorian government schools. DEET spends \$12 000 per annum on marketing the Program. Schools with the capacity to fund vacancies can designate up to 2 Teacher Graduate Recruitment positions each year. Where schools have an annual budget that exceeds \$2 million (primary) or \$5 million (secondary), they are entitled to nominate additional graduate positions. Small schools that are unable to offer a full vacancy position, can cluster resources with other local schools to employ a graduate recruit for their area. The Program has the following features:

- **Eligibility.** A graduate is defined as a teacher who has graduated since 1997 and is not employed as a teacher by DEET. Applicants must have as a minimum a 4-year tertiary degree that includes an approved course of teacher education;
- **Selection criteria.** Individual schools make appointments using merit-based local selection processes. Principals can make provisional offers on the understanding that graduates must complete prescribed qualifications before commencement; and
- **Conditions.** Graduates are guaranteed an offer of employment before the commencement of the school year. These positions can be ongoing or for a specific period of time.

**7.37** One of the main benefits of the Teacher Graduate Recruitment Program to schools is that it allows Principals to adjust the school staffing profile and reduce their staffing costs. The funding formula for the 2001 School Global Budget provides a flat rate of \$53 080 for non-executive teaching staff. Schools can make savings by employing first year graduates because they receive Beginning Teacher salaries of \$38 630. The Teacher Graduate Recruitment Program allows Principals to make employment offers to graduates without having to consider teachers who are in excess of requirements or who have applied for a compassionate transfer.

**7.38** In many cases the offers made are short-term contracts where the Principal is able to assess the performance of a new teacher and not review a contract if performance is unsatisfactory.

**7.39** The first round of school vacancies and employment offers for the 2001 Teacher Graduate Recruitment Program were made between August and December of 2000. Schools provided 195.5 vacancies and 180 appointments were made. Table 7D shows the region where the appointments were made and the period of employment.

**TABLE 7D  
EMPLOYMENT PERIOD OF APPOINTED APPLICANTS, 2000-2001**

Region	Employment period (years)						Total
	1	2	3	4	7	Ongoing	
<b>Country -</b>							
Barwon South Western	5	1	-	1	-	5	<b>12</b>
Central Highlands Wimmera	2		-	-	-	2	<b>4</b>
Loddon Campaspe Mallee	6	2	1	-	-	3	<b>12</b>
Goulburn North Eastern	6	2	-	-	2	7	<b>17</b>
Gippsland	-	-	-	-	-	4	<b>4</b>
<b>Total country</b>	<b>19</b>	<b>5</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>21</b>	<b>49</b>
<b>Metropolitan -</b>							
Eastern	20	1	2	-	-	24	<b>47</b>
Western	6	1	2	-	1	16	<b>26</b>
Southern	15	3	1	-	2	11	<b>32</b>
Northern	7	1	5	-	1	12	<b>26</b>
<b>Total metropolitan</b>	<b>48</b>	<b>6</b>	<b>10</b>	<b>0</b>	<b>4</b>	<b>63</b>	<b>131</b>
<b>Total</b>	(no.) <b>67</b>	<b>11</b>	<b>11</b>	<b>1</b>	<b>6</b>	<b>84</b>	<b>180</b>
<b>Total</b>	(%) <b>37.2</b>	<b>6.1</b>	<b>6.1</b>	<b>0.6</b>	<b>3.3</b>	<b>46.7</b>	<b>100</b>

Source: Victorian Auditor-General's Office based on data provided by DEET, Workforce Studies Unit.

**7.40** Only 47 per cent of positions were advertised as ongoing and more than half were of limited tenure.

**7.41** The Teacher Graduate Recruitment Program also has a mid-year intake with 45 schools offering vacancies in 2001. The majority of these were for Generalist Primary teachers and the offers were spread fairly evenly across the 9 school regions with the exception of the Goulburn North Eastern, Gippsland and Northern Metropolitan regions where few vacancies were listed. At the time of our audit, schools were in the process of making offers.

### **Teacher Graduate Recruitment Program Findings**

**7.42** The Teacher Graduate Recruitment Program provides administrative and planning benefits to schools, allowing Principals to select graduates for vacancies in advance of the vacancy becoming available. The teaching practicum is one way that Principals can assess the merits of graduates before offering employment through the Program. In addition, the Teacher Graduate Recruitment Program provides graduates with the benefit of securing employment before the beginning of the teaching year.

**7.43** Despite the fact that the Teacher Graduate Recruitment Program has a higher take-up rate than the Teaching Scholarship Scheme, the number of vacancies identified by schools for the Teacher Graduate Recruitment Program is still comparatively low. By way of illustration, there were over 2 200 ongoing Beginning Teacher positions advertised for commencement in January 2001 which theoretically were available for filling by graduates, compared with 195.5 identified vacancies in the Teacher Graduate Recruitment Program.

**7.44** While details of the Teacher Graduate Recruitment Program were communicated to Principals by electronic circulars, we believe that providing Principals with information about the Program's work force planning and administrative benefits could better focus the marketing strategy. This Program is most relevant to Principals of schools who wish to refocus their staffing profiles to achieve a better balance of experienced and beginning teachers. It allows these Principals to adjust their staffing profiles by employing graduates on Beginning Teacher salaries as part of a strategy of succession planning in the school. Any marketing of the Program should emphasise the work force planning benefits of the Program.

