

NEW TEACHING, NEW LEARNING

A Vision for Australian Education



Australian Council of Deans of Education

New Teaching, New Learning: A Vision for Australian Education
October 2004
Australian Council of Deans of Education
Canberra

The Australian Council of Deans of Education Incorporated (ACDE) is the national organisation of the deans of faculties of education and heads of schools of education in Australian universities.

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ACDE

c/o RMIT

PO Box 71

Bundoora

VIC 3083

Ph: 03 9925 7844

Fax: 03 9925 7586

Email: andrew.harvey@rmit.edu.au

Website: www.acde.edu.au

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The Australian Council of Deans of Education Incorporated (ACDE) is the peak organisation representing the deans of faculties of education and heads of schools of education in Australian universities and other higher education institutions. It represents those responsible for initial and post-initial teacher education and much of the education research and scholarship throughout Australia.

The ACDE was established in 1991 and was incorporated as an association in the Australian Capital Territory in 2000. The governing Board of the ACDE includes representatives from each Australian State and Territory.

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This report draws on the 2001 publication, *New Learning: A Charter for Australian Education* (ACDE), subsequent submissions and reports by the Council, and discussion papers by ACDE members. The report has been prepared on behalf of the ACDE by Prof. Mary Kalantzis & Dr. Andrew Harvey.

Contents

EXECUTIVE SUMMARY	1
INTRODUCTION: NEW TEACHING, NEW LEARNING	5
Words and Actions	7
1) INVESTMENT IN EDUCATION IS IN THE NATIONAL INTEREST	9
Actions	19
2) THE DISCIPLINE OF EDUCATION IS CENTRAL TO THE KNOWLEDGE ECONOMY	21
Lifelong and Lifewide Learning	21
The Discipline of Education	22
Status and Resources	23
Actions	29
3) EDUCATIONAL RESEARCH IMPROVES LEARNING OUTCOMES	31
Educational Research	32
The National Institute for Quality Teaching and School Leadership (NIQTSL)	32
Actions	38
4) TEACHING IS THE CENTRAL PROFESSION OF THE KNOWLEDGE ECONOMY	39
Supply	43
Teacher Payment and Conditions	45
Professional Learning	45
Tertiary Teaching	46
Prior to School Educators	47
Vocational Education and Training Educators	48
Actions	54
5) OPPORTUNITY AND DIVERSITY: EDUCATION IS CENTRAL TO THE PROMISE OF DEMOCRACY	55
Opportunity	55
Indigenous Education	57

Autonomy and Empowerment: A National Indigenous Higher Education Council	58
Rural and Regional Australia	59
Diversity: languages	60
Actions	69
6) THE PUBLIC/PRIVATE DEBATE MUST BE REDEFINED	71
Rethinking the Public/Private Debate	72
Schools – An Education Commons?	73
Schools – Public Private Partnerships?	74
Higher Education	75
Actions	82
7) TECHNOLOGY WILL BECOME CENTRAL TO ALL LEARNING	83
Actions	88
A CALL TO OUR POLITICAL LEADERS	89
A CALL TO EDUCATORS	91
A CALL TO AUSTRALIAN CITIZENS AND VOTERS	93
BIBLIOGRAPHY	95

Executive Summary

New Teaching: New Learning has been prepared by the Australian Council of Deans of Education (ACDE). The ACDE is the peak organisation representing the deans of faculties of education and heads of schools of education in Australian universities and other higher education institutions. It represents those responsible for initial and post-initial teacher education and much of the education research and scholarship throughout Australia.

New Teaching: New Learning is, above all, a vision for the future. The Council argues that, despite rhetoric to the contrary, education is presently viewed as a cost rather than an investment by Australian politicians. Consistent overseas and longitudinal studies stress the economic benefits of investment in education to individuals and nations, yet our governments are increasingly abdicating financial responsibility for its provision. And this is a conscious decision.

Commonwealth expenditure on education has declined as a percentage of GDP over the last three decades. Yet overall Commonwealth expenditure as a percentage of GDP has increased over the same period. There is only one explanation for this: education has become a lower public priority. The nation, however, depends on informed citizens, learners and workers for prosperity and social cohesion in the twenty-first century. The first change required, then, is attitudinal.

New Teaching: New Learning begins by outlining the current conditions of commerce, technology and culture. These new conditions demand a rethinking of the role of education. In the twenty-first century, education will need not only to produce effective workers, but also to promote learning for its own worth, to encourage secure identities and to promote active citizenship. A vision across and beyond the education sector is required.

The Council then contends that seven propositions will shape the future environment of learning. Each proposition is supported by an action agenda, including a series of specific recommendations.

PROPOSITION 1 is that *Investment in education is in the national interest*. The returns on investment in education are high, because societies are becoming defined by their relationships to knowledge. The private return on investment in education is already well-documented. Yet education exports are also worth more to Australia's balance of payments than traditional earners such as wool. Indeed, we are entering a phase in history in which education is the central figure. Contemporary economic, social, cultural and military imperatives are now aligned. In education lies the future of the nation.

PROPOSITION 2 argues that *The discipline of Education is central to the knowledge economy*. If lifelong and lifewide learning are the hallmarks of the knowledge economy, then Education is the pivotal discipline. This Section argues that an

effective culture of lifelong learning relies on the science of Education. Today's teachers must deal with rapidly changing discipline and pedagogical knowledge; with increasing student diversity; and with new information and communications technologies. These changes demand unprecedented professionalism, and a complex range of knowledge and skills. The traditional view of educators as carers and nurturers has never seemed so inadequate. High quality education must be delivered by professionals, and backed by research and evidence, if the promise of lifelong learning is to be fulfilled.

PROPOSITION 3 maintains that *Educational research improves learning outcomes*. A culture of lifelong and lifewide learning requires knowledge about learning contexts and learner identities. These are connected to the science of Education. Yet if Education really is a science, then it must be backed by research evidence for what it does and advocates. There is substantial evidence of the links between research and improved educational outcomes. Yet research, and educational research in particular, remains relatively under-funded.

PROPOSITION 4 claims that *Teaching is the central profession of the knowledge economy*. The implications of the knowledge economy for educators are profound. Teaching is not alone in being substantially recast by the knowledge economy, but its particular relation to knowledge makes the profession pivotal to economic prosperity and social cohesion.

PROPOSITION 5 concerns *Opportunity and diversity: Education is central to the promise of democracy*. Education promises individuals greater social mobility: more access to material resources through better paid employment; a greater capacity to participate actively in the processes of government; and the personal dexterity that comes with knowing the world. It promises communities improved employment prospects, increased self-determination and extended access to the wider world. The key challenge, however, is to ensure that education fulfills its democratic mission, and *New Teaching: New Learning* argues that this challenge can only be met by dedicated programs which address inequality. Targeting groups disadvantaged and 'at risk' must be done, not on the basis of moral arguments alone, but also on the basis of the economic and social dangers of allowing individuals and groups to be excluded.

PROPOSITION 6 is that *The public/private debate must be redefined*. The ACDE believes that the current trends in Australian school education are both divisive and unsustainable. For the sake of the nation, the public school system cannot be allowed to run down, and the divide between rich and poor cannot be allowed to widen further. All schools need to reflect and practice democratic values, and to be accountable for their curriculum and resources. This accountability, however, needs not to promote a 'one size fits all' approach, but rather to underpin greater diversity and flexibility in educational provision. In Higher Education, increased private investment needs to be complemented by high levels of public investment. Education must be funded on the basis that the major beneficiary of highly educated Australians is Australia.

PROPOSITION 7, that *Technology will become central to all learning*, is arguably more complex than it first appears. Technologies of digitisation have the potential to transform learning relationships for the better, but this potential needs to be harnessed. This proposition contends that we need to learn through, but also *about* technology. Technology is not just a tool for learning, in other words. It should be one of the main things that learning is about - a message as well as a medium.

Introduction: New Teaching, New Learning

New Teaching: New Learning highlights the growing influence of education in the realms of work, citizenship and identity. It argues that learning is pivotal to success, and that teaching is the central profession of the knowledge economy.

New Teaching: New Learning provides a comprehensive vision for Australia – an Australia in which education is available to all, and in which learning is promoted, respected and rewarded.

In *New Learning: A Charter for Australian Education* (2001), the Australian Council of Deans of Education argued that education will increasingly be viewed as the key to both economic success and social cohesion. The knowledge economy, the Council argued, will depend on autonomous learners, citizens well-connected and secure in their identity, and highly trained workers. The majority of workers will be knowledge workers in the broad sense. Knowledge-intensive industries will themselves grow exponentially, but even industries such as manufacturing and agriculture will be transformed by the rise of Information and Communications Technologies, greater collaboration, and the need for interpersonal and problem-solving skills. Changes in technological, cultural and commercial conditions will be sweeping. *New Teaching: New Learning* continues the arguments first made in the *Charter*, but has been updated and revised following new research and recent educational trends.

Evidence of sweeping change is already upon us. Technological change is omnipresent. Semiotics and information and communications technologies now dominate the economy, and technical knowledge has a shorter and shorter shelflife (Kalantzis, Cope & Harvey 2003a; Kress 2000). It is not fixed assets, but the skills and knowledge of a workforce which now determine competitive advantage. Multi-skilling and lifelong learning are integral to success, not only in explicitly technological areas, but in traditional areas such as manufacturing (Candy, P. 2000; Golding, Davies and Volkoff 2001). Indeed, traditional industries, often overlooked in accounts of the knowledge economy, are themselves being transformed by technological processes.

Commercial conditions are also being reconfigured. Where vertical lines of communication once dominated, these are now being replaced by horizontal communication with peers. Where traditional structures of command were typical, they are now being replaced by pedagogical relationships. The strictly hierarchical nature of workplaces typified by the 'old' economy is being eroded, and the search for knowledge is increasingly recognised as a necessarily collaborative one. These developments are popularised in terms such as the 'triple bottom line', which acknowledge the need for organizations to broaden their measures of success (Cope and Kalantzis 2000; Senge 1990).

Finally, culture has come to be seen as a vital part of effective workplaces. Organisations are concentrating on winning employee commitment by setting up systems of belonging, and by harnessing diversity within and outside their

organizations (ACDE 2001). Internally, the teamwork so sought after in the knowledge economy relies on strong interpersonal skills, a respect for differences, and an ability to use these differences as a source of creativity, or as a link into the myriad of niches in the world in which the organization has to operate (Gee 2000: 47). Diversity, indeed, is everywhere. In a market context, contemporary customer service relies on appreciating diversity in serving niche markets and in providing mass customisation (Cope & Kalantzis 1997; Cross, Feather and Lynch 1994; Deal and Jenkins 1994).

These three shifts, in the conditions of technology, the conditions of commerce and the conditions of culture, are large indeed. In fact, they are signs of a quite fundamental systemic shift. Even the value of an organisation is no longer based on fixed capital. Indeed, the market capitalisation of today's organisations is built on a mix of these three things: technology (e.g. as direct means of production, as an internal systems filter and communications medium, as an information conduit to markets etc.); commercial processes (e.g. business systems, winning employee buy-in at the level of work teams and corporate culture, customer relationship management etc.); and culture (e.g. branding, customer relationships, commodity-aesthetics, the integrity of the product and the ability to tailor or customise products to meet the needs of diverse niche markets etc.).

These are all knowledge things, relationship things, things of human rather than fixed capital. Most importantly, they are all things that are made by learning. Learning has become pivotal to the whole economy.

And, for the learning which is now required, the old education simply won't do. As the *Charter* (ACDE 2001) highlighted, the new economy requires new persons: persons who can work flexibly with changing technologies; persons who can work effectively in the new relationship-focused commercial environment; and people who are able to work within an open organisational culture and across diverse cultural settings.

The 'knowledge economy' identifies a society transformed in the broadest sense by new relationships to knowledge. To speak of knowledge workers is not to speak of a particular niche of workers, but of a typical worker in the new economy. Neat separations will increasingly be more difficult to impose, all workers will need to learn throughout and across their lives, and education will be the key to both individual prosperity and national growth and security. In the twenty-first century, education will need not only to produce effective workers, but also to promote learning for its own worth, to encourage secure identities and to promote active citizenship (Kalantzis & Harvey 2003).

A vision across and beyond the education sector is required. If learning is becoming an operating principle of success, then a renewed focus on Australian education is needed. Investment in education must be made on the grounds of national interest; the discipline of Education must be acknowledged and supported by research; teaching must be recognized as the central profession of the knowledge economy; the promise of democracy must be fulfilled by addressing

opportunity and diversity; the public/private debate must be redefined and resolved, and; technology must be seen as essential to all learning. Conceptions and perceptions of education must change.

Words and Actions

There remains a gap between the words of our leaders and their actions. Ensuring that reality matches the rhetoric is a key challenge for the nation.

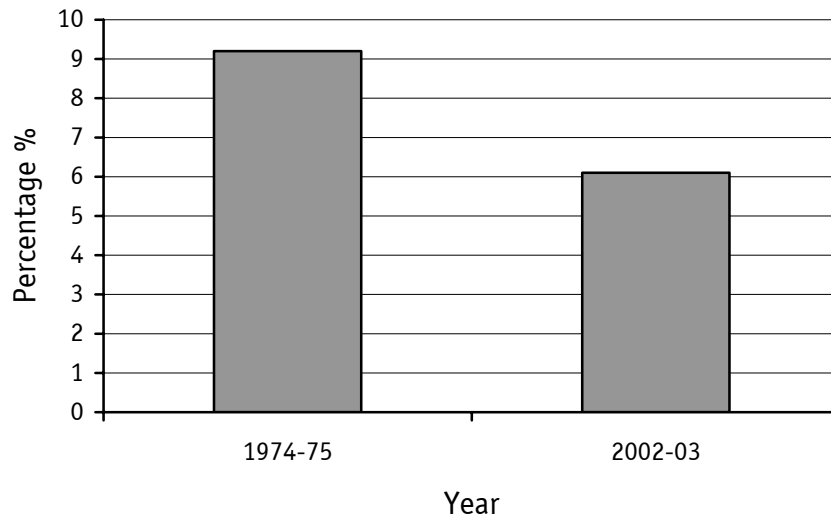
It is ultimately the struggle against what Socrates described as the root of all evil, and that is ignorance. It is our own ignorance at times, and the ignorance of others in other parts of the world. And that is why education is so critically important. It's about resilience for life. The more that we can invest in education, which is of a high quality, which we can measure as being of a high quality, the more that we can find and develop human potential in all its fields, then the stronger the country that we will be, and the more likely we will be to overcome attitudes and ideas which are founded in ignorance, prejudice and fear.

Dr Brendan Nelson, 24 March 2004, address to
the National Press Club

Education has always been important for creating the virtues of reason and tolerance. But now, with so many technological changes, it has become more than a pathway to social enrichment. It is the key to economic success – for individuals, communities and nations. There is a lot of talk in the media about the new economy. Its meaning is actually quite simple. The things we used to do with our hands are now being done with our heads. Jobs based on muscle power and machine power are being replaced by brain power.

Mark Latham, 20 April 2004, address to
the Global Foundation

Commonwealth expenditure on education as a percentage of total outlays on all purposes



Source: ABS cat. 5512.0

There has been a steady decline in Commonwealth funding of education, relative to other portfolios, over the past three decades. Relative funding is estimated to increase over the next two years, but the plight of Australian education must be seen in context. It is not smaller government which has led to declining funding. Primarily it is that education has been consciously designated a lower priority over time.

1) Investment in education is in the national interest

In many nations, rhetoric of the importance of education is being followed by resources. In the UK, the US and Singapore, substantial public investment increases are being made in the education sector, and for good reason. The returns on investment in education are high, because societies are becoming defined by their relationships to knowledge.

Most obviously, in leading economies around the world, the education sector is quite simply getting bigger. It is itself a 'lead industry' in the new economy. Because it is more important today and more needed, there is simply more demand for education (ACDE 2001).

Second, the sectors of most significant economic growth are knowledge intensive. These growth industries depend on human skills in the areas of technology, commerce and culture. Our country can no longer rely on luck and the wealth of its natural resources. We are a large country of few people. Our success now depends on being technologically smart, commercially astute, and culturally sensitive. In the new and rapidly growing export sectors, Australia now has to be all of these things: in tourism, finance, international education, information technology, health and business services. These are all industry sectors built on human-skills advantages, not the easy natural resource advantages of the past (Cope & Kalantzis 1997).

Third, *the old economy*—the economy of manufactured things—is being transformed. Even here, economic futures, right down to the success of an individual enterprise, no longer rest on the accumulation of fixed assets as was the case in the era of industrial capitalism. Rather, as the Introduction highlighted, the value and even the market price of today's capital is built on a mix of three key capacities: technological, commercial and cultural. These, in fact, are the three biggest 'products' that education can offer the 'knowledge economy'. In this new capitalism, the processes of knowledge creation in the collective sense (research, corporate memory), and knowledge creation in the individual sense (student learning), have become pivotal even to what might be characterised as old economy sectors.

The truth of these changes is evidenced by economic figures. For individuals, the benefits of education are clear. Data suggest that an Australian male higher education graduate would earn 14% more over their life compared to a non-graduate, while a female would earn 21% more. And labour force participation rates rise steadily according to level of education. Australians who have finished Year 12 or a vocational equivalent are around one and a half times more likely to be employed full-time than those who have not (Australian Government 2004: 1).

Despite these impressive figures, the private rate of return on higher education investment is actually declining (Chapman and Ryan 2002). This is primarily due to increasing private costs of education, and to an increase in graduate labour. As Gallagher notes, the proportion of the labour force aged 15-64 years with degree

level qualifications has almost doubled from 12% in 1993 to 21% in 2003, while the level of graduate earnings relative to average earnings has fallen in recent years (2004: 13). There is still a substantial net benefit to individuals who participate in higher education, but higher fees are already impacting on this benefit.

Education is not only a private good. Education exports are now worth more to Australia's balance of payments than traditional earners such as wool. And unlike many traditional earners, education is growing rapidly. Most Australian universities now have an overseas presence, and education-related travel services have accounted for more than \$4 billion in annual revenue since 2000 - a threefold increase over a decade (Doherty 2004). The net benefit of tertiary education alone to the Commonwealth Budget was estimated at about \$9.6 billion in 2001-02. This was projected to rise to over \$12 billion by 2010-11 (Johnson and Wilkins 2003). More broadly, the Organisation for Economic Co-operation and Development (OECD) estimates that each additional year of education across a country's population lifts gross domestic product (GDP) in the long term by between 4% and 7% (see Australian Government 2004). The return on investment is substantial and growing. Education is a profitable enterprise.

Beyond a narrowly economic focus, there is a decisive cultural argument for education investment. This approach emphasizes increasing globalization and the need for citizens to work and live in a global environment. The Harvard University Review of Curriculum (2004) notes these new exigencies:

First, today's world requires a greater emphasis on internationalization...Our students of the twenty-first century go out into a world made smaller by technology, but still defined by different and changing cultures and civilizations. They may well find themselves living and working in another part of the world, and surely must expect to work with colleagues who bring with them differing cultural assumptions. (p.8)

New Teaching: New Learning argues that working with diversity will be increasingly important for learners, citizens and workers. Indeed, the cultural need for greater understanding is linked to a third argument often raised for education: security.

