From Silos to Seamlessness:
Towards a Cross-sectoral Funding Model for Post-compulsory
Education and Training.

Bruce Chapman\textsuperscript{a} Louise Watson\textsuperscript{b} and Leesa Wheelahan\textsuperscript{c}

Discussion Paper No. 439
November 2001

\textit{Acknowledgment}
This research was supported with a grant from the National Research and Evaluation Committee of the
Australian National Training Authority administered by the National Centre for Vocational Education Research.
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Student demand for seamless education and lifelong learning is leading to increased levels of cross-sectoral provision by publicly funded education and training institutions. However the sectoral divisions that characterise Australia’s education funding frameworks make it difficult for institutions to provide cross-sectoral courses and inhibit the development of “student-centred” learning programs. Where cross-sectoral programs are implemented, the sector-based funding arrangements lead to anomalies and inequities for both institutions and students. This paper argues that public funding for post-compulsory education and training should be distributed according to principles that are consistently applied, regardless of the sector in which studies are undertaken.

**Keywords:** Educational finance, Post compulsory education, Vocational education, Higher education, Adult education, Recurrent education.
From Silos to Seamlessness
Towards a Cross-sectoral Funding Model for Post-compulsory Education and Training.

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Introduction

Five years ago when the OECD adopted the policy goal of “lifelong learning for all” (OECD, 1996), it sparked international interest in the question of how to finance and deliver lifelong learning (see Leuven and Tuijnman, 1996; Levin, 1998; Oosterbeek, 1998). The OECD Education Ministers’ communique identified four strategies for promoting lifelong learning – including, “rethinking the roles and responsibilities of all partners (individuals, governments and industry) who provide opportunities for learning” (OECD, 1996, p.21). In Australia, whereas the role of individuals and industry in financing lifelong learning has been a focus of policy debate (see AUSTRALIAN NATIONAL TRAINING AUTHORITY, 1998; West, 1998) the appropriate role of government is relatively under-researched (Watson, 2001a).

This paper questions whether the current funding arrangements for Australian education and training are the most efficient and effective means of promoting lifelong learning. Lifelong learning encompasses all forms of learning, yet government funding continues to be primarily directed to supporting formal accredited training on a sectoral basis. Perpetuating rigid sectoral divisions may not be the most effective way to increase participation in countries with large publicly-funded education and training systems.

The relevance of the sectors

The different types of education that are the hallmarks of each sector have evolved over the centuries to become four broad types of provision:

1. **Vocational education and training** is primarily identified with the production of skills and knowledge to be applied in the workplace.

2. **Schooling** is characterised by formal tuition offered on a daily basis within classes supervised by qualified school teachers, primarily to young people and is designed to provide students with a broad general education.

3. **Adult community education** encompasses many types of education and training for adults – basic literacy education, foundation-level studies, accredited training and general education.

4. **Higher education** is primarily identified with “higher learning” in disciplinary studies such as the arts, science, humanities and social sciences and with the production of new knowledge through research.

The traditional distinctions between the broad educational orientation of each sector – in particular, the distinction between vocational and general learning – is increasingly
contested. While historically there has been a distinction between the “liberal” or “general” education offered in universities and the “vocational” learning provided by institutes of technical education, Australian universities have nonetheless had a strong vocational orientation since their inception last century (Hyde, 1982; Marginson, 1993) and have become more overtly vocational in recent decades (Doughney, 2000; Wheelahan, 2001). The elevated status of liberal education over vocational learning may originate more from the desire to reproduce social class through an educational hierarchy than from any concrete pedagogical principles (Teese, 2000; Rushbrook, 1997; Anderson, 1998; Hyde, 1982). Recent studies suggest that although the distinction between vocational and general education may have been a useful means of differentiating between educational outcomes in the “old” economy, the labour markets of the new economy require graduates to possess a range of skills derived from both general and vocational learning (Raffe and Howieson, 1998; Temple, 2001; Jackson, 1999; Young et al., 1997).