**7.45** The provision of short-term graduate contracts may not be viable in future years as the teacher labour market moves into shortage. DEET should alert schools to the shifts in the teacher labour market, so that Principals can make offers of employment based on their long-term staffing needs. Principals should also be provided with up-to-date information regarding the segments of the teacher labour market that are in shortage.

### **Recommendation**

**7.46** We recommend that DEET increase and monitor participation in the Teacher Graduate Recruitment Program by:

- highlighting the financial and administrative benefits of the Program through marketing strategies; and

- providing Principals with current information regarding the status of the teacher labour market to encourage informed decision-making relating to offers of employment under the Program.

### **POSSIBLE OPTIONS TO ADDRESS TEACHER SUPPLY AND DISTRIBUTION**

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**7.47** The Teaching Scholarship Scheme is nominally targeted to schools with recruitment difficulties and difficult-to-fill subjects, but further initiatives need to be considered to make significant inroads into addressing recruitment problems in these areas. Universities and schools can play an important role in this regard. Some possible options include:

- improved targeting of Teaching Scholarship Scheme;
- teaching practicum at schools with recruitment difficulties;
- increased marketing of schools on university campuses;
- providing incentives for teachers to relocate to rural areas;
- retraining existing teachers in difficult-to-fill subjects;
- targeting the Teacher Release to Industry Program to areas of subject demand; and
- greater co-ordination of teacher resources through the development of 5-year teacher supply plan.

#### **Schools with recruitment difficulties**

**7.48** We have identified three options (apart from the targeting of the Teaching Scholarship Scheme) to encourage teachers to teach at schools with recruitment difficulties. They include, encouraging teaching practicum at difficult-to-staff schools, marketing of difficult-to-staff schools to university undergraduates, and offering incentives for teachers to relocate to rural and remote schools with recruitment difficulties.

#### **Encouraging teaching practicum at schools with recruitment difficulties**

**7.49** There is evidence that undertaking practicum at a particular school increases the potential for subsequent employment at that school:

- Currently 2 education faculties collect graduate destination data. For the years 1999 and 2000, one university reported 17 per cent graduate employment in schools where the individual had completed practicum. The other faculty reported over 12 per cent employment post-practicum during the same period. While it is unclear if any of these schools were difficult-to-staff, we believe these rates to be significant as not all schools providing practicum placements would have been in a position to offer employment;
- In our telephone survey of those schools that had awarded scholarships, over a quarter of successful applicants had some previous involvement with the school, usually through the school practicum; and



- There are examples where schools with recruitment difficulties have introduced programs in conjunction with universities to encourage students to undertake their practicum at a particular school or group of schools. These initiatives have produced positive results. Later in this Part of the Report we provide a case study of the Tyrrell School Cluster Project, which we believe is a good example of such an initiative.

**7.50** In relation to the last point above, we support a well-designed evaluation of such initiatives to objectively identify:

- the extent to which students have changed their attitudes to teaching in remote locations and what were the influences in facilitating either a positive or negative response;
- the extent to which practicum led to employment, as measured against availability of jobs within these schools; and
- factors that need to be in place to support students during practicum, e.g. community involvement.

**7.51** In 2000, Victorian universities made 2 773 student teacher placements at schools across Victoria. Of this total, 1 596 placements were made in government schools and 1 177 in non-government schools. Within the government school system, these placements overwhelmingly favoured metropolitan and provincial schools as opposed to rural and remote schools. Metropolitan and provincial schools comprise 60 per cent of total government schools yet received 78 per cent of practicum placements. In contrast, rural and isolated schools comprise 40 per cent of government schools yet received 22 per cent of practicum placements.

**7.52** In relation to 442 primary and secondary government schools with recruitment difficulties (this total excludes special schools) identified by DEET:

- 132 schools (30 per cent of the total) had no student placements in 2000; and
- 162 schools (37 per cent of the total) had **one** student on placement in 2000.