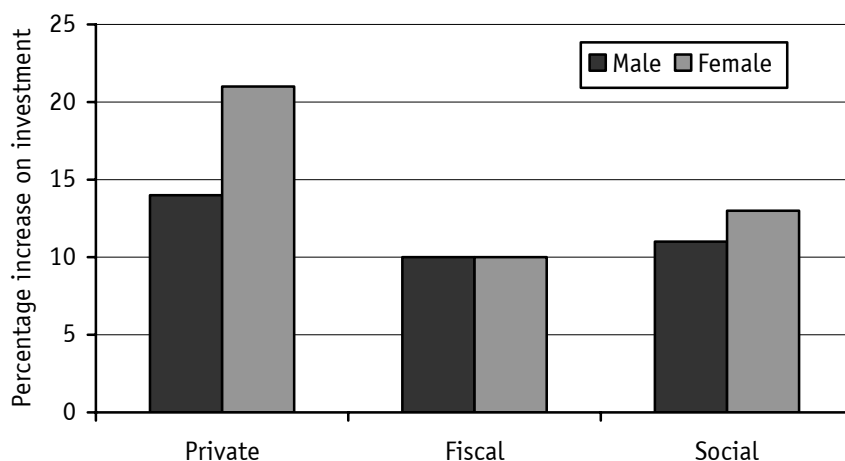
The Commonwealth Minister, Dr Nelson, often invokes the claim of US President Thomas Jefferson that education is the 'defence of the nation'. This claim could be interpreted as a narrow, perhaps even isolationist, reason for investing in education. Yet it can also be viewed in a broader sense, as articulated by the head of the Australian Defence Force, General Peter Cosgrove. Security is more than a matter of military might or economic power. As Cosgrove noted,

The message from the new relationships that have formed as a matter of necessity on recent humanitarian and peace support operations is that the ADF needs to prepare and anticipate a requirement to be more politically and culturally sophisticated in the conduct of 'good neighbour' operations in the future. Good neighbours learn to speak each other's languages...Good neighbours learn to respect each other's religious and cultural beliefs. Good neighbours learn to allow for differences and to be inclusive. Good neighbours spend time with each other. Good neighbours understand that contentious issues should be resolved through negotiation' (2000).

In this context, international links need to be forged not on narrowly conceived economic or military grounds, but on the basis that cross-cultural understanding is the only true bulwark against ignorance, racism and social unrest.

These arguments are all connected. Underpinning the need for greater investment in education are sweeping societal changes. Together they represent a new phase in history, in which education is the central figure. Contemporary economic, social, cultural and military imperatives are now aligned. In education lies the future of the nation.

Estimated rates of return on investment in education, Australia



Source: OECD (1999) Table A4.3 page 112

The NTEU submission to the Senate Inquiry into Higher Education (2003: 8) notes that:

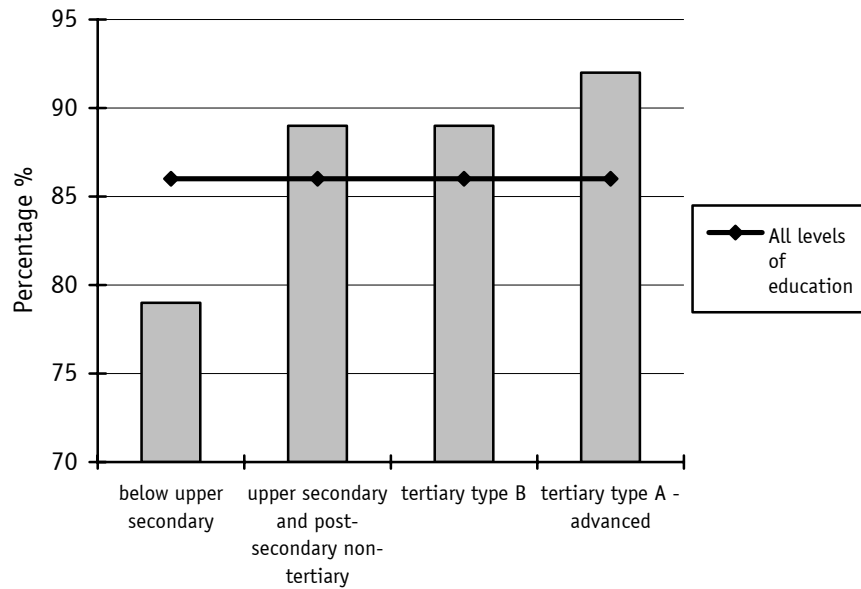
The **private rate of return** estimates the net benefit that graduates gain through higher earnings over their working life as result of having a university degree. Based on the data in Table 2, an Australian male graduate would earn 14% more over their life compared to a non-graduate, while a female would earn 21% more.

The **fiscal rate of return** measures the net benefit to the Government's budget bottom line for every dollar invested in higher education. For Australia, this means that for every dollar the government invests in higher education they will either receive additional taxes or pay lower welfare to the value of \$1.10. A recent study by Johnson and Wilkins (2003) estimated that tertiary education provided a net benefit to the Commonwealth Budget of about \$9.6b in 2001-02 and this was estimated to rise to over \$12 billion by 2010-11.

The **social rate of return** measures the combined private and fiscal returns. It should be emphasised that the social rate of return in particular is considered to be a narrow estimate in that it does not attempt to estimate the broader macro-economic impacts of higher education in relation to improved productivity and higher economic growth rates that are likely to be a consequence of investing in higher education.

These figures clearly show that the returns on investment in education are high, not only for individuals, but for the society in which they work and learn.

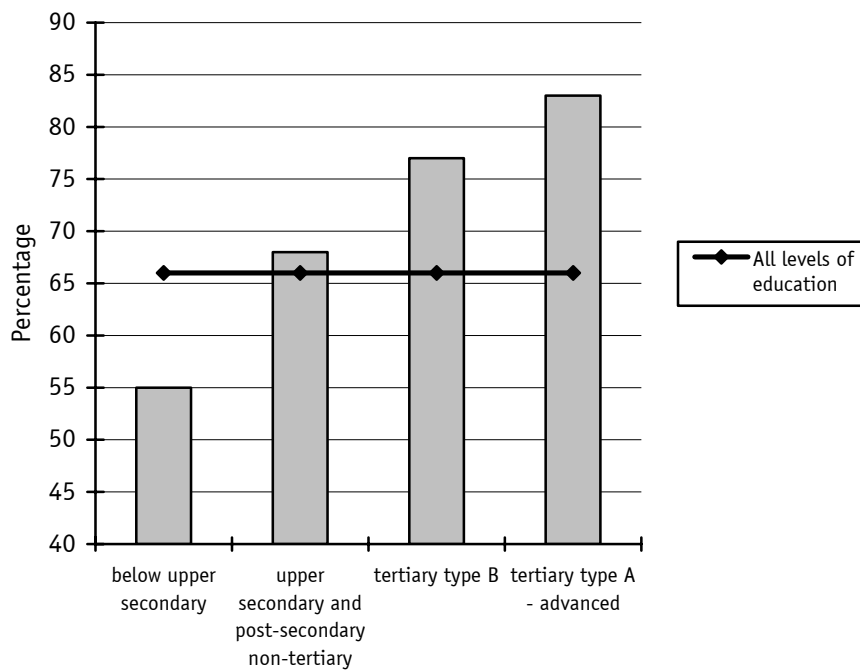
Australian labour force participation rates: males (2001)



source: OECD 2003 Table A12.1

Rates of participation in the labour force rise according to levels of education. The Dusseldorp Foundation has confirmed the high cost of early school leavers to the national economy. Much of this cost arises because those without formal education are much less likely to find gainful employment than those who hold qualifications. The data suggest a renewed effort is required to boost school retention rates, and to increase participation in tertiary education.

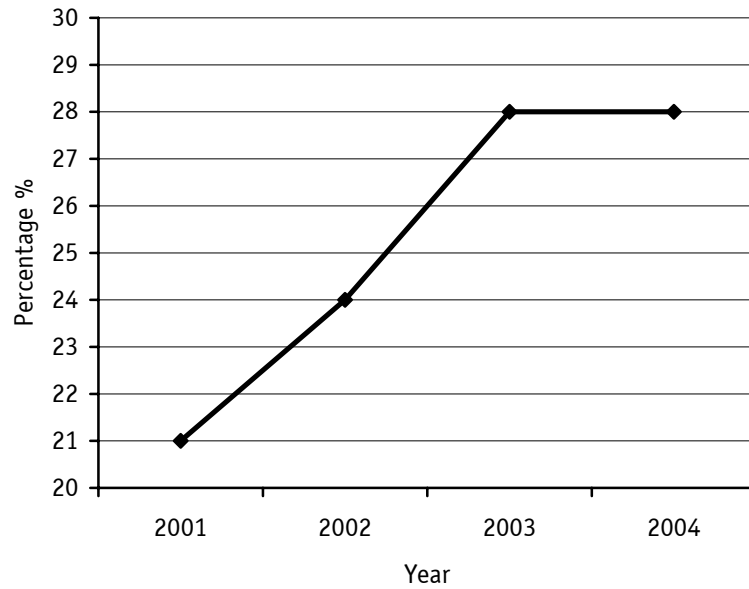
Australian labour force participation rates: females (2001)



source: OECD 2003 Table A12.1

For females, the link between gainful employment and qualifications is even stronger than for males. Females who fail to complete year 12 are much less likely to be in the labour force than those with higher degrees. As with males, labour force participation for females rises substantially with each stage of further education.

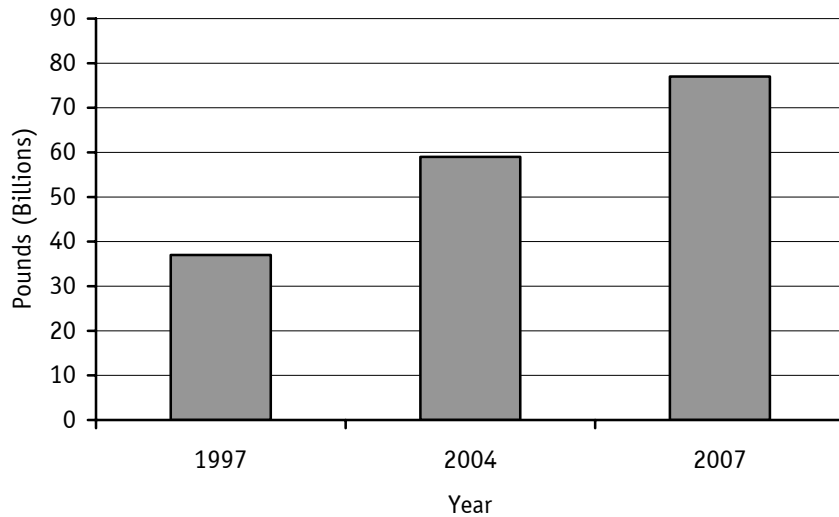
Unmet demand: Percentage of eligible applicants not receiving a university offer



source: AVCC statistics

In higher education, over 63,000 eligible applicants did not receive an offer in 2004. This is particularly concerning at a time when education opportunities require expansion. The percentage of eligible applicants not receiving an offer has risen substantially from 21% in 2001 to 28% in 2004.

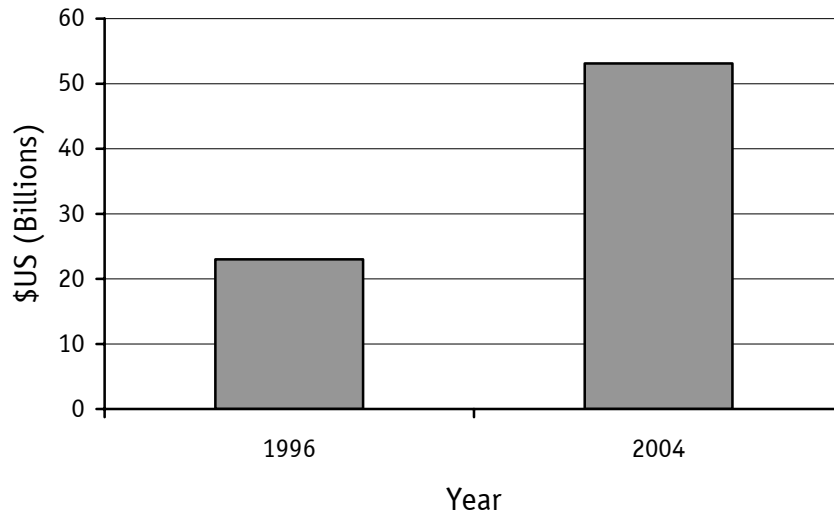
Public investment in education, UK, 1997-2007



Source: Clarke, C. 2004 (Budget details at <http://www.hm-treasury.gov.uk/>)

Across the UK, funding for education is to rise to £77bn by 2007-08, up from £37bn in 1997 and £59bn this year. A concerted effort has been made in the UK to boost public funding for education. Upon coming to office in 1997, Tony Blair proclaimed that his focus would be on 'Education, Education, Education'. Public funding will have more than doubled in the decade to 2007, as the UK gears up for the knowledge economy.

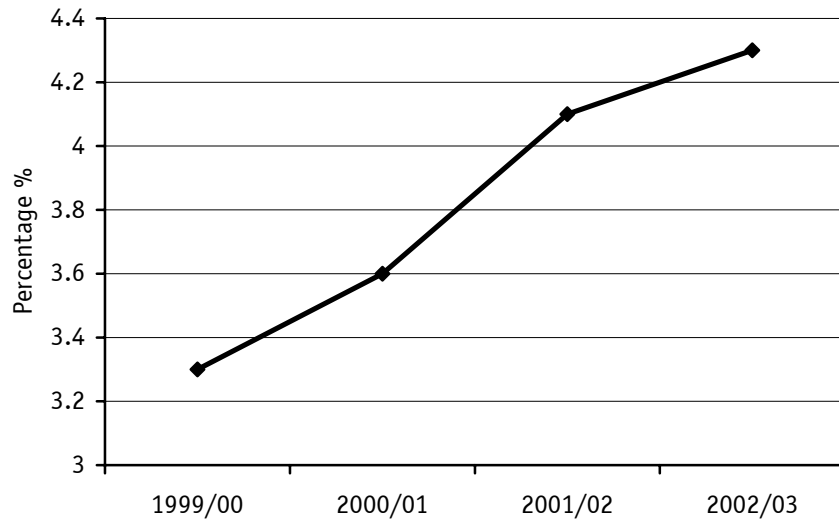
Federal public investment in education, US, 1996-2004



Source: US Dept of Education 2003

Federal public investment in US education has more than doubled in the eight years to 2004. The US government now clearly views education as a matter of national importance, and as the top domestic priority. As the US Department of Education notes, 'Despite the many priorities competing for tax dollars--protecting our homeland, fighting terrorism and recovering from recession--President Bush's budget request for 2004 provides \$53.1 billion for the U.S. Department of Education, an increase of \$2.8 billion or 5.6 percent above his 2003 spending plan and the largest dollar increase of any domestic agency.'

**Public expenditure on education
as a percentage of GDP, Singapore, 1999-2003**



Source: Singapore Ministry of Education
<http://www.moe.gov.sg/esd/Factsheet2003.pdf>

The trend in Singapore is unmistakable. While public spending on education was at a relatively low base in 1999, it has risen substantially since. The figures reflect a realisation by the Singapore government that greater public investment is essential to the nation's competitiveness and prosperity.

ACTIONS

- Increase public funding across all sectors. By 2008, the size of the education sector in Australia as a proportion of the whole economy should be in the top quarter of OECD countries;
- Establish a Charter of Budget Honesty in Educational Investment, in which governments relate their levels of investment to projected long term returns—to individuals, to businesses, in terms of improved social indicators, and in terms of their own tax-take;
- Develop lifelong learning accounts to fund training and ancillary learning experiences, supported by a mix of personal, employer and government funding;
- Increase public funding of languages, including student and teacher exchange programs;
- Governments to advocate the importance of multiculturalism and facility with languages other than English.

2) The discipline of Education is central to the knowledge economy

If lifelong and lifewide learning are the hallmarks of the knowledge economy, then Education is the pivotal discipline. This section argues that an effective culture of lifelong learning relies on the science of Education. Today's teachers must deal with rapidly changing discipline and pedagogical knowledge; with increasing student diversity; and with new information and communications technologies. These changes demand unprecedented professionalism, and a complex range of knowledge and skills. The traditional view of educators as carers and nurturers has never seemed so inadequate. High quality education must be delivered by professionals, and backed by research and evidence, if the promise of lifelong learning is to be fulfilled.

Lifelong and Lifewide Learning

Lifelong learning means that education is no longer located at a discrete time on your life, your one chance to learn, a time when you learn things that are sufficient for life. Specific skills and knowledge learnt today may be obsolete in twenty years time or even five years time, and we will increasingly need to retrain and relearn throughout life (ACDE 2001).

Lifewide learning is about learning across life, not just in formal educational settings. This requires a new perception of education. The distinction between 'knowing' and 'doing' needs to be broken down (Kalantzis, Cope & Harvey 2003a; Arnold & Ryan 2003). The idea that education is something you learn in institutions, which then prepares you for life, is no longer relevant. The division between vocational and non-vocational learning is fading. Instead must come a recognition that learning occurs throughout life in all kinds of contexts, and that vocational advantages can be found in the most informal and unlikely of educational forms. Broadening access and participation means recognising that pool halls, libraries, shopping malls and parks are all viable educational forums.

As Section 5 argues, the new frame of reference for learning—lifelong and lifewide—also changes what formal educational institutions should be teaching.

The old learning focused on fixed content knowledge: undeniable facts and theories-to-be-applied, vocational skills and technical information, and these were supposed to last for life. Applied today, this kind of education becomes instantly redundant. In fact, it fosters a rigid way of thinking which will be counterproductive for the workers, citizens and persons of the near future.

The new learning is less about imparting defined knowledge and skills and more about shaping a kind of person: somebody who knows what they don't know; knows how to learn what they need to know; knows how to create knowledge through problem solving; knows how to create knowledge by drawing on

informational and human resources around them; knows how to make knowledge collaboratively; knows how to nurture, mentor, and teach others; and knows how to document and pass on personal knowledge. In sum, this kind of person is open to autonomous, assisted and collaborative learning.

These kinds of capacities are at a much higher level than what was measurable by old-style tests of fact and theory. And, despite the increasing pressure to specialise, the focus of all education should be on underlying and transferable capacities, not only the specifics of an area of specialisation. In fact, in formal education settings there is an increasing need to move towards more general and more comprehensive education, around technology (science, mathematics, applied sciences), commerce (working together sociably), and the humanities (cultural understandings, capacities for intercultural interaction and boundary-crossing) (Kalantzis, Cope & Harvey 2003b).

When it comes to lifelong and lifewide learning, it's not enough to be learning in new settings, such as work- integrated learning, nor to be blurring the boundaries which once separated formal institutionalised education from the rest of life. The transformation also needs to be in the very way knowledge itself is constructed, the content of curriculum, even the purposes of learning. Even within the old institutions of learning, the focus must be on preparing students for lifewide learning, and developing the capacity to learn in other settings.

The Discipline of Education

All of these changes demand a renewed focus on the science and discipline of Education. If knowledge is to be the key currency of the twenty first century, then the discipline of Education must be privileged. This means promoting educational research, as Section 3 argues. It means supporting and fostering a new breed of educators, as Section 4 outlines. And it means supporting the discipline of Education within universities. Education is often equated with teacher education, but faculties of Education address the full breadth of the discipline. Education faculties are, for example, central to managing organizational change. In promoting collaboration and communication skills, the discipline of Education is invaluable to organizations seeking to effect change with the support of employees. Education acknowledges that pedagogical relationships are replacing hierarchical command chains, and that vertical structures of accountability are being overtaken by horizontal, peer relationships. These insights are increasingly of use to corporations, governments and other institutions outside of formal learning environments.

Nevertheless, Education is currently at the margins of the university. The ACDE believes that the discipline of Education is central to the university, and that this needs to be acknowledged by governments, Vice-Chancellors and the broader community. The science of Education needs to be well resourced, closely linked to other disciplines, and involved in the education of academics across the university. It needs to be a priority in both name and fact. It is not yet.

Status and Resources

Teaching and learning is certainly on the national agenda. However, Education within universities remains marginalised. At issue is funding, but also the way that education faculties are conceptualised and positioned.

There are currently just fourteen dedicated faculties of education in Australia. This seems remarkable given the number of students enrolled in teacher education programs across the country (around 40,000 annually). The anomaly arises because most students find themselves in a school of Education, which is itself located within a larger organisational unit. These larger units usually comprise arts and social sciences, though may cover areas as diverse as science, information technology, communications and health. In the last decade, nearly half of the Education faculties have been merged into larger organisations.