It is beyond the scope of this paper to interrogate the historical, social and educational assumptions underlying the distinctions between vocational and general learning. We simply observe that there is already considerable breadth and overlap in what institutions in each of the sectors do. In Australia, there are few legal impediments to an institution offering courses that are traditionally associated with another sector. Each sector has its own course accreditation frameworks, but any institution – public or private – has the right to apply for accreditation to award qualifications in any of the sectors, provided they meet the accreditation and quality assurance guidelines associated with sector-specific qualifications (Watson, 2000; 2001b; Wheelahan, 2000). Institutes of Technical and Further Education (TAFE), providers of Adult Community Education (ACE) as well as private providers may apply to State governments for accreditation to offer higher education courses. Schools and ACE providers offer accredited vocational training, and providers in all sectors tend to offer non-accredited adult education and training.

The extent to which institutions offer programs, courses or subjects accredited by another sector is growing. In 1998 ten per cent of 15-19 year olds in schools were enrolled in VET programs – an increase of 30 per cent over 1997 (NCVER, 1999b). In Victoria in 2000, twenty per cent of senior secondary students were enrolled in VET in schools programs (Teese, 2001). Community providers delivered 15 per cent of total vocational training programs in 1998 (NCVER, 1999a). Australian universities receive over $94 million per year from providing adult education and training courses (Watson, 2001b). Institutes of TAFE are now actively engaged in research (Smith, 2001).

New types of cross-sectoral provision have emerged. Five dual-sector institutions comprise both the TAFE and higher education sectors within one institution. Multi-sector campuses now exist where institutions from different sectors are co-located on one site. This model is becoming very popular in regional Australia (Wheelahan, 2001b). A range of new cross-sectoral learning arrangements have developed that include dual-sector awards (combining two awards, one from each sector), nested

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1 While the differences in the accreditation frameworks have not prevented institutions offering courses from another sector, it is argued that differences in curriculum and accreditation limit the extent of cross-sectoral provision and will impede the development of newer forms of cross-sectoral courses (see Wheelahan, 2001a; and Jackson 1999, Young et al. 1999 for a discussion of this issue in the UK).
awards (that commence in TAFE and exit in higher education with various exits along the way) and awards that draw from both sectors in the one course. Students are now able to access articulated courses that may include up to four sectors of post-compulsory provision. If the proliferation of new cross-sectoral arrangements continues, we can expect that “[t]he differentiation between the sectors will become less distinct, with programmes in each sector having both generalist and vocational characteristics” (Karmel, 1998, p.5).

Although the traditional educational distinctions between the sectors appear to be diminishing, funding and accreditation arrangements remain highly sector-specific. These structures appear increasingly anomalous in an era of cross-sectoral provision.

The changing context of education and training

The different government funding arrangements for the four sectors of schooling, higher education, vocational education and training (VET) and adult community education (ACE) evolved in the context of a ‘front end’ model of provision where the majority of students engaged in learning when they were young (see Austin, 1961; Birch and Smart, 1977; Foley and Morris, 1995; Fooks, 1994; Hyde, 1983; Goozee, 1993). This system was premised on the assumption that it did not matter if people chose not to participate in further education and training beyond the compulsory years because entry into the labour market did not depend on levels of educational attainment. In contrast, the new policy agenda for education and training places a high priority on educational attainment and lifelong learning (Gallagher, 1999; Robinson, 1999). Due to the changing nature of work in the new economy, young people can no longer be confident of getting a job without possessing educational qualifications (McClelland et al, 1997; Spierings, 1999; Vella and Gregory, 1996). Continuous participation in education and training appears to be a key to long-term success in the labour market (McKenzie and Long, 1995).

Government policy is now focused on promoting lifelong learning among people who would previously have never proceeded to post-compulsory schooling (AUSTRALIAN NATIONAL TRAINING AUTHORITY, 1998; Kemp, 1999). These policies are pursued by providing alternative educational pathways for young people in the senior secondary years through programs such as VET in schools. Labour market programs also focus on providing education and training opportunities for people who are unemployed, and educational institutions are encouraged to provide pathways for students from initial education through to further education and employment. However, these policy goals are difficult to realise in the context of a funding system that is divided along sectoral lines.

. . . although progress has been made, the VET/higher education interface is still struggling at the margins. This has been made worse by the different funding, regulatory and administrative arrangements for the two sectors” (Kulevski and Frith, 1998, pp.2-3).

Tensions in sector-based funding

Sector-based funding arrangements compromise cross-sectoral program delivery in a variety of ways. The main concern is that education and training providers delivering
cross-sectoral programs face additional costs in coping with the different funding and accountability arrangements for more than one sector. Students may also be financially disadvantaged when they undertake cross-sectoral programs. The sources of these anomalies and inequities are described below.