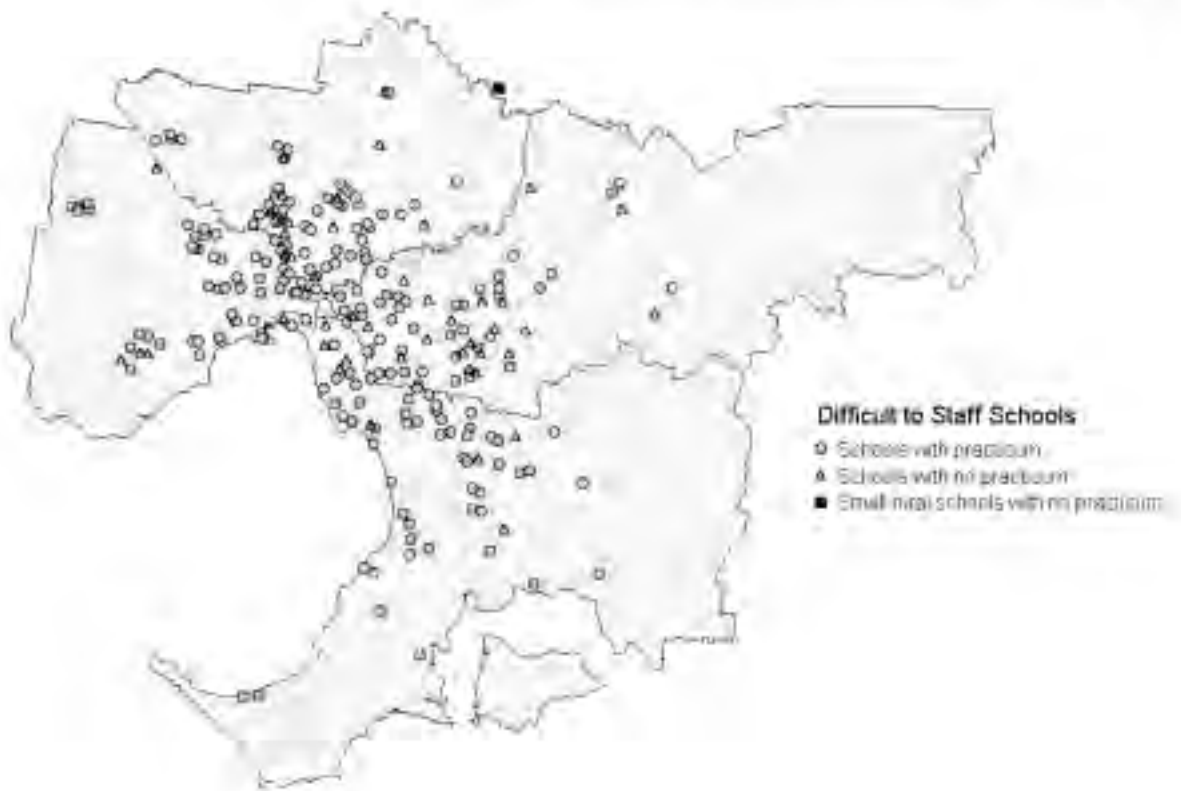
In 2000, 148 difficult-to-staff schools (33 per cent of the total) had **more** than one student on placement. In comparison, 66 per cent of schools designated as **not** difficult-to-staff had **more** than one placement.

**7.53** Within the difficult-to-staff category of schools, there are particular concerns in terms of:

- **Geographic areas.** A total of 52 per cent of schools designated as having recruitment difficulties in the Central Highlands Wimmera Region had no students on placement. Similarly, 48 per cent of schools in both Barwon South Western and Goulburn North Eastern Regions had no students on placement; and
- **Small rural schools.** Of the 40 small rural difficult-to-staff schools, 31 schools had no placements.

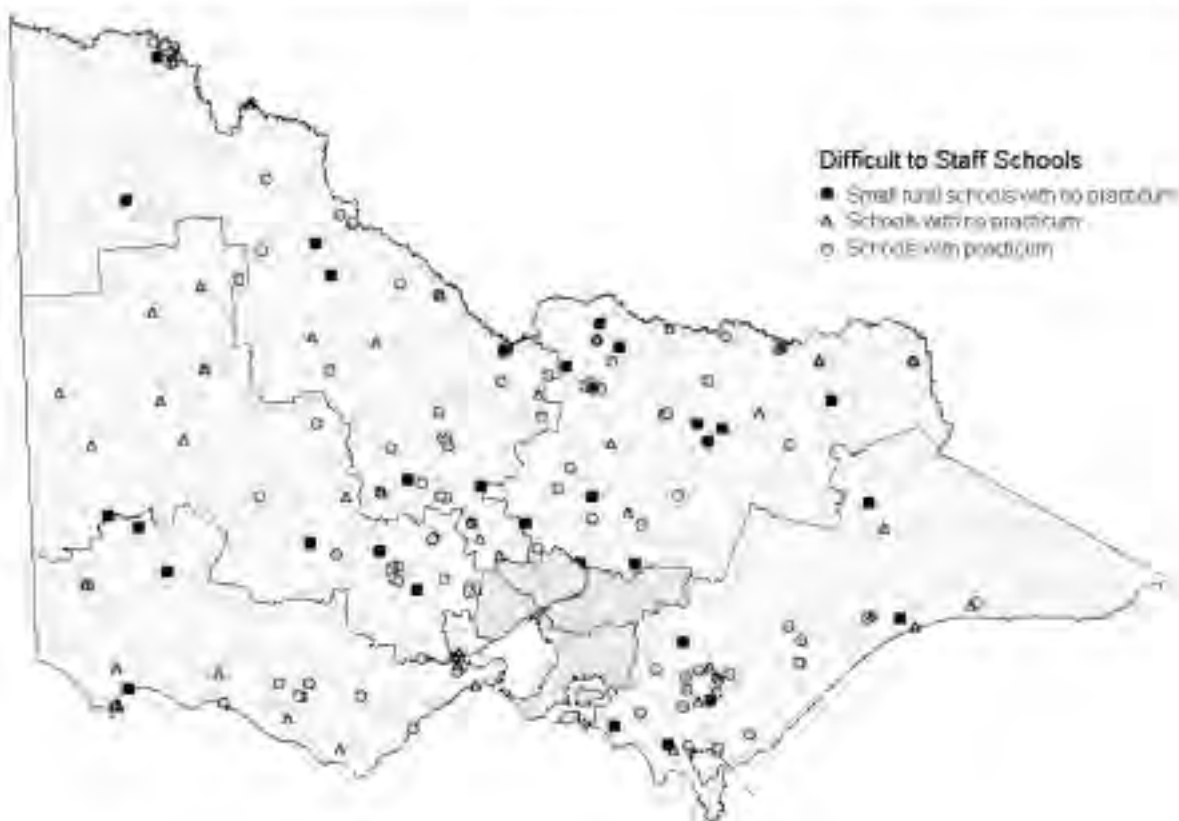
**7.54** The distribution of practicum across Victoria for schools identified by DEET as having recruitment difficulties is depicted in Chart 7E (Metropolitan schools) and Chart 7F (country schools).