Naturally, the larger units have more resources and control over their strategic direction than smaller subsidiary schools. Despite the political rhetoric, then, Education schools often find themselves with little ability to lead. Instead, they are embedded in larger and larger organisational units, on the grounds of efficiency within the university. The paucity of dedicated Education faculties is at odds with the rhetoric of their purpose.

The perception of Education as a poor cousin is thus maintained. There are a number of reasons for this perception. First, Education is a latecomer to university. It was only from 1989 that Colleges of Advanced Education (CAEs) became incorporated into a university structure. Embedding Education has proved a slow process, and competition from the more established university disciplines is often evident.

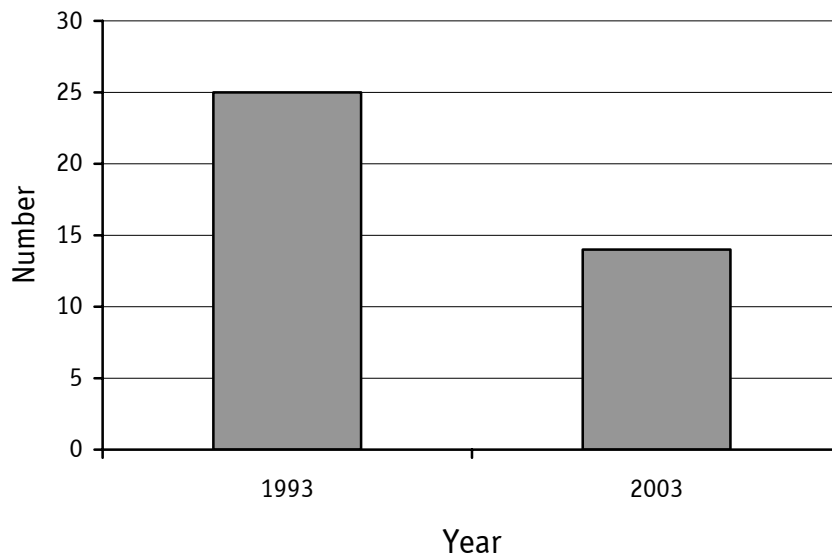
Moreover, Education *is* a poor cousin. Generally, Education has been unable to attract the funds of higher profile, or more marketable, disciplines. This is due to the historically low status of teaching in the community, and to underestimation of the worth of educational research. It is also due to the long-term nature of most educational benefits. Pressures on the few remaining faculties of Education will increase as the trend towards marketisation continues. Preventing Education faculties from charging top-up fees assists students in the short-term, but does not help the faculties in a competitive environment.

Education academics are also declining in number. In 1988 there were nearly 3000 academics in the field of Education, representing 7% of academics across the university. By 2001, that number had shrunk to just 1800, or less than 4% of total academics (Preston 2002). Student/staff ratios are also worse in Education faculties than other disciplines in universities (AVCC 2004). Beyond this, academic salaries are uncompetitive compared with those of school principals and senior teachers (Preston 2002).

Ironically, as Education is becoming marginalised within universities, a renewed push is being made for improved tertiary teaching. As Section 4 outlines, the ACDE supports moves to improve teaching and learning within higher education.

At the centre of such moves needs to be evidence-based practice. The discipline of Education, and the faculties responsible for this discipline, need to play a leading role in the quest for better tertiary teaching. If the importance of Education is acknowledged, consequences follow for educational research, and for the role of educators in society. The following two sections address these issues.

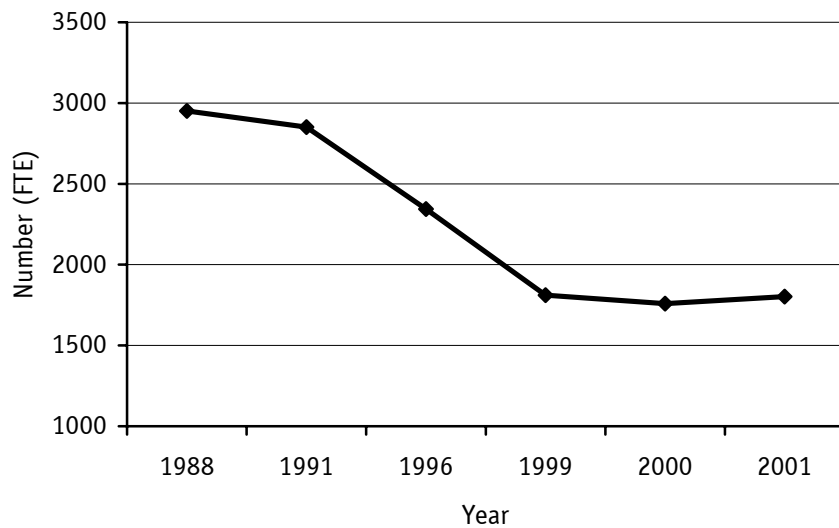
Faculties of Education, 1993-2003



Source: internal ACDE data

Just fourteen dedicated faculties of education remain in Australian universities. Other schools of education are now located within larger units and faculties. The result of this change is that the discipline of Education has lost influence. It is difficult for those dedicated to education to set strategic goals and priorities in this context. At the very time when the science of Education is of increasing importance within (and outside) the university, the place of Education is becoming marginalized within it.

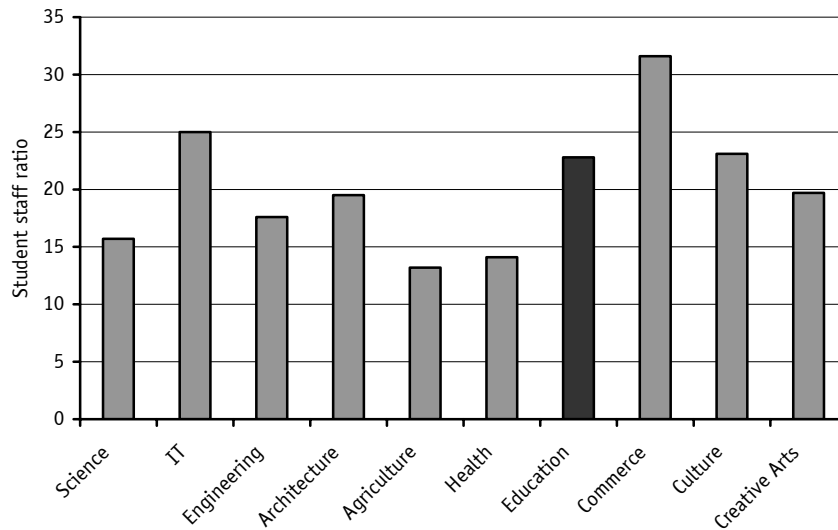
**Number (FTE) of Education academic staff,
Australian higher education, 1988-2001**



source: Preston 2002

The number of academic staff within Education has declined over the past fifteen years. This is further evidence that while the discipline of Education is ascendant, the number of Education experts is in decline. It is important that those with professional qualifications and knowledge be at the centre of a culture lifelong learning, both on and off campus.

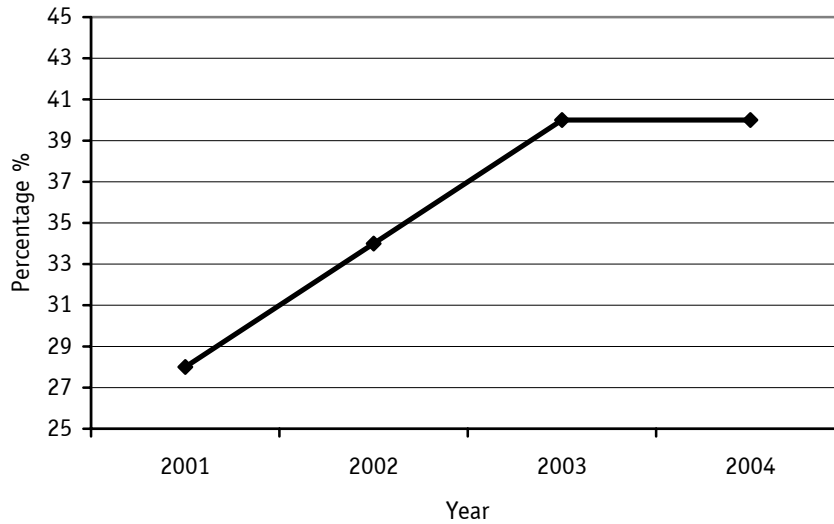
Student staff ratios by Academic Organisational Unit (AOU)



source: AVCC 2003

The student: staff ratio for Education is 22.8, substantially higher than the university average of 21. As the research conducted by Education faculties shows, better student/staff ratios are important in improving learning outcomes. If teaching is the central profession of the knowledge economy, this proposition is not yet reflected in the resources devoted to Education students.

Unmet demand: Percentage of eligible applicants in Education not receiving a university offer



source: AVCC statistics

Within Education, unmet demand has risen alarmingly since 2001. At a time of teacher shortages, and when the portability of Education degrees is in high demand, there has not been enough supply within the Higher Education system. 40% of eligible applicants missed out in 2004, up from 28% in 2001. This represents nearly 10,000 eligible applicants who are now not offered a place in the field of Education. This high number is particularly concerning given the centrality of Education to universities and to the nation's future prosperity.

ACTIONS

- Increase base funding to enable a reduction in student/staff ratios, a higher quality teaching and learning experience, and the realisation of teacher education as a national priority;
- Increase academic salaries to make them attractive both internationally, and compared with school-based salaries;
- Include, and harness the experience of, teacher education schools/faculties in tertiary teaching and learning initiatives across the university;
- If a variable HECS fees market is maintained, remove the quarantining of Education from it;
- Ensure that the Commonwealth's pledged \$81.4 million increase in practicum funding reaches the Education faculties in its entirety.

3) Educational research improves learning outcomes

In Section 2 we argued that Education must be seen as a discipline in its own right. Moreover, the discipline of Education is arguably the key discipline of the knowledge economy. A culture of lifelong and lifewide learning requires knowledge about learning contexts and learner identities. It requires knowledge about what should be taught in a time of rapidly changing knowledge, knowledge of how different learners learn, and knowledge of how the new technologies can be harnessed for effective learning. These are all connected to the science of Education. Yet if Education really is a science, then it must be backed by research evidence for what it does and advocates.

Despite Backing Australia's Future II, the overall level of Australian research is projected to remain steady at 1.6% of GDP. Indeed, public investment in research is actually projected to decline over the next decade. This is disappointing given the clear links between research and economic growth. If for no other reason, the pragmatic case to invest in research is strong. For the discipline of Education, however, the problem is greater still. Education remains almost alone as a discipline of national importance without a dedicated research funding body. Indeed, there is less research funded in the field of Education than in nearly any other field. Redressing this imbalance is a key priority if Australia is to thrive in the knowledge economy.

Beyond funding issues, there is a need to reconsider national research priorities, to ensure that any emphasis on science recognizes that the 'take up' and 'impact' of scientific discoveries and new technology is just as important as their discovery itself. Civil society, cultural diversity and growing socio-economic disparities in the face of rapid change require that humanities research sits alongside sciences and technology. As such research relies inordinately on the work done in universities, the ACDE encourages that priorities continue to be put in place which enhance the level of funding available in these areas. This is the case especially for education where an international reputation for being a contributor well beyond its relative size is at serious risk of slipping.

The ACDE also emphasises that the national innovation agenda, focusing on the importance of research and development in the hard sciences, is entirely dependent on the quality of the compulsory education sector in order to produce the undergraduate and post graduate students in the hard sciences that the nation so desperately needs. There needs to be recognition of the pipeline effect, so that the preparation of a new generation of knowledgeable, highly skilled, dynamic maths and science teachers (and the upskilling of the current teaching workforce, especially (though not exclusively) in maths and the sciences) should be identified as an essential element of this national agenda.

Educational Research

Educational research is important but neglected. In *The Impact of Educational Research* (DETYA 2000), Tom Phelan gathered results from five distinct though related studies on education research. His report found 'compelling evidence that Australian educational research is respected internationally and makes a difference in the worlds of schools, and policy development' (DETYA 2000: 4). Phelan also found, however, that research 'accounts for less than one per cent of the total personnel resources devoted to education and training in Australia. Of these resources, university-based research accounts for about 90 per cent' (DETYA 2000: 5). Research into education depends on proactive government policies, and the impact of public investment on this research is both measurable and substantial.

Research into professional learning is poorly developed, as the forthcoming joint ACDE and ACDS Report into professional learning, and the Commonwealth Review of Teaching and Teacher Education, have found. We simply do not know enough about which programs work, which means inefficient delivery of resources and poorer quality teaching and learning. Research into pedagogy is also under-developed. Successful learners will be intelligent in more than one way, that is, their intelligence may in turn be communicative, numerate, technical or process-oriented, or it may be emotional, analytical, creative or critical (Gonczi 2002). Recognising different modes of learning is a key challenge for educators, as is developing effective pedagogies which reward difference, and which acknowledge a breadth, as well as depth, of intelligence. In the 2000 AARE Radford Lecture, Kemmis (2000) argued that Australian educational researchers now, more than ever, understand that their research efforts must be increasingly directed towards the classroom experiences of teachers; that past practices of educational research contributed to the creation of a 'perceived "gap" between theory and practice, and between the work and concerns of universities and schools.'

As Lovat underlines in the ACDE Discussion Paper, *The Role of the 'Teacher': Coming of Age?* (2003: 24), greater collaboration is essential:

Collaborative research between teacher educators and practicing teachers where, as Lingard (2001, 6) argues, teachers themselves are seen as researchers rather than as 'mere translators of research done elsewhere', needs to be supported as a matter of urgency if gains in curriculum development, pedagogy, teaching and learning are to be achieved. A collaborative approach would also facilitate the establishment of stronger functional relationships between schools and teacher education institutions.

The National Institute for Quality Teaching and School Leadership (NIQTSL)

The NIQTSL could be used to fill an important gap in Australian education. The discipline of Education needs a separate research funding pool, similar to the National Health and Medical Research Council (NHMRC). Such a pool of funding could ultimately be administered by the new National Institute.

As Judith Gill notes,

Of the recent Australian Research Council grants – which have become the main source of large-scale funding for educational research – education successes were rare indeed. In all, fifteen education projects were funded in the latest Discovery grants out of the 875 funded projects altogether; education received less than 2 per cent of the number of grants; in money terms the percentage is lower still. (2004: 8-9)

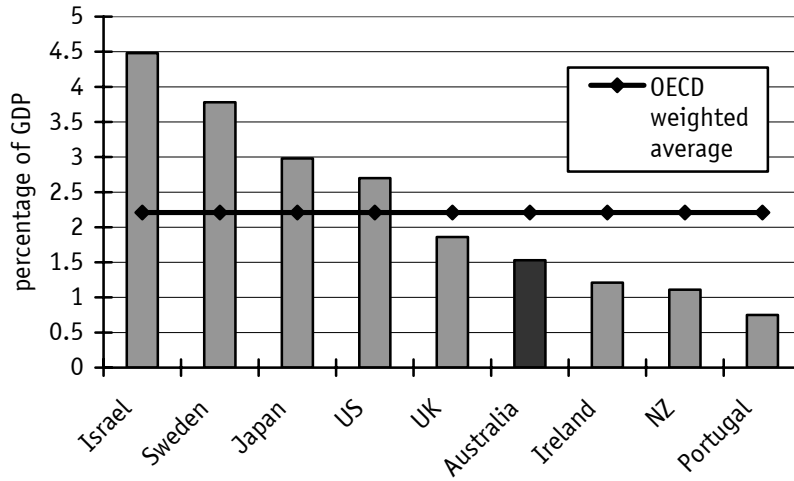
Yet as the Australian Association for Research in Education (AARE) has noted, the higher education sector accounts for 81 per cent of all expenditure on educational research, but only 29 per cent of expenditure on all research. Further, the higher education sector accounts for 91 per cent of all human resources devoted to educational research, but only 50 per cent of expenditure on all research (2004).

Together with Phelan's analysis, the result of these figures is clear. Educational research is vital, and that which is conducted makes a material and substantial difference to learning and broader outcomes. Nevertheless, educational research is under-represented in the ARC process. Higher education, where the vast majority of educational research is conducted, is consequently being starved of funds to carry out this research. The need for a designated national research funding body is manifest.

Promoting and enabling research is integral to the success of the newly established NIQTSL. Indeed, research should underpin the success of all Institute functions. The Institute could be most effective in promoting, facilitating and disseminating educational research, and in serving as the clearinghouse so badly needed. This would also provide a much-needed national focus. Presently, research productivity is held to be very uneven between institutions, and research activities are seen to be distributed poorly (DETYA 2000: 10-13). These problems could be addressed by the Institute allocating research funds on a distributed model, similar to the ARC and NHMRC.

Specific funds would need to be allocated to achieve these research related goals. Importantly, the NIQTSL could devise a grants scheme to support research in quality teaching and school leadership, perhaps specifying annual priorities for part of the funds allocated for this purpose. Priorities may be set by an expert board of rotating members, and research fellows may be seconded from across the country to work for limited periods of time at the Institute. The NIQTSL could enter into partnerships with universities by providing research support via a grants scheme.

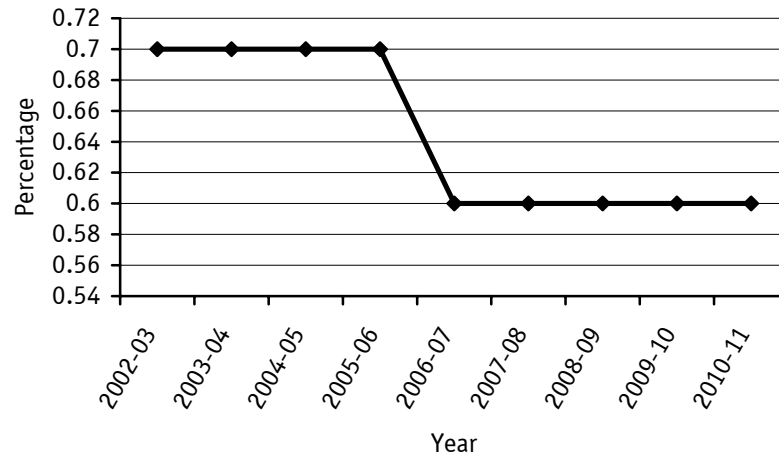
Investment in R & D as a percentage of GDP



Source: Group of Eight 2002: appendix 2

Australia's total investment in R & D is approximately 1.6% of GDP. Nations such as Sweden and Israel devote more than double this amount to research, and the US and UK also devote substantially more resources. Research is a key driver of economic growth and innovation, and Australia needs to aim to invest at least 2% in R & D to be internationally competitive.

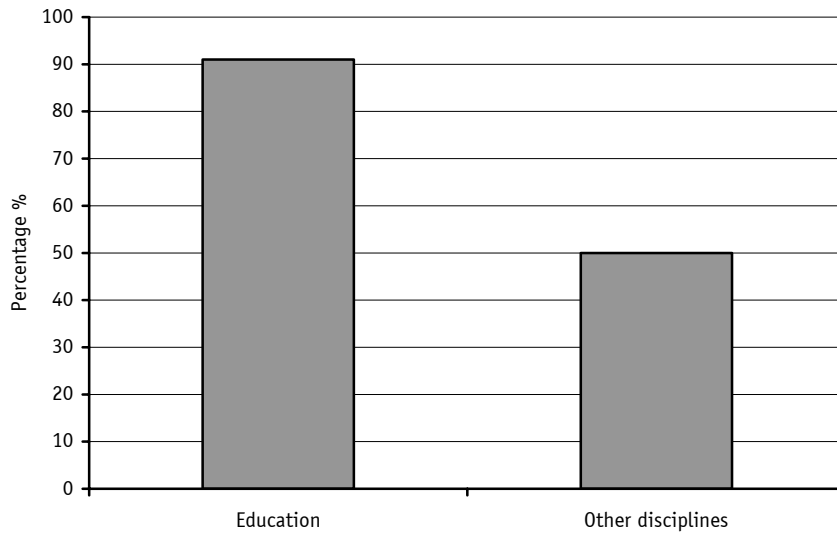
Estimated Commonwealth investment in R & D as a percentage of GDP



Source: AVCC 2004

While our overall level of investment in R & D is predicted to remain steady under Backing Australia's Future 2, public investment is projected to decline. This is concerning given the recent corresponding decline in public investment in tertiary education. To prosper in the knowledge economy, it will be necessary to maximize both public and private investment in research.