**Course delivery costs**

As the sectors are funded in different proportions by both the States and Federal governments there has been no historical impetus for convergence between the funding regimes. In Table 1, we compare the costs of course provision between the sectors on an annual basis and by the unit of Student Contact Hour (SCH). Neither measure is perfect for comparing costs between the sectors. Annual equivalent full-time student units are a measure used in higher education but ACE courses and many VET courses are not taken on a calendar year basis. Student Contact Hours (SCH) is a unit of measurement that is currently used in vocational education and adult community education, but not in the higher education sector or schooling.

<table>
<thead>
<tr>
<th>Table 1 Estimated unit costs in each sector, 1995-96.</th>
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<td><strong>Average cost per annual equivalent full-time student unit ($)</strong></td>
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<tr>
<td>Senior secondary school sector</td>
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<td>Catholic Schools</td>
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<td>Non-Catholic private</td>
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<tr>
<td>Vocational education and training sector</td>
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<td>Vocational education</td>
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<td>Higher education sector</td>
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<tr>
<td>Undergraduate</td>
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<tr>
<td>Postgraduate research</td>
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<tr>
<td>Postgraduate course work</td>
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<tr>
<td>Adult community education sector</td>
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<tr>
<td>Adult education</td>
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Notes: These figures should be treated as indicative only as some are derived from aggregate data and others from a limited number of observations in a limited number of providers. We have calculated the average annual cost of a postgraduate course by dividing the total income from fee-paying postgraduate students in 1998 ($152.2 million) by the total number of fee-paying postgraduate students enrolled (20,568 EFTSU). The average unit cost in each sector is difficult to estimate because each sector uses different definitions of a “student unit”. There are also significant differences within the sectors in the costs of delivering courses across various fields of study. These factors need to be kept in mind when considering the average unit costs of course delivery.

Sectoral differences in industrial awards, class sizes and student contact hours influence the average course delivery costs in each sector and are impediments to cross-sectoral provision because they determine the level of resources available to
institutions. (Wheelahan, 2000). Even in circumstances where governments are committed to supporting cross-sectoral programs, such as VET in schools, integrated provision of cross-sectoral programs is rendered very difficult because of different cost structures. While schools receive extra funding to conduct VET in schools, it is not at the same rate the VET sector receives, yet many schools need to purchase training from a local VET provider\(^2\). As the key cost drivers differ between the sectors, the average cost of educating a student in each sector varies.

**Resource allocation processes**

The governing authorities for each sector have different methods for determining funding levels and allocating resources to institutions. The broad differences are:

- School funding priorities are determined by State governments and private school governing bodies.
- VET funding priorities are determined in an annual round of negotiations with stakeholders in industry and government.
- University funding is determined on a three-yearly basis based on an agreement about their student load.
- Funding priorities for adult community provision is determined by State and Territory governments in those States where the ACE sector is funded. In New South Wales and Victoria providers receive annual core funding from government but most public funding for ACE is derived from competitive tendering to deliver government programs.

Once the funding priorities have been determined, each sector has different methods of allocating resources to institutions:

- Schools are funded according to student (per capita) enrolments in a calendar year.
- VET providers are funded on the basis of teaching time, measured in terms of the number of student contact hours (SCH).
- Student load in universities is measured in terms of equivalent full-time student units (EFTSUs).
- Where State funding is provided to adult community education, it is usually determined on the basis of student contact hours (SCHs).

The differences in resource allocation processes limit the potential for multi-sector institutions to operate as coherent and unified institutions and are an impediment to the development of cross-sectoral programs – both within and between institutions. In a dual-sector university, for example, the higher education arm knows its load and capital funding three years in advance, whereas the VET providers receive an annual allocation of student load (Schoemaker et al., 2000; Ramsey et al., 1997).

\(^2\) Although it is difficult to estimate the costs of delivering VET in schools, an Ernst and Young study (1999) estimated that the cost of VET in schools provision was about 50 per cent higher than the cost of general education, but lower than the cost of course delivery in the VET sector – about two-thirds of the cost of General VET (Allen Consulting Group 2000).
When students within one institution are funded in different ways, there are considerable costs involved in developing student information systems, particularly in respect of students engaged in cross-sectoral programs. The student records management for cross-sectoral programs can be so complicated that in many cases the student information is processed manually. Recent research at a dual-sector university also found that students require high levels of support from teaching and administrative staff in negotiating the transition between the sectors (Wheelahan, 2001).