**CHART 7E  
GOVERNMENT SCHOOLS WITH RECRUITMENT DIFFICULTIES, MELBOURNE REGIONS,  
FEBRUARY 2001**



Source: DEET.

CHART 7F  
GOVERNMENT SCHOOLS WITH RECRUITMENT DIFFICULTIES, COUNTRY VICTORIA,  
FEBRUARY 2001



Source: DEET.

**7.55** There are major disincentives from both the student and university perspective to undertaking practicum at a significant distance from the student's place of residence and university campus. Of the 9 universities offering teacher education in Victoria, 7 cited costs to students and faculties as the major impediments to rural practicum. In the case of universities, specific funding is not provided for student practicum. These costs are met as part of the Commonwealth Government's funding of student load allocations.

**7.56** In order to encourage teacher practicum in rural and remote locations, we suggest the following:

- Providing allowances to students to undertake their practicum at designated schools to offset any additional costs incurred by students. While some schools have provided funding to students from the teaching practicum subsidies, (refer to the case study of the Tyrrell School Cluster Project to follow), there are also other funds that schools can potentially access. According to our analysis, 83 per cent of schools with recruitment difficulties are in budget surplus. Of this figure, 7 per cent are in surplus by the capped amount of \$75 000. In our view there is the potential for a proportion of any surplus funds to be utilised as the basis for funding practicum initiatives. Amounts offered to students should be determined by the school, and consistent with the relative costs of student travel and relocation.
- Some schools may favour the Industry Based Learning (IBL) model as a way of funding students on practicum. The IBL model would suit students undertaking extended practicum placements. (Industry Based Learning is a program whereby undergraduate students in the third or final year of their degree can undertake learning through paid, full-time, industry employment. It is currently in operation in Victoria, providing industry placements to students across a range of subject disciplines);
- Using Local Learning and Employment Networks<sup>1</sup> as a vehicle to develop a partnership approach involving community and industry support for students. This could involve provision of accommodation or part-time paid employment for students; and
- Education faculties are committed to providing students with a wide range of teaching experiences. When student teachers are placed in locations at a distance from the university campus, additional university travel costs and staff time exacerbate the already high cost of practicum to universities. Consideration could be given of DEET providing supplementary funds to faculties providing practicum placements for students in difficult-to-staff rural and remote locations. Payment should be based on a set number of students placed at a tightly targeted number of rural and remote schools as nominated by DEET. In these instances, DEET would fund the differential between the average cost of remote supervision as compared with local supervision.

**7.57** The following case study describes the way in which schools in the Mallee region of north-west Victoria utilised the practicum as a recruitment strategy.

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<sup>1</sup> Education and training providers, industry, government and the community are establishing local Learning and Employment Networks to foster collaborative approaches to the planning and delivery of programs.

## CASE STUDY

**Bringing teachers to the Mallee - The Tyrrell School Cluster Project***Recruitment difficulties in the Mallee*

In recent years, rural schools in the Mallee region of north-west Victoria have experienced great difficulties in staff recruitment. One group of Mallee schools, known as the Tyrrell Cluster, have taken steps to redress the difficulties that they have in attracting teachers. The Co-ordinator of the Tyrrell Cluster partnership writes:

*“Tyrrell College and the surrounding small rural schools have been feeling the impact of the ‘teacher shortage’ for some years now. We want to see our schools staffed by enthusiastic, skilled teachers who understand the culture of rural educational settings.”*

The staffing problems in the Mallee are demonstrated most clearly by the appointment of 3 graduates (all with less than a year teaching experience) to Principal/Head Teacher positions in the late 1990s. Last year, Tyrrell College advertised an ongoing Level 2 Maths/Science vacancy and did not receive a single application.

*A school approach to improving recruitment in the region*

The objective of the Tyrrell Cluster Project is to provide students with a practicum experience that will encourage them to apply for teaching positions in rural Victoria. It was agreed that the region would have to provide some incentives to encourage students to complete their practicum in the Mallee.

In order to offset some of the travel and living costs to students, Mallee schools and small businesses have been assisting student teachers with subsidised accommodation. Cluster schools have donated their practicum payments to students to provide them with a small living allowance.

An essential part of the Tyrrell School Cluster Project is a carefully designed professional experience that includes one day of professional development for all student teachers and staff. Another aspect of the practicum is the integration of student teachers into the life of the rural communities by including them in local sporting events and other activities.

*Feedback on the project*

Student feedback on the Tyrrell School Cluster Project suggests that there were benefits for both student teachers and schools. At the conclusion of the 2001 practicum, 60 per cent of the Victoria University participants indicated that they would consider teaching in a rural community. Some comments of students after completing the project are included below.