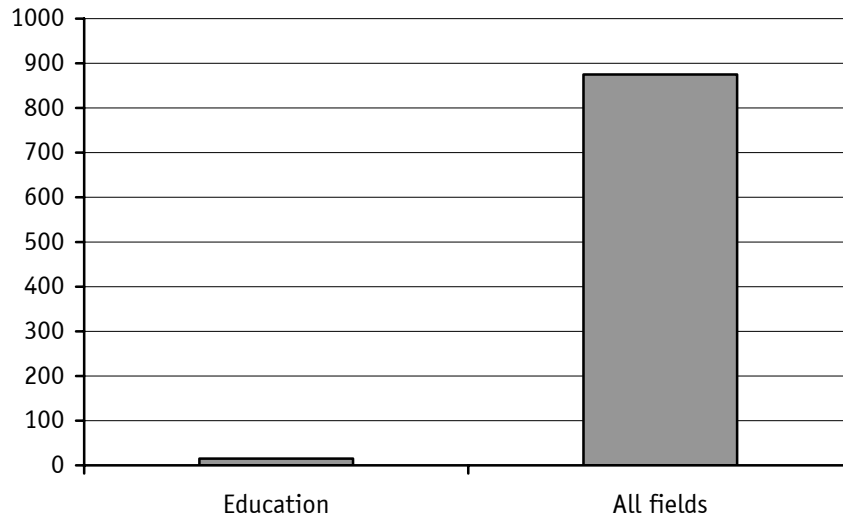
Percentage of research conducted by Higher Education institutions



Source: Australian Bureau of Statistics (1998-99)

Nearly all research within the field of Education is conducted by universities. Most other disciplines attract substantial levels of private investment in research, but educational research is typically less commercially attractive. However, educational research is overwhelmingly in the national interest. The concentration of educational research within higher education increases the need for a specific allocation of public research funds for the discipline.

Australian Research Council Discovery Grants 2004



Source: Gill 2004

Education attracted just 15 of 875 ARC discovery grants in the initial 2004 round. This is less than 2% of all grants awarded and, as Gill notes, even less in money terms. The need to expand research within the field of Education is pressing, and the ACDE believes a dedicated research body is required for Education, similar to the National Health and Medical Research Centre and similar bodies covering other important disciplines.

ACTIONS

- Designate research priorities in Education as a matter of urgency;
- Acknowledge the 'pipeline' effect of research, and channel resources towards the preparation and upskilling of the teaching workforce;
- Address the brain drain through the promotion of Australian-led international research collaboration, and the raising of relative salaries and conditions of academics;
- Establish a competitive research funding body for Education, possibly tied to the NIQTSL.

4) Teaching is the central profession of the knowledge economy

The implications of the knowledge economy for educators are profound. Teaching is not alone in being substantially recast by the knowledge economy, but its particular relation to knowledge makes the profession pivotal to economic prosperity and social cohesion.

Educators themselves must be aware of the contemporary skills and attributes required by good learners. As the Introduction outlined, these characteristics need to be considered broadly, as those necessary both for success in the workplace and for security of identity in a globalised environment. The list below outlines the individual skills demanded by the knowledge economy. Educators are integral to promoting these skills, on which the prosperity of learners, citizens and workers will depend.

Knowledge workers will be situated in a climate of constant change, where individual industries are uncertain and where new forms of employment appear on a constant basis. The first skill required of tomorrow's worker will be flexibility. In the *Charter* (ACDE 2001), the ACDE first outlined the following qualities required by knowledge workers.

Successful knowledge workers will need to be flexible, possessing problem-solving skills, multiple strategies for tackling a task, and a flexible solutions-orientation to knowledge (Cope and Kalantzis 2000). They will need to possess portable skills which are transferable among often very different contexts, in order to adapt to the rapid pace of change in the contemporary workforce.

Effective knowledge workers will also need to be autonomous and self-directed - designers of their own learning experiences, in collaboration with others as well as by themselves (Gee 2000: 51).

Knowledge workers will be collaborative, recognizing that knowledge is increasingly created collaboratively, whether in work teams, in scientific research laboratories or through community development.

They will themselves be good teachers and communicators, and of open sensibility, able to work productively with linguistic and cultural diversity (Gee 2000: 51; ACDE 2001). Indeed, in the new economy, difference and diversity will increasingly be viewed as assets to be harnessed, rather than problems to be overcome.

Successful learners will be intelligent in more than one way, that is, their intelligence may in turn be communicative, numerate, technical or process-oriented, or it may be emotional, analytical, creative or critical (Gonczi 2002). Recognising different modes of learning is a key challenge for educators, as is

developing effective pedagogies which reward difference, and which acknowledge a breadth, as well as depth, of intelligence.

Finally, effective knowledge workers of the future will be broadly knowledgeable, and in particular able to engage with the different interpretative frameworks and contexts of specific information. Experts in highly specific areas will need broad knowledge and sensibilities, not only in the application of different hermeneutic views to that area, but in other contexts which will inevitably arise within their working life.

Promoting this kind of learning requires a new breed of educators. Many contemporary educators are already reflective practitioners, proactive towards change, and well connected to the broader community. The need for these attributes, however, will grow (Kalantzis & Harvey 2003). In successful nations of the future, educators will be regarded among doctors and lawyers. They will be seen as professionals with deep knowledge of learners and learning, and possessing a complex range of skills. This will require changes to the way the profession is both conceived and perceived.

To better promote the skills now required by learners, workers and citizens, the following changes to Education will need to occur.

First, teachers will need to focus on learning and teaching the 'new basics'. At one level, the new basics can be listed broadly as ICT, foreign language, entrepreneurial and problem-solving skills, but the term denotes qualitative as well as quantitative changes to the way curriculum is approached. By focussing on the context and application of knowledge, it is possible to reconceptualise the old basics:

Literacy, for instance, is not only about rules and their correct application. It is about being faced with an unfamiliar kind of text and search for clues about its meaning without immediately feeling alienated and excluded from it. It is also about understanding how this text works in order to participate in its meanings (its own particular 'rules'), and about working out the particular context and purposes of the text (for herein you will find more clues to its meaning to the communicator and to you). Finally, literacy is about actively communicating in an unfamiliar context and learning from your successes and mistakes (ACDE 2001: 90).

The new basics, then, are fundamentally about new orientations to knowledge. They are designed to shape new kinds of persons, persons better adapted to the kind of world we live in now and that of the near future. Precise content of the new basics is dictated by the demands of the knowledge economy, and the exigencies of lifelong and lifewide learning. Broad knowledgeability is preferred to a list of specific skills and capabilities. Rather than create a crowded or 'shopping mall' curriculum, the new basics are focussed on perhaps as few as three core areas, such as 'technology', 'commerce' and 'culture' in their broadest senses (Kalantzis & Harvey 2003).

Apart from this breadth of focus and desire to create kinds of persons, the new basics reflect that learning is increasingly interdisciplinary in nature, eroding old subject or academic discipline boundaries (Newman and Scurry 2001). This interdisciplinary focus enables core areas to be limited in number, and allows for hitherto neglected links between traditional subjects to be demonstrated (Fairclough 2000). For Education, this implies the need to emphasise proficiency in ICT, but also to position Education as central rather than peripheral to the university. In the quest for greater interdisciplinary studies, and in an environment where learning is valued, the impact of pedagogical research and practice on disciplines outside of Education will be profound.

Further, as Ryan and Arnold outline in the ACDE Discussion Paper, *The Transformative Capacity of New Learning* (2003),

The contexts for learning now are recognizably challenging and need to be understood in all their diversity and complexity. This means that interpersonal relationships, their structure, their function, their mutability and their significance in learning contexts have to be acknowledged. This emphasis recognizes that knowledge can be acquired within dynamic contexts which shape meanings in particular ways. We need to know how learners engage (or disengage) with knowledge and contexts and how emotional connectedness is enhanced. In the same way, there is a need to understand the reasons for student disaffection. There is scope for research into teachers' enthusiasm, their capacity to engage both with students and knowledge, their attunement to learners and their expertise in discipline and pedagogy. This is important because in school learning contexts, teachers are powerful role models and have the capacity to create significant intellectual and emotional connectedness between learners and knowledge.

Different learning styles must be accommodated and supported. In addition to promoting greater research into, and understanding of, teaching practices, this means expanding current assessment practices. A number of assessment techniques which more accurately measure the full range of skills required by students are needed in the knowledge economy.

Project assessment, for example, based on indepth tasks which involve task plan, complex collation of material and presentation would measure broad knowledgability and a flexible solutions orientation to knowledge. It would also enable some measurement of multiple intelligences, be they communicative, analytical or creative.

Performance assessment, based on the planning, doing and completion of a task, would measure a wide range of skills, including organisation and problem-solving.

Group assessment, of the collective work of a whole learning group, or of the collaborative capacities of individual group members, would be an important means of measuring the collaborative skills so important in the new economy.

Finally, **Portfolio assessment**, through documenting the body of works undertaken, unique life experiences and other learning achievements, would enable open

sensibilities to be measured as well as the individual strengths of diverse individuals (ACDE 2001).

Teacher education of the future will focus more on the overall aim of reflective practice. Clearly, this does not simply mean spending more time in schools. The recent *Crossroads* Ministerial discussion paper emphasises that 'we need a system that produces graduates who can think critically and have adaptable skill sets as well as technical expertise' (DEST 2002a: 14). However, as Alan Reid explains, the mere allocation of more time for initial teachers to be trained in schools 'simply reproduces the status quo and reinforces the idea that teachers are technicians' (2001). Instead, Reid advocates a model based on enquiry into educational practice, which would involve project work and greater collaborative learning between students, teachers and academics (2001).

This is not to refute the value of initial teachers taking classes in designated schools, but to suggest important, and often neglected, ways of adding to this experience. The development of mentoring, team teaching, and the allocation of time for collegial discussion and feedback, are all vital to the goals of collaborative and flexible learning. In future, not only will greater links be sought between schools and communities, universities, businesses and government, but the education institutions themselves will be reconceptualised as parts of a broader learning environment (Kirby 2000: 98). Rather than being added on to an existing scaffold, local and regional collaboration will in fact come to redefine the very nature of schools and their orientation to society. Educators will operate in an increasingly complex environment, and will need to be involved as mediators and collaborators with a number of broad and diverse groups throughout society.

Even at individual school level, diversity is becoming a central issue as retention rates rise. In the ACDE discussion paper, *Blurring the Boundaries in Education: towards a more seamless system of post-compulsory education* (forthcoming: 5), Henry & Grundy highlight the dilemma:

The rise in the secondary school retention rates has come to pass but the secondary school sector has been slow to respond to the learning needs of a much more diverse student population. Systematic advanced planning by the school sector for what was to come as a result of having young people, whose counterparts in previous times would have left school as soon as they were legally able, staying on into the post-compulsory years was limited at best. Schools have struggled to engage those young people whose learning needs are not readily accommodated by the bookish pedagogies and curricula of the academic and disciplines-based senior secondary school classrooms. The introduction of vocational learning programs has been the default response but the impact of these programs on the overall institutional form of senior school programs has been minimal to date (Dalton 2003) and suffered through the 1990s from the tendency of schools to shape VET in Schools courses as minimalist departures from the norms for senior school certificate subjects (Henry, Dalton, Wilde, Walsh & Wilde 2003).

Rethinking the role of schools is an urgent task. Future teacher education programs need to be linked to the needs of future schools, and the capacity to deal with diversity will be central to both.

Finally, teacher education will need to be seen as ongoing process. Just as students will need to continue learning long after they have left school, teachers will also need to refine their skills throughout their careers. To this end, the provision of continuing professional development will be crucial. While this important task remains largely neglected in Australia, there is some tentative progress being shown in England and other nations, where sabbaticals, secondments and international exchanges are already being promoted. The need for both greater creativity and resources here is pressing, and we are unlikely to keep the finest teachers in the profession without more commitment to programs of reskilling and professional development.

The need for systematic professional development is not a priority that can be postponed. If, as we have argued, a new breed of educator will be required, then current leading teachers and principals will require upskilling and greater professional development opportunities themselves. As a cohort of experienced teachers retires over the next few years, it is crucial that knowledge is not lost from the profession. Knowledge management will be pivotal to the success of the profession. However, it is not only the transfer of current skills and knowledge which is important, but that the profession itself is geared up for the knowledge economy. Existing leaders and principals require improved professional development opportunities, both for their own sake and to ensure that the potential of early career teachers is fully realized.

The role of educators is central to the knowledge economy. For learners and for teachers, the message is clear. Flexibility, portability and broad knowledgeability must be sought; diversity must be harnessed as a resource; and both autonomous and collaborative learning will become increasingly important (ACDE 2001). Within teacher education programs, these priorities will most likely be reflected in substantial changes to curriculum content and delivery, an expansion of assessment practices, greater emphasis on promoting diverse learning styles, greater collaboration through mentoring and team teaching, and professional development which is both creative and ongoing (Kalantzis & Harvey 2003). More broadly, how the profession of teaching is recast will have profound implications for both individual prosperity and national well-being.

Within Australia, there are specific issues which must first be resolved if teaching is to be acknowledged as the central profession of the knowledge economy. Put simply, Australia needs more teachers; better paid teachers; career paths for teachers; more research into teaching; resourced teacher education; and public recognition. These material changes are all required if the role of educators is to be acknowledged. A leap, not of faith, but of reason, is required.

Supply

There are not enough teachers across the nation – this much is agreed. While figures vary, MCEETYA estimate that shortages of up to 30,000 are soon possible.

Levels of supply differ across states, regions and discipline areas, but the overall level of teacher supply is inadequate, and may in fact worsen without further action.

There is not enough supply across the nation overall. Demand is at record levels, as students recognize the value of education as a generalist degree. Yet the AVCC estimates that unmet demand for teaching is 9,610 places, or 41% of all eligible university applicants (2002-03). Under *Backing Australia's Future*, the Commonwealth government has agreed to provide an additional 745 places distributed to private providers and 1,400 new 'population growth' places, which will be shared between teaching and nursing. This alone is welcome but insufficient. The phasing out of over-enrolments will impact disproportionately on teacher education, leading to an overall reduction of places in states such as Victoria. This suggests that teacher shortages may still be underestimated.

A further claim made is that too many qualified teachers leave or do not take up the profession. The Commonwealth Review of Teaching and Teacher Education (DEST 2003) claims that, 'An important issue arising from the MCEETYA study was the number of teachers leaving the profession after less than five years working as a teacher. This is possibly as high as 25 % within the first five years of teaching.' (p.87, Main Report). The Review also found that that only 60% of graduates who have been trained as teachers are actually working in schools the year after they graduate (p.51, Background Data and Analysis), and that an estimated 117,000 qualified teachers have left teaching and are working in other occupations. (p.17, Agenda for Action).

The interpretation of these statistics is often negative. That is, teaching is perceived as hard to enter but easy to leave: an attractive profession to enter, but not to remain in. Certainly, retaining more teachers requires better salaries, better career paths, and better working conditions. However, many teachers leave the profession for positive reasons. Teaching is increasingly being viewed as a generalist degree, whose skills are transferable across a range of occupations and sectors. Programs such as the Teacher Release to Industry Program (TRIP) in Victoria have for some time highlighted the portability of a teaching degree. The Introduction outlined that in the knowledge economy, communication, collaboration, interpersonal and problem-solving skills are the key attributes required. These skills are emphasized within Education courses, and it is partly for this reason that teaching graduates face impressive employment prospects outside the classroom. Increasing the supply of teaching graduates, then, goes even further than the issue of workforce planning. While it is imperative that every school student be taught by a qualified professional, it is also necessary to acknowledge the value of Education as a generalist degree, and to respond to the surge in demand.

Teacher Payment and Conditions

Teachers perform a role as important as lawyers, doctors, or IT professionals, yet do not receive anywhere near the remuneration. The pivotal role of our nation's educators must be recognised, and their vocation accorded the salary levels it deserves. Quite simply, the salary gap between teachers and professionals requiring similar levels of qualification, should be reduced.

Even with the substantial improvements which are required in teacher salaries to improve the standing of the profession and to reward teachers for their level of skill and training, teaching is likely to remain less well paid than other professions. Compensation needs to be in the form of lifestyle benefits.

A number of reforms which could be implemented by both Commonwealth and state/territory governments are needed. These include rewarding the further formal study of educators through revised salary structures, and providing sabbaticals, which may include study tours, structured community-based learning, or intensive time to complete a postgraduate course. Additionally, teacher exchange programs could be developed, where teachers undertake at least two or three international exchanges (six months, twelve months each) in a career, by setting up exchange structures and supporting ancillary expenses such as travel costs. More work could also be done to second teachers into community organisations, businesses and government in order to broaden their experience base and to expand the school's networks.

Professional Learning

Teachers are lifelong learners. Along with school leaders and other stakeholders, teachers want more opportunities for professional development (DEET 2000: 45; see also Ramsey 2000: 85). This desire is not surprising – professional development clearly works. Evidence of the effectiveness of professional learning in improving teaching and learning outcomes is now widespread. Enhancing the professionalism of teachers typically contributes to heightened teacher confidence and knowledge, and translates to heightened enthusiasm among students. The forthcoming joint report by the Australian Council of Deans of Education and the Australian Council of Deans of Science, *Professional Learning for Enhancing Teaching and Learning within Science, Mathematics and Technology in Australia*, finds considerable improvement in outcomes where professional learning is instituted and sustained. Where programs have been continuous and subject to rigorous evaluation, the Report finds that student outcomes, and teacher knowledge and confidence, have demonstrably improved. Qualitative evidence also suggests that most extant programs are highly valued by teachers and school leaders.

Despite this evidence, scarce opportunities are provided. The Senate Report, *A Class Act*, found that despite the rhetoric of the importance of professional development, 'the reality is quite different' (1998, ch. 7). Professional development is under-resourced, underestimated and desultory in its provision (ACDE & ACDS forthcoming). The Senate Committee discovered that the type, quality and availability of professional development in Australia varied enormously between

jurisdictions, systems and schools and that many programs were ad hoc, piecemeal in nature and lacking in intellectual rigour.

Teachers and school leaders need support to enhance their professionalism at different stages of their working lives. Requirements differ for early career teachers, transitional career teachers, mature age teachers, and principals, but professional learning opportunities must be accessible to all. Beyond accessibility, professional learning needs to be linked to career paths, and clearer relationships are required between school-based activities and tertiary programs and awards. Changes in discipline and pedagogical knowledge 'require the continual renewal by teachers of their own knowledge and understanding' (DEST 2003: 38).

Building learning opportunities into career and salary structures remains a key challenge for all Australian governments. International evidence is clear on this point. It is not enough simply to provide opportunities. Those opportunities must be attractive, and incentives must be given for participation and completion.

This same argument applies to postgraduate study. Postgraduate enrolments in education have fallen, at a time when they need to be rising. Despite the need for teachers with graduate-level competencies, the evidence is that education systems as employers neither provide an adequate system of incentives (such as paid time off to do courses – part time or full time) nor encourage teachers to undertake graduate studies (see ACDE 2001; DETYA 2000: 197-98; Ramsey 2000: 82).