*“My practicum has offered more than just an excellent opportunity to experience my future workplace and develop valuable skills, it has provided me with a lasting impression of a very different way of living and working. As a result of this scheme, many of my colleagues and I believe that this is a much preferable career environment to that offered by the large city schools.” (Student teacher, Culgoa Primary School)*

*“My experiences in Sea Lake have made me realise I could be very happy settling into a country town and school.” (Student teacher, Sea Lake)*

*“Prior to these [practicum] rounds I would’ve told you that teaching in the country didn’t interest me, but by the end of Day One my thoughts had already turned around.” (Student teacher, Manangatang P-12 School)*

*“This experience has broadened my understanding of life in the country and assured me that I could teach in country regions where so many opportunities exist.” (Student teacher, Tyrrell College).*

### **Increased marketing of schools and their local communities on university campuses**

**7.58** There is potential to increase the involvement of government school Principals in marketing their school and community to university students. In order to minimise the potential for disruption to both universities and students, school marketing exercises should be co-ordinated on a regional basis. In this regard, DEET's Regional Offices can play an important role as well as providing advice on the quality of proposed marketing exercises developed by schools within their region.

**7.59** It is particularly critical that marketing focuses on the competitive advantages offered by each school and the government school system in general. For example, some rural schools have arranged accommodation for teachers.

**7.60** Changes to the funding of the School Global Budget in 2001 will advantage schools that have a staffing profile with a higher proportion of younger teachers at the lower end of the teacher salary scale. We have previously commented that a high proportion of schools with recruitment difficulties are in budgetary surplus. These schools are more likely to have budget flexibility under the new formula and, therefore, may consider restructuring positions to include additional responsibilities with commensurate financial remuneration.

### **Providing incentives to relocate to difficult-to-staff schools**

**7.61** We have previously commented that there are limited allowances for Victorian government school staff that relocate to rural and remote locations. In comparison, States with large distances between main population centres such as Western Australia and Queensland offer significant financial incentives.

**7.62** While the justification for providing increased rural and remote financial incentives in Victoria is less compelling than for other States, we believe that there is an argument for addressing some of the disincentives. This may include reimbursement of a teacher's relocation costs up to a capped amount.

### **Subjects which are difficult to staff**

**7.63** DEET and, where appropriate, universities could consider the following options to address teacher shortages in areas such as information technology, mathematics and science.

***Retraining existing teachers in subject areas  
which are difficult to staff***

**7.64** In order to provide a school curriculum program across all of the Key Learning Areas, a proportion of Victorian government teachers are teaching subjects in which they have no subject qualification. Data from our School Review questionnaire identified 28 per cent of junior Information Technology (IT) classes and 15 per cent of senior IT classes were taught by teachers not qualified to teach the subject. According to our questionnaire, teachers taking classes for which they are not qualified is most prevalent at the junior secondary level. LOTE is another area with classes taught by teachers with no subject qualification. From our survey, 10 per cent of junior LOTE classes were taught by teachers in this category.

**7.65** In order to address the shortfall of qualified LOTE teachers, DEET provides a teacher retraining program. Currently, retraining is available for government teachers with ongoing employment. Teachers from the Catholic and independent school systems can attend on a fee-for-service basis. The provision of courses is funded by DEET and conducted by universities as a result of a public tender process. Government teachers are provided with study leave and DEET funds schools for casual relief teacher replacements. No evaluations have been conducted of the effectiveness of LOTE retraining: for instance the level of retention of teachers within the government system after course completion.

**7.66** Subject to the results of a formal evaluation of the current LOTE training program, we believe there is the potential to extend retraining into other subject areas to meet subject demand. It is important to note, however, that retraining programs are most effective when there are adequate numbers of teachers in the labour market overall, with teacher shortfalls in certain market segments. Overall teacher shortages would seriously compromise teacher retaining as a viable labour market adjustment option. It is also critical that any future retraining programs be established with monitoring and evaluation systems in place to track participants. This will allow assessments to be made regarding the cost-effectiveness of any retraining provided.

***Attracting mature age entrants from industry into  
the teaching work force***

**7.67** In recent years, there has been a shift to an older age profile among the teacher education applicants for university courses. An increasing number of mature age applicants are entering teaching as a second career. The number of students aged over 30 years applying for undergraduate teaching courses increased from 4.5 per cent in 1997 to 7.6 per cent in 2001. Data are not available for postgraduate applicants, though graduate destinations suggest that the trend for this cohort to a mature age profile is even more significant. According to the Graduate Careers Council of Australia, in 2000 approximately 24 per cent of the new graduates employed in government schools were aged 30 and above.

**7.68** There is the potential to target a marketing campaign at mature age workers with expertise and qualifications in areas of subject shortage. In particular, concentration could be directed to local companies or sectors that are in the process of either relocating or shedding staff.

**7.69** As a prerequisite for any further marketing and policy development in this area, additional research should be undertaken to determine:

- the motivation of mature age students to pursue a teaching career;
- the types of incentives necessary to encourage mature age workers to consider a teaching career;
- the most appropriate marketing of teaching as a career to this age group; and
- the capacity of mature age applicants to respond to difficult-to-fill subjects in the more remote locations, as they may have less flexibility in this regard than younger teachers.

### ***Increasing pathways into teacher education***

**7.70** There is the potential for universities to explore additional pathways into teacher education courses and increased flexibility in course delivery, particularly for areas of teacher under-supply. The Graduate Diploma in Technology Education offered by La Trobe University in 2001 is an example of this.

**7.71** Technology Studies remains one of the most acute areas of teacher under-supply. In 2001, there were only 3 students in Victoria in their final year of Technology Studies. In 2000, there was one student. In response, La Trobe University developed the Graduate Diploma course that has the following features:

- A full fee-paying course over a 2 year period consisting of 12 subjects of which 9 are completed at La Trobe University and 3 at TAFE providers;
- The University recognises as one of its entry requirements a TAFE qualification such as a Certificate of Technology plus at least 6 years of relevant work experience;
- Entry prerequisites provide a credit of 2 years towards the teacher education qualification;
- The course is offered at weekends and during holiday periods, thereby providing the training option to people currently employed; and
- Students negotiate the TAFE component of the course with a provider in their area, thereby facilitating course access to people outside of the Melbourne metropolitan area.

**7.72** With minimal marketing, there are 26 students currently enrolled in the first year of the course. This initiative is particularly suited to the subject area of Technology Studies. While courses such as the Graduate Diploma may not be appropriate in every difficult-to-fill subject area, DEET and university faculty staff should explore the potential for additional pathways into teacher education in subjects where there are shortages of teachers.





*Teacher and Vocational Education and Training student at automotive class at Sunshine Secondary College.*

### ***Targeting the Teacher Release to Industry Program to areas of subject demand***

**7.73** DEET currently provides professional development opportunities for government teachers of 5 years experience to work in industry for a year on full pay through the Teacher Release to Industry Program (TRIP). This Program commenced in 1991. There are 2 components to TRIP; one includes industry experience, the other, an approved course of study. Participants are expected to enrol in one of 2 nationally accredited courses. They are also expected to complete an industry-based project that will be of value to their school.

In recent years, the number of TRIP places on offer has been capped at 50 with applications far exceeding the number of places available. In terms of retention rates for the 2000 Program, 2 per cent of participants have relocated to industry and 4 per cent have commenced employment with allied education providers. The remainder have returned to DEET employment.

**7.74** The TRIP program provides an excellent opportunity for teachers to upgrade or retrain in areas of subject shortage. TRIP can provide potential benefits to schools when teachers bring required skills and knowledge back to the school environment. Consideration could be given to providing preference to applicants for the TRIP Program who offer to enhance or upgrade their qualifications in areas of subject shortfall within their school. In recent years, an obvious subject area for staff professional development has been information technology. The enhancement of qualifications may, for example, allow teachers to teach in the senior classes or specialist classes where staffing difficulties may exist within their school.

**7.75** The adoption of this option would require increasing the number of TRIP-accredited courses currently available for participants. As DEET contributes approximately \$1 million annually to the cost of operating this Program, it is in DEET’s interests to maximise the benefits of the Program by targeting areas of the highest priority.

**Expected costs and benefits of suggested initiatives**

**7.76** We have identified in Table 7G an indicative cost of the initiatives suggested above and associated benefits. The initiatives proposed are mainly not high cost. If the labour market position worsens, more costly measures may be necessary.

**TABLE 7G  
EXPECTED COSTS AND BENEFITS OF SUGGESTED INITIATIVES**

<i>Suggested initiatives</i>	<i>Cost</i>	<i>Expected benefit</i>
Improved targeting of the Teaching Scholarship Scheme and variation of scholarship payments	Cost neutral. Current annual expenditure \$0.8m (budgeted) for 220 places.	Better targeting of scholarships and other initiatives to schools with recruitment difficulties and difficult-to-fill subject areas which are the areas of greatest need.
More targeted marketing of the Teaching Scholarship Scheme	Low	More Principals are aware of the benefits of the scheme and hence a greater number of positions will be offered for graduates.
Increased marketing of the Graduate Recruitment Program to schools and Principals.	Low	Large number of schools involved in the program and hence increased employment opportunities for graduates.
Encouraging undertaking of teaching practicum at schools with recruitment difficulties by: <ul style="list-style-type: none"> <li>• providing monetary allowances for students</li> <li>• using Local Learning and Employment Networks</li> <li>• developing a network of practicum supervisors in rural and regional Victoria</li> <li>• supplementation of practicum cost</li> </ul>	Medium  These initiatives would be more costly than the current scholarship scheme.	Student practicum conducted in schools with recruitment difficulties and rural and remote locations has proven to be a successful means of encouraging graduates to seek employment in areas with recruitment difficulties.  The sharing of costs of practicum should encourage more students and education faculties of universities to use rural and remote schools in their practicum programs.

**TABLE 7G**  
**EXPECTED COSTS AND BENEFITS OF SUGGESTED INITIATIVES - *continued***

<i>Suggested initiatives</i>	<i>Cost</i>	<i>Expected benefit</i>
Removing disincentives to relocate to schools with recruitment difficulties in rural and remote areas.	Medium	Removing relocation costs may ameliorate some of the disincentives for teachers moving to rural and remote schools.
Retraining existing teachers in difficult-to-fill subject areas.	High Current annual cost is \$2m (part Commonwealth funded). Between 400 and 500 teachers are expected to complete courses annually.	Retraining of existing teachers from schools experiencing difficulty in filling vacancies could overcome subject shortages in schools with recruitment difficulties and provide support to teachers teaching outside of their subject tags.  In a situation of overall shortage, this may be a less useful initiative.
Marketing designed to attract mature age entrants from other industries into the teaching work force.	Low	Increased knowledge of opportunities within teaching by people with relevant industry background in difficult-to-fill subject areas.
Increased pathways into teacher education.	Cost neutral	Establishment of fee paying courses that provide recognition for relevant industry experience and training could provide an additional source of supply of teachers in a limited number of high demand subject areas.
Targeting of the Teacher Release to Industry Program (TRIP).	Low/ Cost neutral	Teachers undertaking the TRIP program would provide relevant industry experience for teachers together with additional training in difficult-to-fill subject areas.