In contrast to the above scenario, in Pennsylvania, teachers beyond the top of the normal scale can move to new salary levels by undertaking a range of professional development options, including further university training. A relevant Masters attainment, for instance, can be worth an extra \$15,000 and a doctorate that much again. The result is that a teacher who never leaves the classroom for administration can elevate salary by approximately 60%, so enhancing their personal wealth, lifestyle and early retirement options. In a country that has the worst teacher shortage in history, there are no shortages in Pennsylvania (Lovat 2003: 17).

Tertiary Teaching

Academics require preparation and training in teaching skills. To suggest otherwise is to ignore a wealth of national and international research. Amongst other benefits, improved preparation and training in teaching skills would assist academics in: (1) learning the skills necessary to facilitate a student-centred approach to teaching and learning; (2) designing and delivering programs which develop skills and knowledge associated related to the 'new basics'; (3) conveying information in an interesting and coherent manner; and (4) becoming experts in the application of new technologies. Given the demonstrated link between teaching quality and student performance, it is also reasonable to assume that completion rates would improve if the role of academic teaching staff were better acknowledged and supported.

Financial (HECS exemptions and reductions, salary supplements, tying staff teaching qualifications to increased funding) and other incentives (an additional criterion for tenure and promotion) must be considered to ensure adequate participation rates in such courses and programs. The ACDE supports the development of specific courses and pedagogical programs in higher education teaching, including qualifications at graduate certificate, graduate diploma and masters level, as well as the provision of ongoing professional development and training programs.

Prior to School Educators

Prior to school education is probably the sector most in need of help in Australia. While declines in the school and university sectors are frequently remarked (though less frequently acted) upon, the prior to school sector remains seriously under funded. Australia spends just 0.1% of GDP on prior to school education compared with the OECD country average of 0.4%, and our prior to school participation rate is around half that of the OECD average, and falling. Despite evidence that clearly demonstrates the early years of education are critical for success, academic development and future learning (CESCEO 2000; Kirby 2001), funding has not been forthcoming. Assuming the 'teaching profession' includes prior to school and early childhood educators, and well it should, then a range of issues need to be addressed. If the profession is to enhance its status and children are to develop into well-rounded, competent, productive and socially responsible citizens, a significant and collaborative program of reform is necessary.

In the workplace prior to school teachers face a range of unenviable challenges, many of which are a consequence of inadequate funding. The Kirby Report (2001) into prior to school education in Victoria found that the conditions under which prior to school teachers worked had the effect of forcing many of them to leave the profession and prompting others to decide against pursuing a career as a prior to school teacher. Prior to school teachers are subjected to debilitating workloads and burdened with a diverse range of roles and responsibilities, many of which should be carried out by prior to school management committees. Teachers are responsible for a range of administrative tasks, record-keeping, the welfare and safety of the children in their charge, the supply of material and equipment, information collection for accountability purposes, liaison with parents and the planning of fundraising activities. To these pressures can be added children with special needs and worsening staff/child ratios.

Remuneration for prior to school teachers needs to clearly reflect not only the nature of prior to school teaching but also the workloads with which teachers are burdened. There are also enormous discrepancies between rates of pay for newly qualified and experienced teachers and between the wages of prior to school teachers and their counterparts at the primary and secondary level (Press and Hayes 2000: 45). Furthermore, because prior to schools are operating under increasing financial pressure, teachers' paid hours are being reduced, and they are employed on low rates of pay or increasingly being employed on a part-time basis. Indeed, according to Kirby (2001: 21) almost 70 per cent of teachers are employed

part-time. Combined, these conditions do not augur well for teachers wanting clear career pathways. In fact, they preclude any form of career planning. Importantly too, these realities serve as clear disincentives to pursuing a career in prior to school education and contribute significantly to high attrition rates in the profession. This is reflected in the difficulties of recruiting suitably qualified prior to school teachers and the near impossibility of finding relief staff to cover short-term absences.

Prior to school teachers must also be considered within the context of lifelong learning and continuous education that is emphasised in this report. In terms of professional renewal and knowledge building, professional development programs are of the utmost importance. They are probably also the most effective means of improving the quality of teaching and learning in prior to schools. In addition, they also provide peer support for teachers and opportunities for them to develop supportive collegiate networks. In a profession that is solitary by nature regular and ongoing professional development is essential. Unfortunately, however, such opportunities are not commonplace. Any strategy to improve the overall state of prior to school education needs to consider the provision of paid and regular professional development for prior to school teachers.

The role of prior to school educators is becoming increasingly complex and demanding, and pay structures need to reflect this reality more clearly. A significant funding increase is necessary. And, given the federal division of powers and the national scale of the problems in prior to school education, a nationally coordinated approach would ensure that successful reforms in individual states could be reproduced at a national level, and that prior to school education policy was both consistent and visionary. Above all, spending on prior to school education can, and indeed must, be seen as an investment. A long-term view must replace the more narrow concern with market forces if Australia is truly to become a knowledge nation (Considine, Marginson and Sheehan 2001).

Vocational Education and Training Educators

The Vocational Education and Training (VET) sector in Australia consists of teachers in schools, TAFE and private providers. In 2003, 1.72 million students were participating in Australian publicly funded VET (NCVER 2003). Student numbers increased by 77.4% from 1991 to 2000, and coping with this increased demand is a major challenge for Australia (NCVER 2001). VET no longer provides simply a second chance. The knowledge economy requires specific skills to be learnt and relearnt throughout life, and VET provides a forum of formal learning where students of all ages, and in all forms of employment, can acquire new skills. The growth in VET demand, then, needs to be seen as an opportunity, not as a burden upon governments. In this context, the decline in government funding of vocational education and training, estimated at 10 per cent between 1997 and 2000 (see Maslen 2002), is both disturbing and counterproductive.

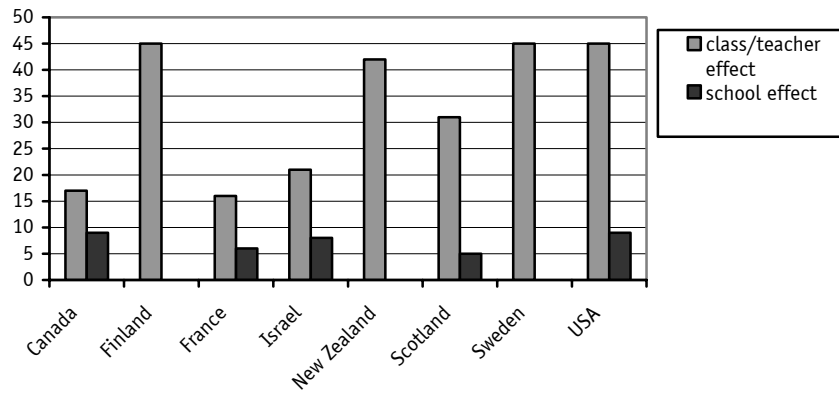
Over recent years the full time workforce in TAFE has declined substantially, having been replaced by casual staff who generally have a low level or no teaching qualifications. This change has occurred at a time when the role of TAFE teacher

has become increasingly complex. The demand for workplace delivery for example, and the greater variation in the range of students taking TAFE courses creates greater expectations on teachers. There is an urgent need for increased professional development in TAFE, and for an increase in the number of fulltime teaching staff in TAFE institutions. In addition, the increasing complexity of the workplace has created huge additional demands on head teachers, curriculum developers, and associated staff. A substantial funding increase is needed to underpin the professional development of teachers and to fund the increasingly diverse range of activities that TAFE teachers have to undertake.

Given the attempt to blur the barriers between schools and TAFE is a highly desirable trend it is a matter of great concern that TAFE teachers have lower levels of teaching qualifications than schoolteachers. We suggest a national benchmark for the proportion of full time teachers in TAFE to be set at no less than 70% of the total teaching effort. We also suggest no TAFE teacher should be registered with a lesser qualification than that possessed by schoolteachers.

Private providers should be in the same situation as independent schoolteachers so far as their teaching qualifications are concerned.

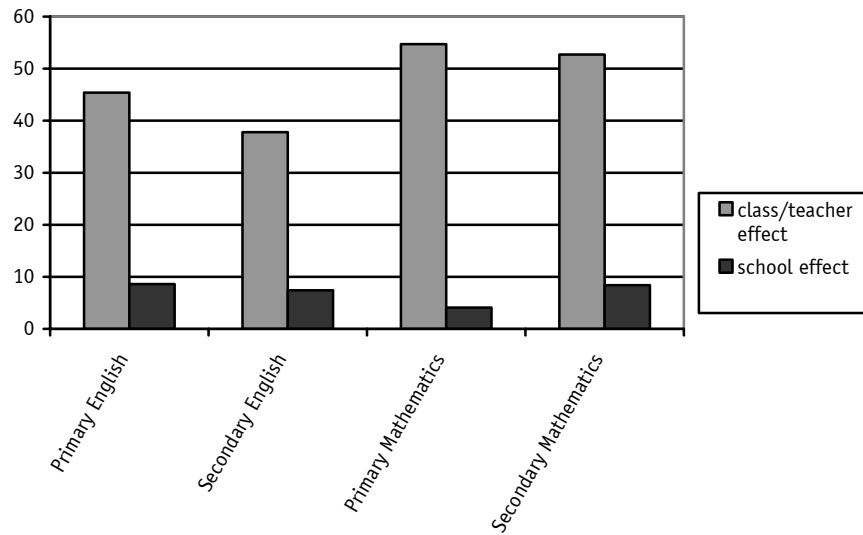
Comparison of class/teacher and school level effects in eight countries



Source: Scheerens et al. 1989, p. 794,
cited in Rowe, K.J. & Rowe, K.S. 2002

Across the OECD, evidence clearly shows that the impact of teachers is high. Across eight selected countries, research highlighted that the effect of individual teachers was much greater than the effect of particular schools in affecting educational outcomes. Irrespective of the resources and quality of schools, the role of educators is profound.

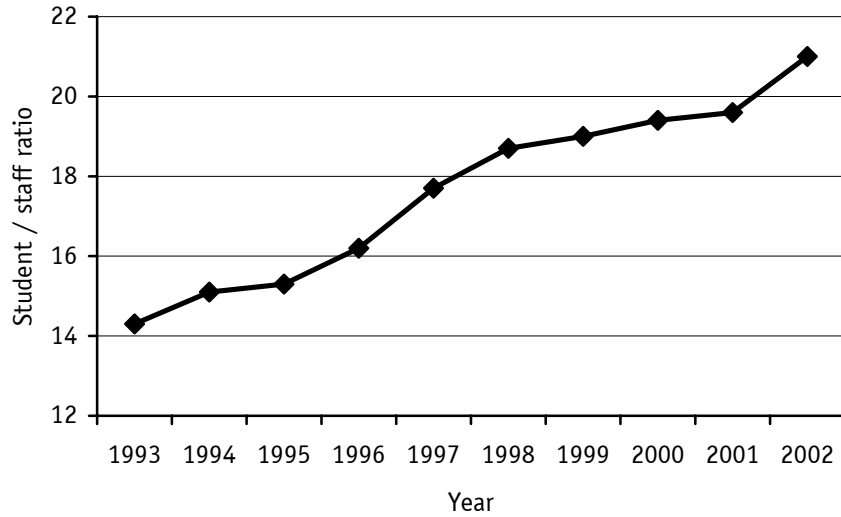
Proportional class/teacher and school effects for Victorian schools: achievement adjusted for prior achievement



Source: Rowe, K.J. & Rowe, K.S. 2002

Research in Victoria replicated the results of the OECD study. While the effect of individual schools was deemed as negligible to student outcomes, much depended on the impact of teachers. Teachers appear to be the single largest influence on student outcomes within the classroom.

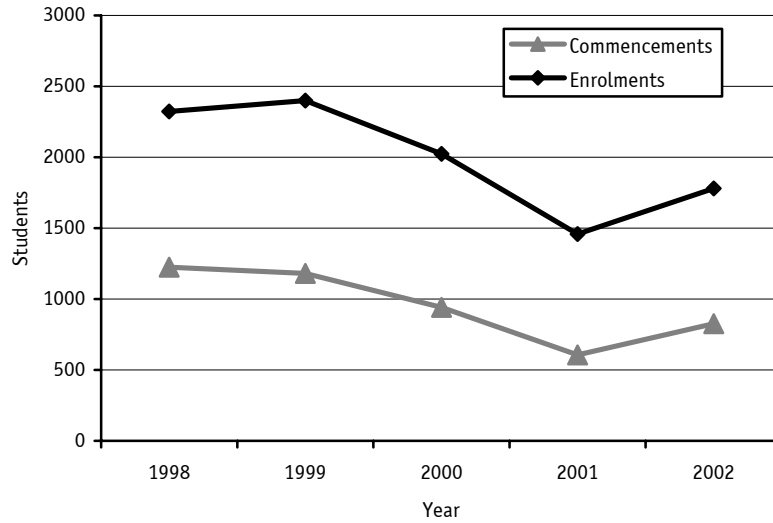
Increase in University Student to Staff Ratio, 1996-2002



Source: AVCC 2003-04

Student/staff ratios have worsened dramatically over the past decade. A push to enroll more students has not been matched by resources, and the result is crowded lecture theatres and a diminished learning experience.

Indigenous commencements and enrolments, Education, 1998-2002



Source: DEST statistics: students

Indigenous enrolments in the discipline of Education have declined since 1998. This is due largely to changes to Abstudy funding, which left a majority of Indigenous students financially worse off. Bridging the inequality of learning outcomes between Indigenous and non-Indigenous students in schools and beyond involves increasing the number of Indigenous educators.

ACTIONS

- Establish a firm means of dialogue between states/territories and the Commonwealth directed at strategic planning for the provision of teachers over a five to ten year period;
- The Commonwealth to adopt a firmer direction in allocating places to universities via the DEST profiles exercise, to ensure that Education is treated as a national priority;
- Find mechanisms to ensure regular places in university programs for teacher education in areas of most serious supply deficiency. Currently, these would be in mathematics, science and technology education in all states and territories, with English, LOTE and Primary areas of concern in some parts of Australia;
- Encourage every teacher to undertake at least two or three international exchanges (six months, twelve months each) in a career, by setting up exchange structures and supporting ancillary expenses such as travel costs. At a relatively small cost, this will expand the global horizons of education, bringing many international teachers to work on exchange in Australian schools, as well as providing invaluable international experiences for Australian teachers;
- Make Education postgraduate courses free, with university costs funded by the university system;
- The NIQTSL to sponsor further research into effective professional learning;
- Administration of the Commonwealth Learning and Teaching Performance Fund to be informed by the discipline of Education;
- The focus on quality of learning to address the relationship between processes, resources and performance;
- Governments to commit to supporting the professionalisation, and appropriate remuneration, of prior to school educators;
- Increase funding for prior to school education to 0.4% of GDP. This would see Australia reach the OECD average, and help our declining prior to school participation rate, which is well behind the advanced OECD nations;
- Governments to increase public support of Vocational Education and Training, by increasing TAFE growth places and promoting national coordination of the sector.

5) Opportunity and diversity: Education is central to the promise of democracy

For all the talk of democracy and equality, opportunity is inherited—in the form of the wealth you are born into, the place you are born, or the colour of your skin or ethnic background. Education, however, is the main thing which differentiates democracy from the world of kings and subjects, lords and serfs, masters and slaves, men and women. If you are born into poverty, or on the wrong side of town, or of the wrong racial or ethnic group, you still have a chance and this chance comes from doing well at school. Education is at the heart of the promise of democracy. This is what right-wing commentators choose to call equality, or more precisely, equality of educational opportunity. In fact, when you look at the results of the educational institution you attend and compare them with results at the ends of the educational scale, you may discover that the opportunity is not equal at all.

Yet education does promise individuals a chance in the game of social mobility: more access to material resources through better paid employment; a greater capacity to participate actively in the processes of government; and the personal dexterity that comes with knowing the world (ACDE 2001). It promises communities improved employment prospects, increased self-determination and extended access to the wider world. The key question is how to make sure education fulfills its democratic mission.

As learning plays an increasing role in social enablement (work, citizenship, identity), so it might also play a greater role in returning credibility to the promise of democracy. What do we make of a society which provides least learning resources to children most at risk of failure? How do we genuinely provide opportunities for all? The answer has to be in dedicated programs addressing inequality, not on the basis of moral arguments alone, but also on the basis of the economic and social dangers of allowing individuals and groups to be excluded.

Opportunity

The Programme for International Student Assessment (PISA) survey of 2001 confirmed a picture of stark inequality (Lokan, Greenwood and Cresswell, 2001). The survey did conclude that Australian levels of literacy and numeracy were relatively high within the OECD context. However, the study also showed an alarming relationship between socio-economic background and educational outcomes, revealing serious inequality within the Australian education system. Further, the survey highlighted that our poor-performing students did worse than those in other high-performing countries, such as Japan, Canada, South Korea and Finland. The extent of this inequality is confirmed by ABS data which highlights the growing poverty gap, and by other data emphasizing a regional and digital divide (ABS cat. 1350; ABS cat. 8146). In terms of Indigenous education, these figures confirm the need to reinforce the expansion of affirmative action for Indigenous students, consistent with long-standing social equity and justice

principles. Moreover, bridging these equity gaps requires a holistic vision and a whole-of-government approach.

The ACDE has argued consistently that research and development efforts to address these problems are also crucial if Australia is to achieve the National Goals of Schooling. Fundamentally, the new economy will demand that all citizens and workers become lifelong learners, and the cost to society of leaving some uneducated will be greater than ever before (ACDE 2001). Indeed, the *Charter* held that future education will be the key to equality of opportunity, the recognition and celebration of diversity, the building of communities, and the combating of social exclusion. Aside from ethical considerations, it is for this highly pragmatic reason that education needs to be harnessed to fulfil the promise of democracy.

The PISA study, and many before it, have highlighted that some groups of students clearly and habitually do better in their education than other groups. Acknowledging that opportunities are not evenly distributed, we discover combinations of the following group and location-related factors influencing outcomes: Aboriginal and Torres Strait Islander students; students from non-English speaking backgrounds; students in poverty, or from low socio-economic status families and localities; students with disabilities; students in rural and/or isolated communities.

These patterns give lie to any claim that opportunities are equal. A paucity of resources is often a critical factor in the creation of these unequal outcomes. However, a further serious problem to be addressed is the distance between these worlds of community experience and the world of institutionalised education and valued knowledge. To use the concept more broadly than usual, diversity requires a pervasive multicultural education, and here we use this idea to mean something as broad and as simple as the idea that a one-size curriculum cannot be expected to fit all. Rather, a curriculum of many sizes would perform the following functions:

- Learning would be designed in such a way that it gels with the needs and interests of particular students or group of students. It would be customised in order to engage every student and every group of students.
- Learning would actively affirm diversity, recognising and honouring different life experiences. This requires classroom and curriculum flexibility which builds on the cultural capital of communities and individual students.
- Education would aim at measurable outcomes. These outcomes must be similar or comparable (each as rewarding as any other, as fulfilling, as socially engaged and as useful) but not necessarily the same. Education does not promise a single cultural and life destination, but it does promise expanding horizons of opportunity.

Professor Gonczi has argued that successful schools are those where 'rather than expecting the students to come into the school and do what the teachers want, these schools take note of the prevailing ethos of the community and work with it' (cited in Green 2002: 17). In the case of Indigenous education, Professor Gonczi

highlights that 'a holistic approach which integrates the community and the school' (cited in Green 2002: 17) has proved remarkable successful in isolated Indigenous schools, and *New Teaching: New Learning* argues that this responsiveness, and willingness to embrace diversity, is necessary at all levels including higher education. The promotion of cultural pluralism, and of greater community engagement in both the delivery and assessment of programs, is essential to ensuring improved participation and completion rates.

Indigenous Education

A holistic plan for education is needed in which Indigenous education is not considered merely as a separate item on the education checklist. As the Council has previously outlined in the *Charter* (ACDE 2001), education needs to be seen as the key to both economic prosperity and social cohesion. Growing a knowledge economy, fostering reconciliation, and promoting social cohesion and cultural diversity all depend on a vision of education to which Indigenous students and studies are central.