## Recommendation

**7.77** We recommend that DEET give consideration to the adoption of additional initiatives outlined in this report that are designed to increase teacher supply into schools with recruitment difficulties and subject areas which are difficult to staff.

## Part 8

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# Co-ordination between the key stakeholders

## INTRODUCTION

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**8.1** Teaching places at universities are funded by the Commonwealth Government, the distribution of student places across faculties is decided within universities and the major employer of teachers is the State Government. This means that effective communication and decision-making mechanisms involving key stakeholders are essential.

## OPERATION OF THE TEACHER SUPPLY AND DEMAND REFERENCE GROUP

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**8.2** In response to the requirement for improved communication, a Teacher Supply and Demand Reference Group has been established consisting of members representing the Department of Education, Employment and Training (DEET), the Victorian Primary Principals Association, the Victorian Association of State Secondary Principals, the Australian Education Union, the Deans of Education, the Catholic Education Office and the Victorian Independent Education Union.

**8.3** The Reference Group was established in May 2000 with the following terms of reference:

- to exchange and co ordinate accurate information relating to teacher supply and demand in Victorian schools;
- to provide a forum for structured and informed discussion on issues related to the supply and demand of teachers in Victoria; and
- to provide feedback and advice to DEET on strategies to assist in the resolution of issues affecting teacher supply and demand in Victorian government schools.

**8.4** Meetings of the Reference Group are held monthly and minutes maintained of each meeting. Our analysis of these minutes is shown below.

### Composition and focus of the Reference Group

**8.5** The current size of the Reference Group is 16 members of which 7 members, including the Group's Executive Officer, are from DEET. Meetings are chaired by a DEET representative. In our examination of the meeting minutes, the agenda is largely reflective of DEET's priorities. This is consistent with the final terms of reference mentioned above which includes the provision of advice and feedback to DEET.

**8.6** We believe the current size of the Reference Group is too large for each representative to make an effective contribution. The Group has been operating since May 2000. It may be timely for its terms of reference and other aspects of the Group's operation (e.g. frequency of meetings) to be re-examined by members to ensure their needs are being met. Subject to the outcome of any review, we favour the retention of a smaller group with terms of reference that are reflective of the information needs of the broader membership.

### **Recommendation**

**8.7** We recommend that the operations of the Teacher Supply and Demand Reference Group be reviewed to ensure it continues to meet the needs of members.

### **Flow and exchange of information**

**8.8** One of the key responsibilities of any reference group, including this one, is to exchange information and to seek views and receive feedback on proposals. Significant exchange of information occurred between parties covering such areas as the Teacher Scholarship Program, DEET surveys of schools with recruitment difficulties and subjects which are difficult to staff, Deans of Education projections on supply and demand for teachers, and surveys by the Australian Education Union and Principals Associations on teacher shortages and unfilled secondary subject areas.

**8.9** However, it was apparent that there were limited processes in place for the dissemination of information to interested parties outside of the direct membership of the Reference Group or the peers of Group members. This may have been a consequence of limited executive support to the Group.

### **Recommendation**

**8.10** We recommend that the Reference Group identify the information needs of various constituencies and determine the most appropriate means of communicating information to these interested parties.

### **Potential for a more co-ordinated approach to work force planning studies**

**8.11** A number of separate studies on supply and demand for teachers have been conducted by DEET, the Victorian Association of State Secondary Principals, the Australian Education Union and the Deans of Education.

**8.12** We observed little evidence of any attempt to co-ordinate studies or to seek some agreement on standard methodological approaches and definitions and data sources. It is acknowledged that the methodology for these studies in many instances has been established prior to the establishment of the Reference Group, and that some studies are national rather than State-based.

**8.13** While various members of the Reference Group represent the views of their constituents, we believe there is sufficient common agreement between parties for them to adopt a more co-ordinated approach to the examination of supply and demand issues. Co-operative research projects could also be considered.

### **Recommendation**

**8.14** We recommend that the Reference Group:

- co-ordinate their studies of teacher supply and demand; and
- explore the potential to undertake co-operative research projects.

### **Areas of common agreement**

**8.15** According to the minutes of the Reference Group, there were substantial areas of agreement between Group members in relation to teacher supply issues. These areas included:

- the secondary school subjects which are difficult-to-fill with suitably qualified teachers;
- those schools in remote locations or in the western suburbs which face significant difficulties in recruiting teachers; and
- key initiatives such as the Teaching Scholarship Scheme.

**8.16** Despite areas of common agreement, we believe the absence of a decision-making mechanism and a long-term targeted plan has inhibited resolution of teacher supply issues.

## **FUTURE DIRECTIONS**

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### **Establishment of action-oriented body**

**8.17** We support the establishment of a small high-level body with equal representation from key decision-makers involved in teacher supply and demand. Individual members should then be tasked with the responsibility of seeking agreement within their respective organisations to implement actions that have been agreed in principle within the body.

**8.18** Membership of this body should include representatives from Victorian universities and employers of teachers covering the government, non-government and Catholic sectors, with an independent chairperson to provide leadership. Provision of support for this proposed body should also be addressed.

**8.19** In establishing a more action-oriented approach to addressing teacher supply and demand issues, there are a number of inherent difficulties, including:

- the competitive nature of the school education market, which may limit co-operation;
- the limited ability of the State as the major employer of teachers to influence the quantum of teaching places available. This is substantially determined by Commonwealth Government funding;

- in response to reductions in university funding, the present focus of universities on those disciplines likely to attract corporate support or the interest of the full fee-paying market. Despite the importance of high quality graduates in education to the State, education is not yet one of these disciplines; and
- the funding pressures placed on education faculties' capacity to discharge core responsibilities such as the supervision of school-based learning by students as part of their practicum.

**8.20** Given the above limitations, we believe the initial concentration of effort for the suggested body should be on addressing teacher supply issues associated with schools with recruitment difficulties and subjects which are difficult to staff rather than the general availability of teaching places at universities. In this context, DEET can play a significant role in developing initiatives and incentives to encourage a redirection of existing teaching resources into areas of greatest need as outlined in Part 7 of this report. This Part of the report also outlines the important role education faculties within universities can play in this regard.

**8.21** This body could also take an advocacy role, particularly in facilitating representations at a Commonwealth level.

### **Recommendation**

**8.22** We recommend the establishment of a high-level body in which key decision-makers can agree on, and then address within their respective organisations, teacher supply and demand issues.

### **Need for a targeted teacher supply plan**

**8.23** An adequate supply of teachers is critical to the achievement of the State Government's education and training policy goals and targets as outlined earlier in Part 2 of this report. This supply is affected by funding and allocative decisions made at a Commonwealth Government and university level. A 5-year teacher supply plan is required to support the achievement of the State Government's policy undertakings in education and training, where performance targets have been set for 2005 and 2010. The responsibility for the preparation of this plan should rest with the body recommended above and be its first priority.

**8.24** A 5-year plan would include:

- the identification of broad priorities and, within these priorities, areas of specific concern;
- the response or commitments by various stakeholders to addressing these concerns; and
- progressive targets and actual performance.



**8.25** This plan would require ratification at the highest levels within respective organisations. The plan should be publicly available and widely publicised to promote informed decision-making, not only by organisations such as DEET but members of the public. For example, such a plan would assist those individuals either at school or in other occupations who may be considering embarking on a teaching career. It is also critical that the plan be regularly monitored and updated to reflect changing priorities and the progressive achievement of performance targets.

***Recommendation***

**8.26** We recommend the development of a targeted teacher supply plan.

# Appendix 1

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## Audit criteria

## Audit criteria

<i>Audit objective was to assess –</i>	<i>Criteria</i>
Whether the Department of Education, Employment and Training (DEET) undertakes appropriate work force planning activities.	<p>DEET's work force planning activities:</p> <ul style="list-style-type: none"> <li>• are consistent with its legislative and policy framework;</li> <li>• are appropriate given the nature of the labour market for school teachers; and</li> <li>• support its role as a Statewide education policy maker and a major employer of teachers.</li> </ul>
How well DEET undertakes work force planning.	<p>Work force planning is undertaken economically, efficiently and effectively by ensuring that:</p> <ul style="list-style-type: none"> <li>• planning and forecasting models are transparent, meet the information needs of users, and use appropriate methodology;</li> <li>• appropriate data collection methods are in place;</li> <li>• forecasts have been reliable;</li> <li>• appropriate action is taken in response to the forecasting results; and</li> <li>• the cost is acceptable.</li> </ul>
How well schools undertake local work force planning and management.	<p>Work force planning and management by schools:</p> <ul style="list-style-type: none"> <li>• has been clearly defined in terms of schools' roles and responsibilities and complies with legislative and DEET policy requirements;</li> <li>• uses appropriate systems and data to identify staff requirements;</li> <li>• is supported by adequate tools and methods;</li> <li>• makes use of incentives for recruitment and retention; and</li> <li>• results in appropriate action being taken and staffing requirements being met.</li> </ul>
The effectiveness of initiatives to maximise work force planning outcomes.	<ul style="list-style-type: none"> <li>• There is evidence of a well functioning labour market (e.g. limited vacancies either overall, in hard-to-fill schools or specific subjects).</li> <li>• Prospective teachers are provided with adequate information and appropriate mechanisms are in place (if necessary) to inform their career choices.</li> <li>• Appropriate DEET initiatives/guidelines have been implemented to deal with major demand/supply issues (e.g. the impact of superannuation-induced attrition and re-employment).</li> <li>• Departmental accountability mechanisms, including evaluation processes, have been put in place.</li> <li>• Appropriate incentives are available at the school/university level to ensure the appropriate supply of teachers.</li> </ul>
The effectiveness of linkages between key stakeholders involved in teacher work force planning.	<ul style="list-style-type: none"> <li>• Effective and efficient mechanisms are in place to ensure co-ordination of work force planning requirements between DEET, universities and schools.</li> <li>• Effective long-term strategies have been developed for meeting teacher requirements.</li> <li>• There is evidence of action taken by responsible parties.</li> </ul>

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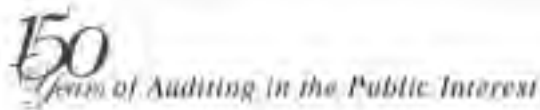
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