Accordingly, the provision of increased funding and effective programs to Indigenous students must be primarily seen not as a cost to the economy, but as an essential investment in the nation's future. The restoration and extension of bilingual and language revival programs must be seen not as a burden but as an important step to honouring diversity and community. The expansion of Indigenous autonomy and representation must be recognised as fundamental to raising Indigenous participation and completion rates, and the profile of Indigenous education more generally. The provision of targeted school and higher education programs to encourage all Australians to learn about Indigenous issues must be seen as essential to principles of self-determination and goals for reconciliation. In short, a dedication to improving Indigenous education should follow from acknowledgement of a broader truth: education is one of the main ways to deliver on the promise of democracy (ACDE 2001; Durnan and Boughton 1999; Dusseldorp Skills Forum 1999).

The participation of Indigenous students in higher education is closely tied to relationships with their communities and families (see RMIT 2002). Because of this relationship, the National Indigenous Postgraduate Association Aboriginal Corporation (NIPAAC) has demonstrated that individual students clearly benefit from ongoing community support, but also that their communities directly benefit from the skills and knowledges brought back by Indigenous students (2002: 9). Supplementary ABSTUDY benefits, such as the dependant spouse allowance, travel allowance, and Away-from-base (ABS) entitlements, were designed to recognise and support these family and community links. There is evidence, however, that changes to ABSTUDY, in particular those adopted in 1999/2000, have disadvantaged the vast majority of Indigenous students, reduced the level of support available, and served as a disincentive to access multiple post-compulsory pathways (see RMIT 2002; Stanley & Hansen 1998; Deakin University 1999).

Moreover, improving the overall participation rate of Indigenous people in education requires a greater focus on the prior to school and primary education of Indigenous children. The DEST discussion paper, *Achieving Equitable and Appropriate Outcomes* (2002d), notes that Indigenous students are less likely to have prior qualifications than other students, that 32% of Indigenous students are from low SES backgrounds, and that 45% of Indigenous higher education students are from rural or isolated areas (2002d: 17-18). Such figures highlight that the regional divide, the digital divide, the public/private divide and the low participation rates of Indigenous students are not separate problems which can simply be addressed individually. Sadly, for all the talk of democracy and equality, Australia is still a nation where opportunity is often inherited, in the form of the wealth into which you are born, the place you are born, or the colour of your skin or ethnic background.

Within Indigenous education, a further point must be made. *Achieving Equitable and Appropriate Outcomes* raises the issue of including core units in Indigenous Australian studies to educate the broader population about Indigenous matters. In the *Charter* (ACDE 2001) the ACDE contended that the path to reconciliation between Indigenous peoples and settlers in Australia is a thorough understanding of Indigenous cultures and the history of interaction with settlers. Accordingly, the ACDE believes that Indigenous studies should indeed be a core aspect of all learning in Australia and, as the peak body representing teacher educators across Australia, the Council is willing to play a role in the design and delivery of such curricula within teacher education.

Autonomy and Empowerment: A National Indigenous Higher Education Council

The ACDE welcomes the establishment of the Indigenous Higher Education Advisory Council, for which the ACDE and others advocated. This support is welcome, but it is important that the Council is well resourced, and that its purposes are clear. The Senate Employment, Workplace Relations, Small Business and Education References Committee Report, *Universities in Crisis* (September 2001), recommended that “the Government examine new ways of encouraging the participation in higher education of educationally disadvantaged Australians particularly Indigenous students” (p. xxi). The ACDE maintains that the creation of the advisory council could be an important step in building the profile, autonomy and resource base of Indigenous education at a national level. The Council could play both a coordinating and a proactive role in the allocation and management of resources, and in the raising of Indigenous participation rates and outcomes.

Beyond this, the Council can play an important proactive role. While enabling local distinctiveness for Indigenous centres, units and programs, the Council can provide an advocacy and leadership role for these centres, as the central, national governance body. Such a role is important in building Indigenous epistemology and greater collective knowledge of, and within, Indigenous education. The Council will also promote greater collaboration between Indigenous communities, centres and students. Similar collaboration among the national campuses of the

Australian Catholic University has already been of value in promoting opportunities and in raising Indigenous enrolments within that university at a national level (Sheehan, P. cited in *Campus Review*, 'ACU celebrates Indigenous culture week', 7-13 August 2002). Further, the Council can play a role in the articulation of pathways between vocational and higher education for Indigenous students, and in raising the profile of Indigenous education in the wider community.

The establishment of a central, national, accountable body is an important step to providing greater autonomy to Indigenous education, and to ensuring that all allocated funding goes directly to enhancing outcomes for Indigenous peoples. Results at local levels indicate that Indigenous outcomes are significantly improved where such autonomy is evident. Studies of Aboriginal Community-Controlled Colleges, for example, reveal pass rates not only higher than for Indigenous students in mainstream VET, but higher than the pass rate for all students/trainees in VET nationally (Durnan and Boughton 1999). Such studies suggest a need not only for more Indigenous educators, but for greater Indigenous autonomy over resources, processes and outcomes within both the higher and vocational education sectors. The establishment of the Indigenous Higher Education Advisory Council is a positive development, and its long term success depends on the continuing provision of public resources and a level of autonomy.

Rural and Regional Australia

The needs of rural and regional Australia must be accommodated. Rural and regional Australia needs to be served by a range of universities with appropriate infrastructure for high quality and comprehensive teaching and research outlets.

In the *Charter*, the ACDE also highlighted the serious inequalities between metropolitan, regional and rural areas, evidenced in disparate educational outcomes. There now exists an approximately ten per cent difference in participation (in either year 12 or higher education) between urban and rural areas. In remote areas (defined here as comprising less than 1,000 people), students are thirteen per cent less likely to participate in year 12, and twelve per cent less likely to participate in higher education, than their urban counterparts.

Educational and economic outcomes for rural and remote Australians must be improved. Retention rates decline as the degree of isolation increases, and completion rates are similarly disproportionate between urban and rural students. Year twelve males in isolated settings have a completion rate of only 44 per cent, compared with a 73 per cent success rate of females undertaking year twelve in urban areas. Social indicators follow this pattern, such as significantly higher rates of suicide amongst males, and particularly males in regional Australia. Research suggests that the overall cost to Australia of one year's early school leavers is estimated at \$2.6 billion per year (Dusseldorp Skills Forum 1999). Education, then, must be seen as both an economic and a social investment. To counter social dislocation, and to succeed in the new economy, education must be accessible to all, and retention and completion rates must reach high levels across the board.

Improving education in regional Australia is vital to creating a fairer and more prosperous nation.

Matters such as the regional digital divide must be addressed as a matter of urgency, as Section 7 elaborates. A number of proposals could be adopted to this end, including: increasing telecommunications infrastructure; developing dedicated and specialized programs and curricula for Indigenous communities; benchmarking educational inputs and outputs to ensure accountability on matters of equity of opportunity; increasing regional collaborations and 'learning communities'; and supporting the Rural Education Forum of Australia (REFA).

Diversity: languages

The range of career possibilities using languages is wider than ever before. Over 90% of careers where languages are used are within non-linguistic professions. Employers may pay up to 20% extra for competence in another language.

DfES 2002

Languages are a matter of national interest, and this interest needs to be broadly defined. When the Commonwealth Government adopted a National Policy on Languages in 1987, Australia became 'the first English speaking country to have such a policy and the first in the world to have a multilingual languages policy', according to the August 1994 report of the Centenary of Federation Committee to the Council of Australian Governments. However, the Australian Alliance for Languages describes the current climate as 'marked by contradictions between states and within the Federal sphere' and dominated by 'fragmented provision' (2001). Similarly, the Applied Linguistics Association of Australia presents a sombre picture of Australian language policies: 'Initially understood as widely-encompassing, the progression in these policies could be characterised as one of progressive narrowing and a steadily decreasing level of Commonwealth commitment' (2002). In particular, the Alliance alleges we have:

retreated from a commitment to issues of cultural and linguistic diversity; often deliberately omitted a commitment to linguistic and cultural diversity in government policy and rhetoric; re-categorised linguistic and cultural diversity as being linked to disadvantage, rather than seeing it as resource for the entire Australian community (2001).

The ACDE concurs that linguistic and cultural diversity needs to be seen as a resource, and that long-term planning is needed to provide consistency and predictability. The need for a broad-based, long-term view to be taken is now manifest. Whereas the establishment of the National Asian Languages and Studies in Australian Schools (NALSAS) program was pursued primarily on economic grounds, the criteria for any future language policy need to be more expansive. If education is to be the defence of the nation, it must be through promoting cultural diversity and understanding, and through the exchange of views and knowledge in a globalised environment. As the Alliance has argued, an effective languages policy 'can facilitate Australia's active engagement in trade and commercial relationships

in all areas of our national strategic economic interests and diplomatic and geo-political activities' (2001).

A national languages policy, building on that developed in 1987, must meet the needs of advocates of the Asian languages of economic significance, as well as those of community and Indigenous languages, ESL and Auslan and adult literacy. To this end, the Council recommends that the Commonwealth establish national agreement to offer 6-8 languages across all jurisdictions, as well as recognise and adequately support the teaching of Indigenous and community languages. Jurisdictions, of course, would provide other languages at their discretion.

A recent discussion paper published as part of the Commonwealth's Higher Education Review observed that 'there are a number of languages in both schools and universities with very small enrolments, which continue to be offered by many universities, some within very close proximity to each other' (DEST 2002b). Much evidence supports this claim, highlighting the need for greater national coordination and specialisation.

For example, even though enrolments in Chinese, Japanese and Indonesian increased by about 190 per cent between 1988 and 2001, these languages still comprise only 0.8 per cent of total EFTSU in Australia. Converted to individual enrolments students studying the languages totalled 2.2 per cent of all students (ASAA 2002: 42). Enrolments in languages of lesser demand, including Korean (Australia's fourth largest trading partner and third largest export market), Hindi and Urdu (close to 600 million speaker world-wide), Vietnamese, Thai and Arabic did not record the same increases while some actually decreased (ASAA 2002: 43).

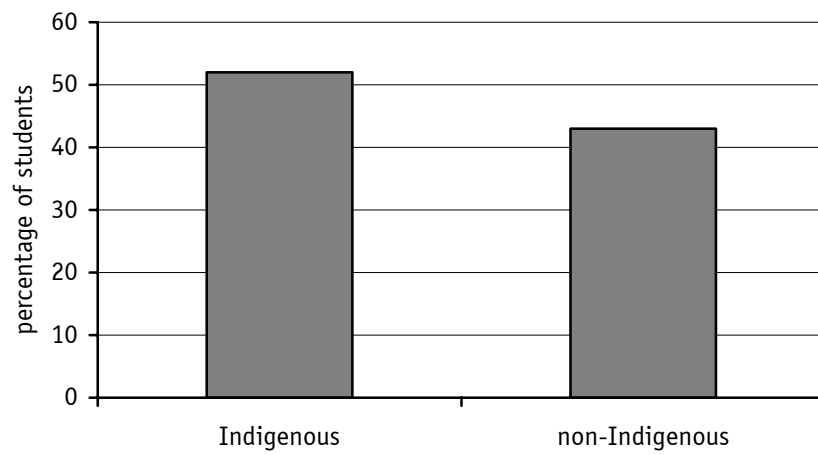
There needs, then, to be cooperation among universities to provide city-wide and region-wide teaching of languages of low enrolment. The ASAA Report, *Maximising Australia's Asia Knowledge*, observes that such cooperation in the past has faltered due to administrative problems and concerns about relatively small expense. A collaborative national policy, supported by the Commonwealth, could play a facilitative role to help universities overcome such obstacles and provide incentives for universities to form partnerships to deliver high quality second language programs, particularly for languages in danger of extinction.

It is imperative that collaboration in the delivery of language programs be nationwide, to ensure economies of scale and the attainment of the best possible student outcomes from available resources. In terms of language teaching, there remains an argument for more strategic course provision in both schools and higher education institutions as well as greater collaboration between the country's education providers. Such collaboration requires national-level strategic planning and resourcing, and may be aided by the creation of an autonomous central body. ACDE concurs with the Applied Linguistics Association of Australia that Commonwealth commitment 'can be flexible; different languages will play different roles in national priorities over time, but it is critical that this role be within an inclusive and consistent policy framework' (2002).

A nationally coordinated policy could also play a role in facilitating improved communication among language diasporas through the promotion of information and communication technologies and the conducting of ongoing research. Harnessing new technologies to foster greater communication and access among particular language speakers is critical to maximising Australia's productive diversity. Ethnically and linguistically, the nation remains remarkably heterogeneous, yet the tyranny of distance continues to hinder connections between groups of language speakers, and impedes efforts to build communities of practice. Languages other than English (LOTE) education, according to the Council, needs to be both encouraged and accessible if Australians are to maximise our engagement with the region and the world, and the potential offered by our cultural and linguistic diversity.

The ACDE also believes that genuine support for all Indigenous and community language groups is needed to further the national commitment to inclusivity and productive diversity, and to continue to recognise the close connection between language, culture and identity.

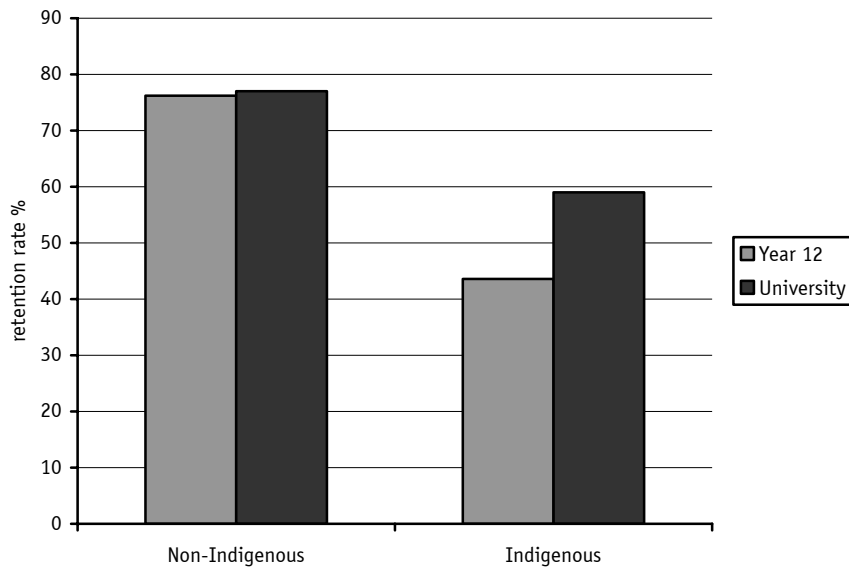
Students without preschool education



Source: Commonwealth of Australia (2002)

It has to be questioned how well many Indigenous students are prepared for school, given that disproportionate numbers continue to have no prior to school (52% of enrolled primary school students, compared to 43% of non-Indigenous children) (Commonwealth of Australia 2002).

Year 12 and university retention rates, 2001

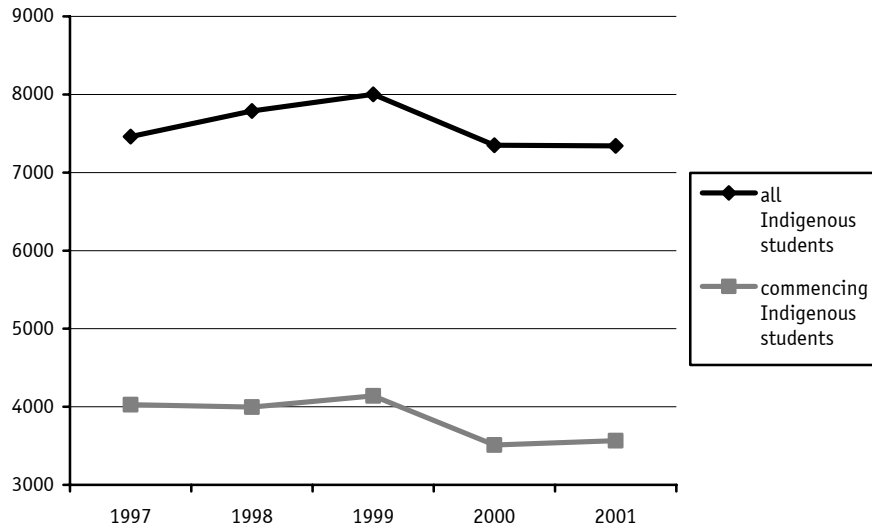


Source: Commonwealth of Australia. (2002);
Australian Council for Educational Research 2004

University Retention Rates indicate 'the proportion of students who are retained in a university course from the commencement of one academic year to the next' (Commonwealth of Australia 2002: 96).

The difference between the university retention rates for Indigenous and non-Indigenous students is stark, and the difference between their year 12 retention rates is even greater. Addressing this striking divide in educational attainment must be a high priority.

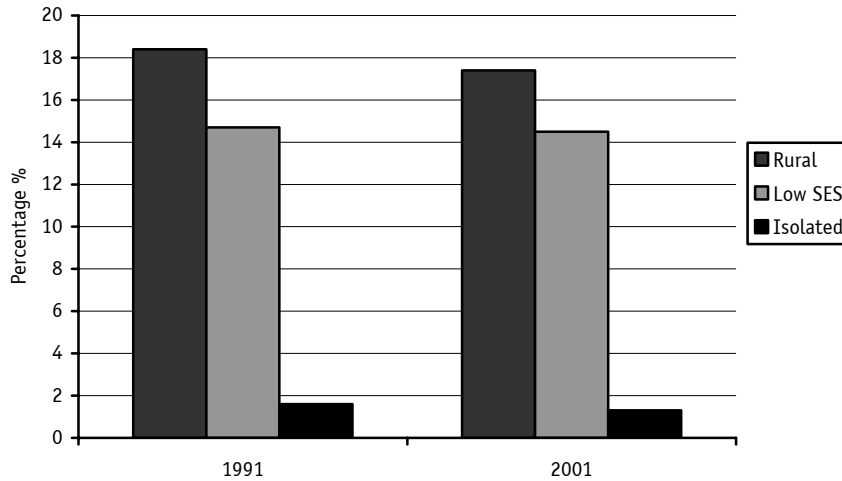
Commencing and all Indigenous students, Higher Education, 1997-2001



source: DEST selected Higher Education statistics

Indigenous enrolments in Higher Education fell substantially after Commonwealth changes to Abstudy support. After reaching 8001 enrolments in 1999, the number fell to just 7342 in 2001. Similarly, Indigenous commencements in Higher Education courses fell from over 4000 in 1997 to just 3566 by 2001. It is often held that the real crisis in Australian education concerns the plight of Indigenous Australians. If that crisis is to be addressed, programs and resources must be targeted to boost both Indigenous commencements and overall enrolments in Higher Education.

The Declining Representation of Disadvantaged Groups in Higher Education, 1991 - 2001



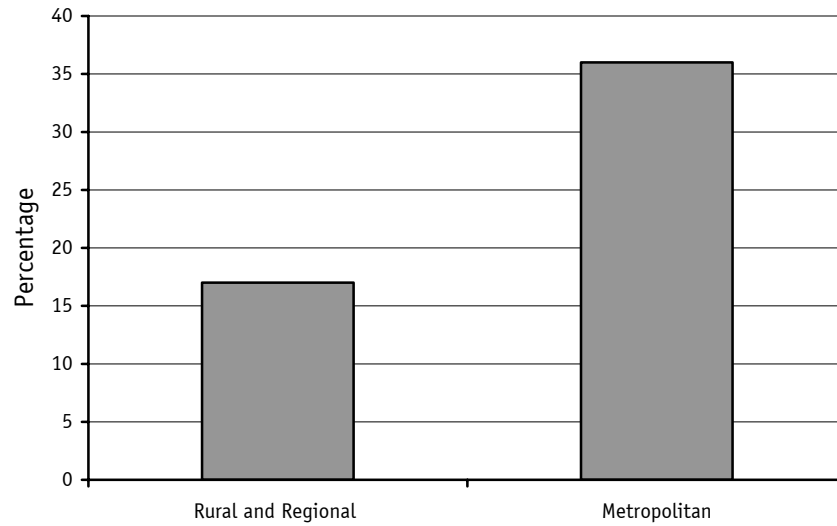
Source: Higher Education Report for the 2003 to 2005 Triennium

The Higher Education Report for the 2003 to 2005 Triennium shows that students from a non-English-speaking background comprise a smaller proportion of the university population than in the early 1990s. Their share has declined from 4.1 per cent in 1991 to 3.3 per cent.

The proportion of students from rural areas declined to 17.4 per cent in 2002 from 18.4 per cent in 1991. For isolated students, their percentage dropped from 1.6 in 1991 to just 1.3 in 2001.

Those from low socio-economic backgrounds now make up 14.5 of the student population compared with 14.7 in 1991. The report admits that university access by these students "remains relatively low".

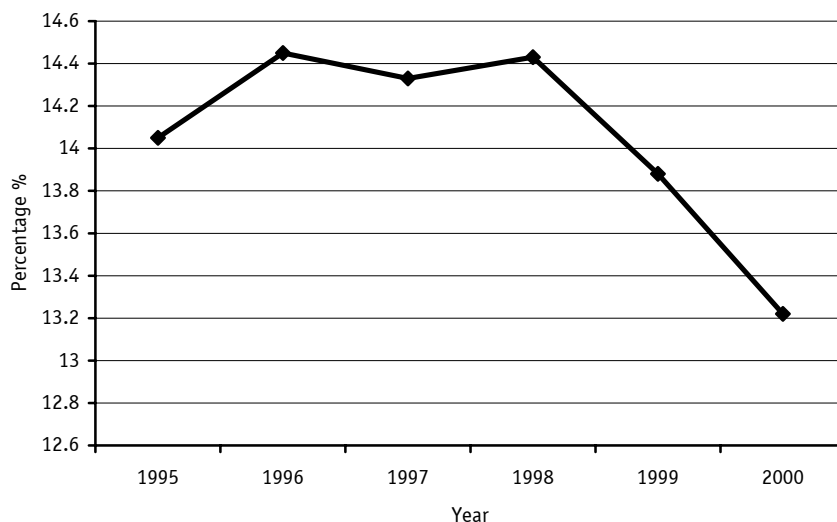
Percentage of school students proceeding to university



Source: Australian Government 2004

The regional divide is confirmed in the relatively small percentage of rural and regional students who proceed from school to university. Those from metropolitan areas are more than twice as likely to attend university as those attending rural and regional schools.

Percentage of year 12 students studying a Language Other Than English



Source: Outcomes and National Reporting Branch, DETYA

Over the period 1994-2000 the total number of year 12 students studying languages other than English (LOTE) declined, while the total number of all year 12 students increased. This occurred despite an increase in Japanese, Korean, Chinese and Indonesian under the now discontinued NALSAS funding. The percentage of the total candidature studying a language has declined, at a time when language facility and proficiency is crucial. In 2002, only slightly more than one in ten year 12 students included at least one language among their course choices. Raising this figure is vital if Australia is to prosper in an increasingly globalised world.

ACTIONS

- Create an annual benchmarking report card on educational investment, comparing inputs by: 1) location, defined both by region but also down to the level of individual schools; 2) type of school: private, public or community; 3) Indigenous/non-Indigenous status; 4) socio-economic and ethnicity demographics;
- Target inequality through sustained programs and resources at both state/territory and national level;
- Assist Indigenous students through targeted programs, and the provision of greater financial assistance. In particular, ABSTUDY, and supplementary ABSTUDY benefits, should be increased and expanded as a matter of urgency to support Indigenous students, families and their communities;
- Encourage all Australians to learn about Indigenous issues, through targeted school and Higher Education programs;
- Restore and extend bilingual and language revival programs;
- Develop dedicated and specialised programs and curricula for Indigenous communities;
- Tertiary entry is one of the key 'sorting points' at which structures of inequality are created. Two ways of blunting the inequitable edge of this sorting process are to increase 'portfolio' rather than score-based entry; and to allocate tertiary places to disadvantaged schools and regions;
- Ensuring access to quality education by Indigenous and non-Indigenous people in rural and remote locations must become a priority, as must increasing the telecommunications infrastructure to ensure that all parts of the country have adequate access to education;
- The Commonwealth to develop an inclusive, overarching languages policy, building on the policy framed in 1987, which acknowledges the importance of LOTE to national security, prosperity and social cohesion.

6) The public/private debate must be redefined

It is clear from these figures that the inequity is growing and that the Federal Government's funding policies are largely responsible. It is also clear that the money being lavished on elite private schools by the Federal Government cannot be justified when real need is being ignored.

Federal President of the Australian Education
Union, Pat Byrne, 29 March 2004

The current needs based funding model is generally agreed to be both equitable and transparent.

Executive Director, Independent Schools
Council of Australia, Bill Daniels, 26 March 2004

In the 'knowledge society', education cannot be just another gift for those already born into privilege. Leaving aside the question of equality of access to economic resources, every useful person in the new society (the worker, the citizen and the person at home), will require a complex and rich repertoire of learning, and the desire as well as the capacity to continue to learn for the whole of their life.

As the *Charter* (ACDE 2001) first documented, the problem for a logic premised on unequal outcomes and the struggle for survival, is that (unlike in the past), we need everybody in the society to have the capacities created by the new learning. Thus, the inevitable practical effect of the current drift to privatisation may work for old economy structures and where we still need a large number of 'educational failures' to work in unskilled jobs. However, it is worse than counterproductive for the new economy and society. Education is not a matter of competition and choice, in which a few succeed by virtue of their capacity to compete with, and to beat, most of the others. Even if this is what drives the private sector, it certainly won't work for education. And there remains the all-important issue of underlying values. Education is a time and a place for nurturing, and of thinking. Applying the logic of competition to education is about as unproductive and destructive as it would be to set up a regime of competition and motivation based on the expectation of unequal outcomes amongst siblings within a family.

The fight for resources thus masks a deeper philosophical debate about the public good. How we define the public good affects how we resource schools, and also how we resource universities, adult and community education, vocational education and training, and early childhood education. There can be no resolution of the schools funding issue without resolution of this broader question. More importantly, there can be no cohesive national education policy without sound philosophical foundations.

Education is the key to economic prosperity and social cohesion. It is not only the defence of the nation, but the cement of the nation (Kalantzis, Cope & Harvey 2003b). It is through education that citizens are formed. Events of the last three years have underlined the importance of active citizenship, and the need for democracy to be taught, learnt and practised in schools and beyond. Although the language of 'individual choice' and 'user pays' currently dominates Australian education debate, it is the notion of the public good which most needs revising and understanding.

Democracy needs nurturing, and schools are one of the few focal points in our society for the sustenance of democratic discourses. This role cannot be limited to encouraging young people to learn about the institutions of democracy through the school curriculum. It also involves practising democracy. Schools are places where young people from different backgrounds and experiences can learn democratic habits and capacities of liberal citizenship, including the habit of civility and the capacity for public reasonableness.

The tragic events of the past three years surely underline the critical importance of an education that develops democratic capacities. In the end, the threat of terrorism and the growth of fundamentalism, introverted localism and racism can only be met by societies that comprise a citizenry with capacities to think beyond the confines of their own experiences, backgrounds and cultures. From a democratic perspective then, the question becomes one of how to organize the education of our children in order to promote democratic capacities (ACDE 2001). This is a question of public purpose, not individual choice, but the one need not preclude the other.

Equally, the provision of Higher Education is foremost a public obligation. It is now widely accepted that individuals contribute to the costs of their own education, but the private benefits of higher education remain secondary to the national benefit. Evidence shows that the links between prosperous higher education systems and prosperous economies is strong, and it is for this reason that nations such as Singapore, the UK and the US are continuing to invest heavily in Higher Education. Similar arguments can be made in the case of vocational and adult education, and early childhood education. It is not helpful, then, to privilege the language of user pays. Neither is it helpful to conceive the debate as some citizens 'subsidising' the education of others. Education is not a zero sum game or a matter of individual competition. Above all else, education contributes to the formation, nature and prosperity of the nation. The project of education is collaborative by nature.

Rethinking the Public/Private Debate

Following the release of the *Charter* in 2001, the ACDE has remained committed to exploring new ways of thinking about the public/private debate. In particular, the Council has commissioned two discussion papers on the subject. Both papers provide grounds for reassessing the debate. More importantly, each suggests important ways by which the education of all Australian school students might be

improved. At the heart of both arguments is a desire to enrich the definition of public education. The public/private debate has been distorted by misleading terminology – there are, for example, no schools in Australia which could genuinely be termed private. Moving forward involves acknowledging the obligations of *all* schools to promote democratic values and to promote rich and diverse educational experiences for students. It also involves recognition that these goals may be met in multiple and creative ways. A narrow view of ‘private’ schools has distorted the current debate. Yet a simplistic view of ‘public’ schools might also inhibit progress.

Schools – An Education Commons?

The lines in the schools debate are now well-rehearsed. Advocates of public education lament the growing inequality of resources, while private education proponents proclaim the need for individual choice. Both sides agree that if the current funding policies are maintained, the drift to private education will likely continue. The merits of this drift, and its impact on the remaining public education system, are disputed. While the Commonwealth funding model often forms the centre of this debate, the role of the states is also crucial. As the Commonwealth frequently notes, its own funding to public schools has increased at a higher rate than state governments’ funding in recent years. Rejuvenating public education will require commitment from, and cooperation by, all levels of government.

In *Public Education as Education Commons* (2003), Alan Reid argues that it is helpful to think of all schools as public schools. All schools receive public funding, and the Independent Schools Council of Australia maintains that its schools operate for the public good (Daniels 2004, at <http://www.isca.edu.au/>). Given these realities, Reid has called for the introduction of an education commons.

The commons is a spatial metaphor for community resources that are held in common and are able to be used or enjoyed equally by anyone in the community without the need to obtain the permission of anyone else. Most resources held within the commons are free, but where fees apply to their use, these are neutrally and consistently applied (Lessig, 2001). Buck (1998) describes commons as ‘resource domains in which common pool resources are found (p. 5).

All schools receiving government funds would be required to operate within a set of limiting conditions, perhaps enshrined in a charter of commons rights and expressed as principles. Within these boundaries, diversity would thrive. The principles and expectations would be determined through public debate and legislated through State and Commonwealth parliaments. The debate would focus on identifying the characteristics of schooling in the commons, using the publicness of education in a democracy as the reference point. Thus the principles would be based on the ‘publicness’ of key aspects of schooling such as curriculum, governance, pedagogy, systems, accountability and funding. There would have to be processes for an ongoing community debate about these principles, but the point is that such debate would be generative, based on consideration about substantive educational and community issues.

In one sense, Reid’s argument is merely making more explicit concepts already implicit. ‘Private’ schools, for instance, already argue that they are bound by the National Goals for Schooling, and are subject to a degree of regulation. However,

this regulation is very limited. Compared with their levels of funding, Australian independent schools have low levels of accountability relative to other nations. Moreover, accountability is often narrowly defined. If all schools are public and committed to promoting democratic values and active citizenship, certain changes are required to the operation of independent schools in particular:

The touchstone for choice would be a rejuvenated notion of the public good, not individual advancement. Thus the problem of homogenous school communities referred to above might be resolved by requiring all schools to demonstrate the ways in which they are exposing their students to a range of cultures and backgrounds. The question of real rather than limited choice might be resolved by implementing a principle of non-excludability where no student could be prevented from participating in the life of any school for such reasons as difference or perceived ability (Reid 2003).

Schools – Public Private Partnerships?

The aim of Caldwell and Keating is also to strengthen public education in its broadest sense. In the ACDE discussion paper, *Adding Value to Public Education* (forthcoming), the authors argue that public/private partnerships can enhance both the flexibility and diversity of education provision.

A public/private partnership is defined as ‘a legally binding agreement between a public authority responsible for a school or school system and a non-public entity that is intended to bring a benefit to each party’ (Caldwell & Keating, forthcoming). Possible models range from non-public providers contributing to the (re) building of a school and leasing it back to the government; to the creation of specialist schools (eg languages, business) which are explicitly linked to relevant community and industry organizations; to community action networks. In the latter case, schools are opened to promote ‘partnerships beyond the classroom with local social entrepreneurs, voluntary groups, health and social services, further and higher education, business, crime prevention and others.’

Public/private partnerships take a number of guises. In most cases though, they aim to open up schools to their communities, and to involve community and industry organizations more productively in the educational process. There are educational and societal risks involved in these collaborations, but the risks of failing to think innovatively are considerably greater.

The merits of public/private partnerships can be sourced to a changing and broader concept of public good, and to opportunities to build social capital. Consciously refuting the notion that such partnerships amount to a privatization of public education, the authors argue that the public good must itself be redefined.

As Caldwell and Keating outline, pressures for greater diversity and innovation in upper secondary schools stem from the development of a knowledge economy. Lifelong and life-wide learning are becoming pivotal to educational success, and this is being reflected in a push to improve school retention rates. Beyond schools, nations are seeking to increase university participation rates, and indeed participation in all formal, informal and non-formal educational settings. The

effects of this change are varied, but include: a more diverse school student cohort demanding more flexible pathways; a related acknowledgement that 'pathways' may not adequately describe the increasingly non-linear transitions between education and employment; growing financial pressures on governments to provide educational services; and new approaches to governance.

In response to these pressures, Caldwell and Keating note that:

Trends include the diversification of courses and qualifications, greater flexibility within senior secondary certificates, new linkages between and combinations of qualifications, new approaches to the recognition of learning, including workplace learning, strategic links between providers, new purpose build multi sector providers. (forthcoming: 13)

These trends already exist within Australia, and further refinement is likely as governments consider all opportunities available to them. Managing rapid change requires a commitment to innovation, and a need to include whole societies and communities in the provision and project of education. Indeed, it requires defining the 'public' in public education more broadly. The authors consider a wide range of examples across Australia, South Africa, the US and the UK:

to illustrate the different approaches to public private partnerships that have emerged in recent years. These include private finance initiatives, city academies, private management of public schools, specialist schools, community action networks, moral persuasion, community design and the creation of education precincts, large-scale philanthropy, and emerging models at the upper secondary level. (forthcoming: 19)

Despite addressing the many concerns about particular public/private partnership models, Caldwell and Keating conclude that 'the weight of evidence supports the proposition that public private partnerships can add value to public education' (forthcoming: 31).

The arguments of Reid, and of Caldwell and Keating, provide important insights into how the public/private debate may be reconceptualised. The ACDE believes that the current trends in Australian school education are both divisive and unsustainable. For the sake of the nation, the public school system cannot be allowed to run down, and the divide between rich and poor cannot be allowed to widen further. All schools need to reflect and practice democratic values, and to be accountable for their curriculum and resources. This accountability, however, needs not to promote a 'one size fits all' approach, but rather to underpin greater diversity and flexibility in educational provision.

Higher Education

Many submissions to the Review call for increased public funding to maintain or improve the quality of higher education. However, given the private benefits that accrue to the individual, it can be argued that any increased per capita investment could be funded in part by those who are directly advantaged.

Taking a course into the future that downloads an increasing proportion of the costs onto new entrants to tertiary education, will risk serious under-investment in the human capital formation that is essential for generating the productivity growth we need to sustain living standards as our population continues to age.

Michael Gallagher 2004: 3

The major beneficiary of highly educated Australians is Australia. Individuals benefit from their education through higher wages, greater employment rates and greater security. These benefits are substantial, measurable and irrefutable. They are also dwarfed by the impact of education on national economic prosperity and social cohesion. Simply, in the knowledge economy, neither economic prosperity nor social cohesion is possible without a well-educated populace, and nations will in future be measured not by their fixed assets, but by the skills and knowledge of their workforce (ACDE 2001; OECD 1996).

Higher Education is undergoing similar changes to the schools system. Overall public investment is not meeting the costs of increased participation, and benefits to the individual are increasingly emphasised. The language of choice is central to changes under *Backing Australia's Future*, which provide fee flexibility in an attempt to introduce a greater market component.

Nevertheless, the variable fee increases are not varying much. In advocating the new legislation, Dr Nelson hoped for thirty-eight tiers of higher education, with universities using their new discretion to create an education marketplace. Courses in high demand would rise in price, while others would remain static or perhaps even fall. The stated goal was a more diverse, student-centred higher education system.

The goal was clearly ambitious. Most university councils have decided to raise their fees, many by the full 25% allowed under the government's legislation. In the short term, the choices for most students will not increase, but the cost of their education will.

The government hopes that Vice-Chancellors will use the additional funds to invest in teaching and learning. Vice-Chancellors claim they will. According to the University of Melbourne, the fee increase is "necessary to maintain the quality of the university's teaching and learning in the face of declining Commonwealth funding for student places". If so, more profitable courses should ultimately enable the quality of the undergraduate experience to be improved.

The answer to funding higher education, however, lies not in merely replacing public investment with private (student) investment. A prosperous Australia requires increased public funding, complemented by student funding and also complemented by industry investment. In facilitating rising student fees, the federal government has focussed overly on one element of funding. The limitations of this approach are many. They arise ultimately from a flawed

philosophical view which does not fully appreciate the economic, social and democratic value of education to the nation.

At one level, there are clearly some areas of education which are critical to the nation's well-being, and which require graduates irrespective of cost considerations. Financial rationalist arguments alone stop short of addressing areas such as Indigenous Education and Languages Other Than English (LOTE). ACDE has argued strongly in the *Charter* (ACDE 2001) that such areas are of vital importance, and that diversity must be harnessed as an economic and cultural resource, promoted through LOTE and a comprehensive national languages funding mechanism at schools level (2001: 82). Many essential areas of education will continue to rely on public funding for their sustainability. The decline of arts subjects, and the decline of teacher education funding, are two trends of particular concern.

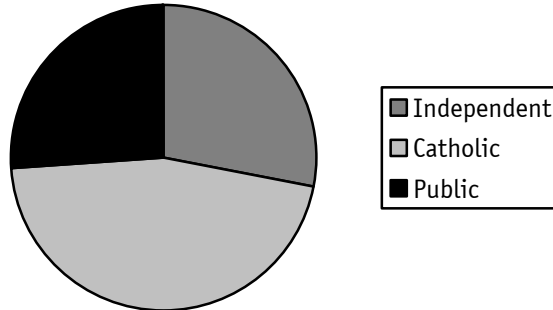
Beyond this, there is simply not enough industry investment. Australian industry has been reluctant to fill the funding gap and the current tax regime does not serve as an incentive. Attractive schemes to encourage enhanced private funding may include necessary adjustments to the taxation regime, both personal and company, as well as incentive schemes which would provide maximum encouragement to individuals and corporations to contribute private wealth to the sector. Lifelong learning accounts and training levies also remain avenues by which industry may further contribute to the costs of both vocational and Higher Education. The Council acknowledges that the size of the Australian industry sector limits what its contribution can be, and the trend towards multinationals also means that offshore parent companies tend not to invest in Australia. However, despite the geographic isolation of our position, our nation enjoys the cultural and economic resource of unparalleled diversity, underlining the need to facilitate and support greater international partnerships. Acknowledgement of the internationalisation of Higher Education, and greater engagement with other nations, would lead to increased funding from industry sources.

Much of the increase in private investment in education in recent years has arisen from increasing the burden on Australian students, who now pay amongst the highest level of fees in the world (AVCC 2000). NTEU figures show that the average student now pays \$4,413 per year for a government subsidised place. This is a real increase of 94% since 1996 (NTEU 2004). Meanwhile, government funding per place has decreased over the same period (NTEU 2004). Additionally of course, an expansion of full fee domestic places is now proposed.

The ACDE does not support the further expansion of full-fee paying courses, whose implementation is arguably discouraging universities from appointing additional HECS places, and whose expansion would further impact upon perceptions of equity. We note the traditional importance of equity of opportunity in Australian education, and that measures such as HECS were designed to ensure that no student was prevented from attending university by financial considerations. The Council believes that HECS has been a highly successful means of financing the expansion of Higher Education, and that students have

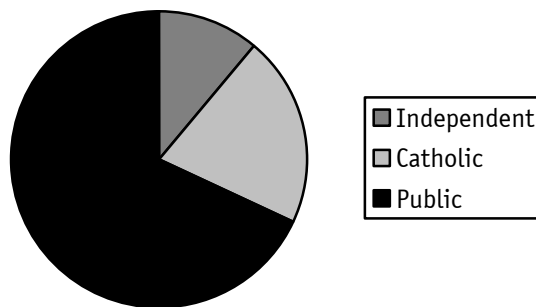
shown general reluctance to pay up-front fees. The recent PISA study, which found serious disparities in achievement between different groups, reminds us that equity of education opportunity is a more pressing issue in Australia than in most OECD nations, and that students in at-risk groups must not be discouraged from participating in higher education. Any increased private investment needs to be complemented by high levels of public investment.

Percentage of Commonwealth schools funding



Source: Martin, R. 2004

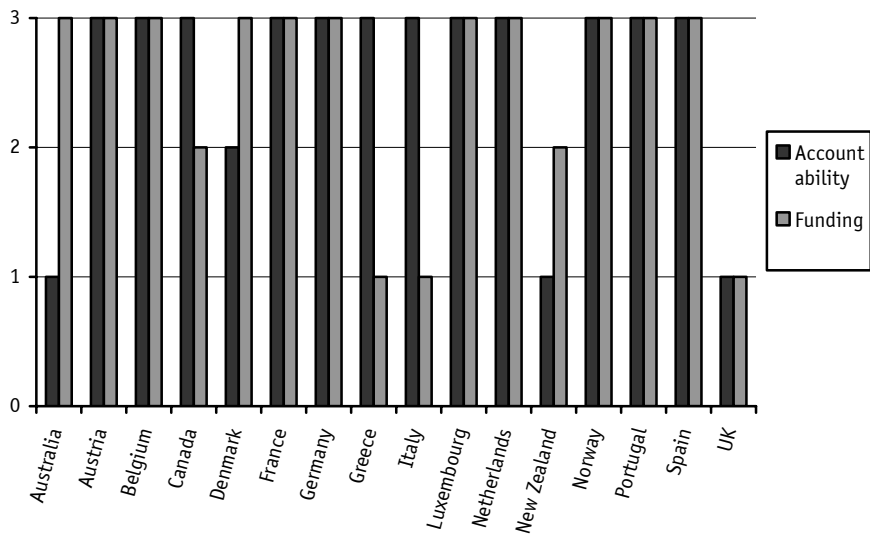
Percentage of Enrolments



Source: Martin, R. 2004

'Private' schools receive around two thirds of Commonwealth funding, despite enrolling only one third of students. This funding is contributing to a drift towards private education, and leading to conflict between state and federal governments over funding responsibilities. A national vision is required to stem the conflict. All schools can be considered public as all receive some public funding. In determining policy, governments must ensure that every Australian child is afforded educational opportunity. The nation cannot afford to exclude some of its citizens from the promise of democracy, and all schools must be accountable for their public funding and operate according to broad democratic principles.

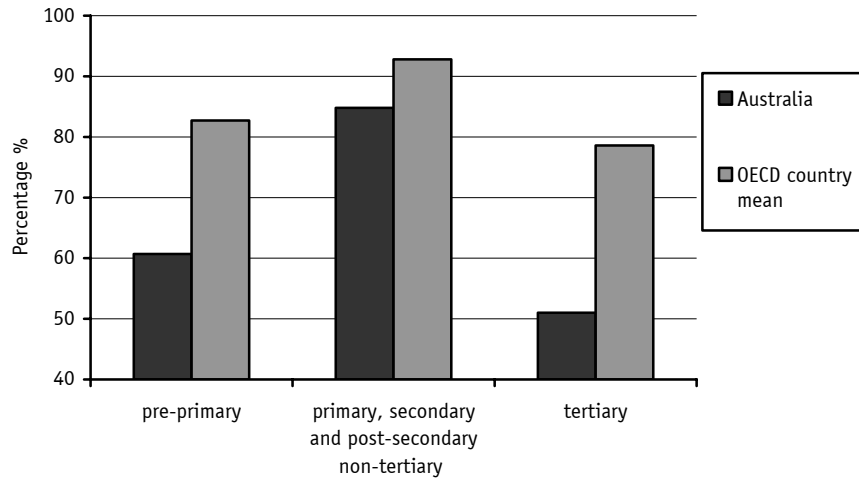
Private School Regulation and Funding



source: Center on Education Policy

Relative to other nations, Australia has high levels of private school funding but very low levels of accountability for that funding. In many nations, regulation of private schools includes matters of curriculum; testing; student admissions; discipline; teacher qualifications, salaries and employment conditions; tuition and fee levels; standards; and recordkeeping. Private schools in Australia receive substantial public funds, and greater accountability would help ensure that these funds are spent in the public interest.

Proportion of public expenditure on educational institutions (2000)



source: OECD 2003 Table B3.2

Levels of public investment in Australian education are proportionately low. Both pre-primary education and tertiary education rely very heavily on private investment. National prosperity will depend on renewed public investment to complement private investment in the education sector.

ACTIONS

- Review arrangements for the public funding of all schools by all governments—Commonwealth and State/Territory. This would ensure consistent and coherent funding arrangements across the two levels of government. The review should be broad ranging, and consider the possibility of creating an Education Commons, ensuring greater accountability throughout the sector, and ultimately more democratic schools. The review should be undertaken by the Ministerial Council of Education, Employment, Training and Youth Affairs ministers (MCEETYA), and cover:
 - the respective roles of the States and the Commonwealth in the provision of schooling;
 - the effect on schools of the interaction between Commonwealth and State funding;
 - the need for advisory and consultative mechanisms to improve openness in decision-making.
- Establish funding targets which reduce resourcing inequities between schools;
- In addition, substantially increase public investment in Higher Education, Vocational Education and Training, Prior to School Education, and Adult and Community Education;
- Seek greater industry funding through changes to the taxation system and further incentive schemes;
- Greater international collaboration to be promoted and facilitated by Commonwealth government initiatives and incentives;
- The establishment of individual learning accounts, company learning accounts, small firms training loans schemes, and a university for industry to be considered, along with further research into other overseas initiatives designed to increase collaborative funding.

7) Technology will become central to all learning

The challenges of lifelong and lifewide learning are compounded by changing technological conditions. As the *Charter* (ACDE 2001) highlighted, technologies of digitisation, mainly centred around the personal computer, have the capacity to transform learning relationships, possibly but not necessarily for the better.

Learning through technology. Quite simply, more sophisticated learning will happen using computers, as well as ancillary content capture devices (digital cameras, sound recording devices) and networking processes (file sharing, the internet). Some of this learning will occur in conventional classrooms as the computer-to-student ratios drop and more students gain additional access to computers in class time. Much of it will happen in new ways—learning at home or at work using structured learning experiences, or learning simply by playing games or using the internet. A large proportion of what users know about the new digital technologies today, from the computer in the home to engineers working at the highest levels in technology companies, has been self-taught. This learning has occurred more through technology than through education in its old institutional sense, and that is partly because educational institutions have lagged behind in introducing computers as a tool through which their students can learn. However, educational institutions need to catch up. Indeed, online or e-learning is now widely predicted to become one of the most significant boom industries within the knowledge economy. But for this new learning to materialise new pedagogies and curricula will need to be designed. This will also require the professional development of teachers in understanding and using the new technologies in ways that genuinely enhance learning (Kalantzis & Harvey 2003).

Learning about technology. Technology, however, is not something which is simply accessed by gaining a technical understanding of its internal workings. If technology is to be a central part of learning, it should itself be humanised, and based on a critical and balanced view of its use to humans rather than a decontextualised 'how it works' view. What can technology do for us, or, when denied access, do for just some of us and thus create new inequalities? In a broad view, technology is a series of relationships, amongst humans and between humans and the natural world. This broader view is encapsulated in the idea of *techne* as one of the 'new basics'— the capacity to use various tools and instruments to get things done, technique, method, practical reasoning, science, human impacts on the environment. All learning today should include technology in this sense as one of the key areas of learning. Technology is not just a tool for learning, in other words. It should be one of the main things that learning is about (ACDE 2001). It should be a message as well as a medium. This is equally true of learners and teachers, given the rapidity with which technology changes.

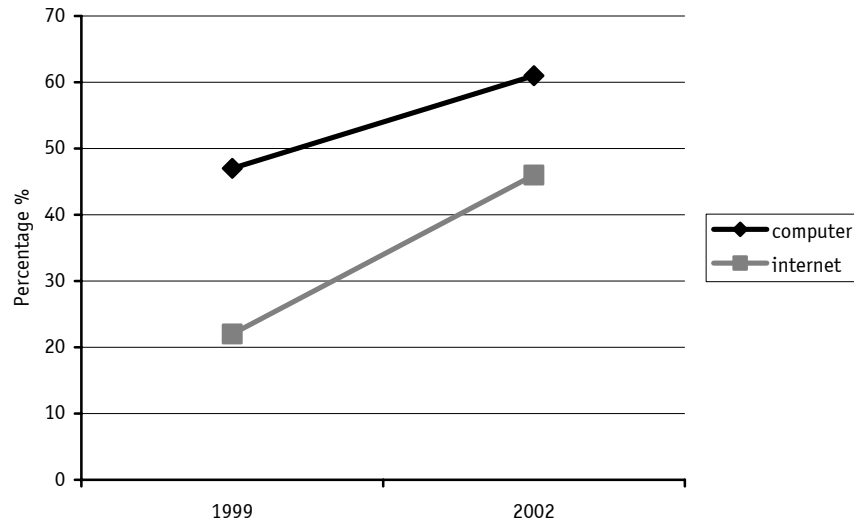
New ways of learning using technology. When used as a learning device and tool, the new technologies can produce enhanced learning experiences. Equally,

however, and despite all their flashy appearances, they can produce a reduced learning experience. The challenge is to figure out possible new ways of learning using technology and to develop them. To examine the possible negatives first, computer-aided instruction is all too often just another way of cramming old style content or a matter of handing the job of skill-and-drill over to a machine, and a machine which tells you whether you are right or wrong in an even more inflexible way than the old teacher-examiner. The syllabus, textbooks and examination system of the old learning made the teacher a mere cog in the knowledge transmission machine. E-learning goes one step further and sets out at least in part to eliminate the teacher. When the media moguls who control the e-learning portals become the providers of content, the learners will become captives to whatever they provide. Computer-based learning can also make learning an individualised experience. The focus is often on what's in your head rather than what you can do and how you communicate, relate and learn with others, just as it was with old learning. It becomes something between you and the machine, rather than a tool that helps you relate to others.

All this adds up to a situation which is undoubtedly worse than learning even in the most draconian of old classrooms, where the teacher at least was there to answer questions and to relate to students as persons. It is a kind of accidental reversion to the very worst of the old learning, and this in part because the educational learning systems are designed not by educators but by computer engineers whose knowledge of education mainly comes from their own childhood experiences. On the other hand, the new technologies could enhance learning, but only if the focus is on learning as a set of human relationships and tools (*techne*); only if the technologies are a means to human ends rather than ends in themselves (ACDE 2001).

Here are some of the possible advantages of computer aided instruction: Whereas the chalk-and-talk classroom worked for the typical child somewhere near the middle of the class, computers can cater for classroom diversity by providing customised learning experiences which meet the needs and interests of individual students. Whereas the information resources and perspectives available in a textbook were limited and required no selection on the part of the learner, the information available on the internet is virtually unlimited and requires the development of skills of navigation and discernment. Whereas students in traditional classrooms were highly dependent on instructions ('pick up your pens and write ...'), computer aided instruction can develop the autonomous, active and interactive learner. Whereas everybody in the traditional classroom, the learners and the teacher, had to be on the same page at the same time (rigidly synchronous learning), learning through computers can be asynchronous and thus correctly paced to meet each student's needs. Whereas group work was not so easy in conventional classrooms, students can easily work collaboratively in online groups, and these groups do not have to be bounded by the walls of the classroom—they can be as wide as the world. And whereas the traditional boundaries of learning (and barriers to entry, progression and opportunity) were geographically defined (the classroom walls, the university campus), now learning can happen anywhere and at any time—at home, at work and in community settings.

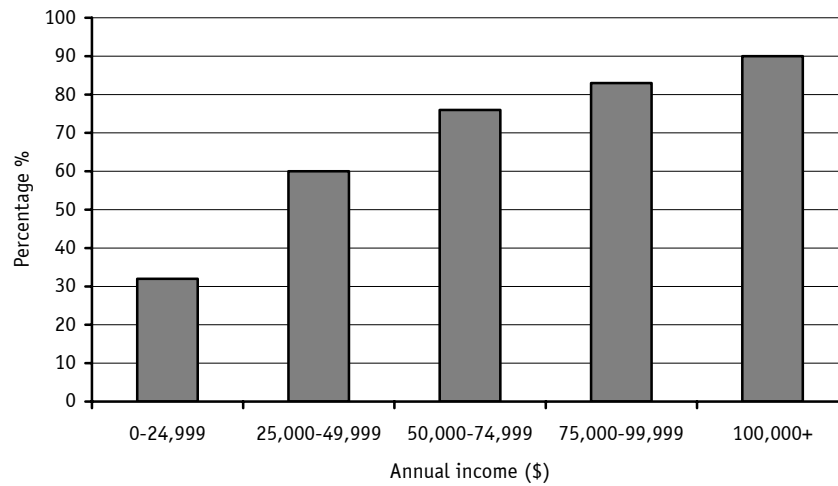
Proportion of Australian households with access to a computer and the internet: 1999-2002



source: ABS cat. 8146

The proportion of households with access to a computer rose from 47% in 1999 to 61% in 2002. Similarly, the proportion of households with access to the internet more than doubled between 1999 and 2002. The embrace of technology is encouraging, but it also means that we need to explore ways of harnessing this technology. New modes of teaching need to be developed, and Australia must ensure that this technology does not lead to a deep digital divide.

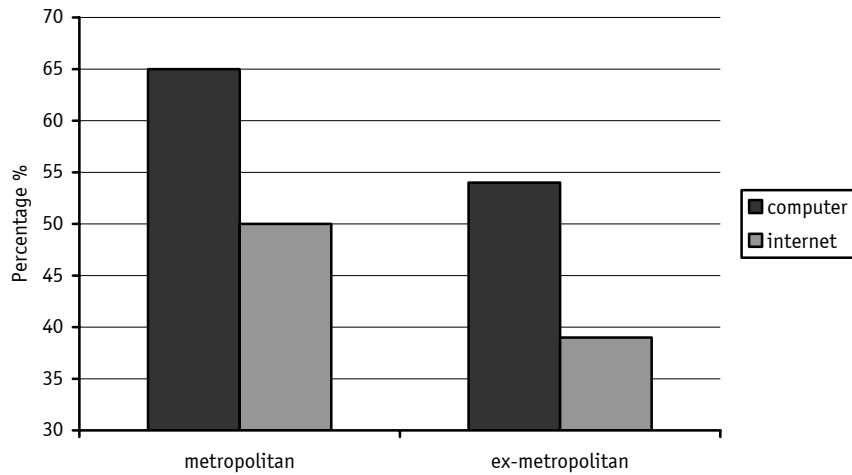
**The digital divide:
Proportion of Australian households
with access to a home computer**



Source: ABS cat. 8146

The digital divide is marked. In 2002, households earning \$100,000 or more were around three times more likely to have access to a home computer than low income earners. As learning increasingly revolves around new technologies, access to computers and the internet is critical. Education can help to assist the digital divide by providing technological opportunities for all Australian students.

**The regional digital divide:
Proportion of Australian households with
access to a home computer and the internet**



Source: ABS cat. 8146

The regional digital divide is also manifest. In 2002, those who lived in metropolitan areas had much greater access to computers and the internet than those in regional and rural Australia. While 54% of households in metropolitan areas had access to the internet, just 39% of those outside the metropolitan area had the same access. Addressing the divide involves infrastructure such as improved bandwidth and telecommunication services. Moreover, it highlights the need for educational institutions across Australia to provide sufficient access to the internet and computers for all students.

ACTIONS

- Provide every learner with a laptop computer, to be replaced every three years. These should be backed by: a) wireless networking in the classroom; b) free internet connections for households with children studying. Costs of software and hardware could be minimised by mass purchase and IT company sponsorship of educational editions of their products. If the cost of this initiative is \$1500 per student per year, the funding needs to be covered by essential increases in overall education expenditure, insofar as more learning will occur autonomously;
- Online infrastructure is not itself sufficient. Large investment is needed to create effective learning relationships in and through the new technologies. This should include:
 - *Learning filters*: tools for navigating, critically assessing and selecting relevant content; digital literacy—online content as a matter of critical selection rather than information download;
 - *Collaborative learning environments*: frameworks for group construction of knowledge in an online environment, networked learning, peer-to-peer learning rather than individualised learning;
 - *Autonomous learning*, including fun ways to replace teachers having to deal with memory work, and in ways which are more sensitive to student diversity than the conventional classroom. Skill and drill becomes fun and games, with constant formative assessment which continually evaluates which learning processes are relevant and appropriate to the needs of an individual student. At every point, students would be guided on paths to further learning as well as being able to take relevant learning tangents;
 - *Transactional learning*: online learning is a matter of communication and sharing (content upload) as much as reception (content download). Instead of student work being created for the traditional audience of one (the teacher or the examiner), online learning involves constant publishing, or making work available to an audience of fellow students, parents and the community. The community of learners becomes the creator of their own learning environment, and the teacher's guiding and filtering role is now more like that of a publisher than the traditional didact standing at the front of the room;
 - *Teacher facilitated learning*, rather than teacher led learning, involves teachers working at online help desks, as managers of 12 by 7 study centres, as moderators of home and community based learning;
 - *Portfolio assessment*, in which every student is constantly publishing to their personal website, thereby building a portfolio of the work they have done, and more broadly of their life experiences. This may be reviewed and annotated with teacher judgments, peer judgments and community expert judgments.

A call to our political leaders

Policy talk must be matched with significant investment and new collaborations to ensure that our place in the world is not further diminished.

The role of government is to expand and to facilitate an increasingly broad range of possibilities and collaborations for all Australians. The anger and confusion, however, that many Australians are experiencing today comes from their sense of exclusion from a future that seems unattainable to them. *New Teaching: New Learning* is about the well-being of the nation. Education needs to be seen as the bedrock of the new economy and the framework for productive citizenship and positively engaged individuals.

Australia may well have only one chance to grasp this opportunity. Other countries are already reinvesting in education capital, and in the future. Australia—an economically and socially vulnerable nation of just twenty million people located at the end of the earth and not part of any regional economic blocs—cannot afford to settle for becoming average.

A call to educators

What is required today is a very dramatic rethinking of education systems, the nature of knowledge and the role that educators need to play.

Rather than being led by political processes, we need to take the lead. What we do is more critical, socially and economically, than it ever has been in the past. We have leverage now to improve the conditions in which we work and the outcomes for learners. This is an opportunity to influence, and to transform, education and society which we must grasp.

A call to Australian citizens and voters

Politicians believe there are no votes in education. They can thus talk the talk but not deliver to children, parents, workers and grandparents on their aspirations to participate equally in the fruits of the new economy. The tax breaks received by families, single people and grandparents cannot hope to buy the education required for equal participation in wealth-creating jobs. Everyone is deprived when a nation wastes its educational heritage and when it ignores what needs to be done to build educational opportunities.

There is an urgent need to build an Australia in which education is available to all, and in which learning is promoted, respected and rewarded.

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