An inevitable accountability issue for providers of cross-sectoral programs is: how and to whom does one report the TAFE student undertaking higher education subjects in their TAFE course, and the higher education student undertaking TAFE subjects in their higher education course? While most teaching in dual-sector universities is conducted separately for each sector, with teaching staff allocated to VET or higher education (and paid under the relevant industrial awards), almost all central administrative and general staff belong to cross-sectoral departments. Establishing a pool of shared funds from which money can be drawn to provide integrated programs or services can be difficult when each of the partners must account to their sectoral authorities in requesting and spending resources. (Wheelahan, 2000).

The capital funding arrangements are also very different between the sectors. Higher education institutions have the capacity to allocate capital funding to complement the university’s mission and strategic plan, whereas in the Victorian VET system, for example, capital funding must be used as specified in the funding agreement, on the campus specified. This makes little sense in dual-sector universities or co-located sites that seek to take a strategic approach to their development.

**Student contributions**

In all sectors, students make a contribution to the cost of their course provision, but the amount and the method of contribution varies between each sector.

- Public school students contribute to around 5 per cent of their course costs through voluntary contributions. Private school students pay fees of between 20 and 70 per cent of their course costs.
- In most States, TAFE students pay up-front fees ranging from 50 cents to $1.15 per Student Contact Hour (SCH) except for New South Wales where fees are determined by course level. Fees vary between states and in some states may be up to a $1,000 a year, however 20-30 per cent of students obtain exemptions from fees.
- In higher education, students are required to pay approximately 33 per cent of the cost of their course, payable either up-front with a 25 per cent discount or as a deferred income-contingent loan.
- In adult community education, most students pay the full cost of their course, except in government-funded programs that have a component of fee relief.

When the same course can be undertaken in more than one sector – such as advanced diplomas in VET and higher education, or AQF Certificate Levels I and II in schools and TAFE institutes – students are faced with different financing options for the same...
award. A VET diploma can be obtained at an up-front cost of approximately $800 per year – or free for a concessional student – whereas a higher education diploma incurs a fee of over $3,000 per year with the payment option of a deferred income-contingent loan (Chapman, 2001). The extent to which these anomalies become inequities depends on the financial circumstances of the students undertaking the course. For example, students undertaking VET programs in secondary school are usually charged a fee that is lower than the fee paid by a student at a TAFE institute, yet secondary students in academic subjects obtain their education free. Students face additional complexities if they undertake cross-sectoral programs such as dual-sector awards that combine an award from the TAFE and higher education sector (Wheelahan, 2000).

Equity strategies

Given the strong link between education participation and success in the labour market, there is concern worldwide about the uneven distribution of educational outcomes within societies and between nations. In a well-known international report, UNESCO Commissioner Jacques Delors wrote,

The major danger is that of a gulf opening up between a minority of people who are capable of finding their way successfully about this new world… and the majority who feel that they are at the mercy of events and have no say in the future of society (Delors, 1996).

Governments have in place a range of strategies to assist disadvantaged learners but these are marginal to mainstream funding arrangements in each sector (Watson et al. 2000). In spite of the policy commitment to promote lifelong learning for all, no sector has specific responsibility for meeting the needs of people who are the least likely to participate in education and training. Similarly, no sector has specific responsibility for ensuring everyone has the opportunity to obtain at least functional levels of literacy. The ACE sector is widely recognised as a potentially important provider of “second-chance” learning because its lack of institutional structure and community focus appeals to individuals who are alienated from the formal education and training system (Senate Employment, Education and Training References Committee, 1997; Bereded et al., 2001). Yet providers of adult community education are the least likely of all institutions to receive government funding on a recurrent basis. Education and training providers serving disadvantaged learners – particularly in the ACE and VET sectors – generally have access to government funding on a program-by-program basis through competitive tender. The lack of certainty over access to funds and the high costs of provision for disadvantaged learners provide strong incentives for providers to target clients from higher socio-economic groups.

Summary

Although governments are now committed to the cross-sectoral policy objective of lifelong learning for all, the sector-based funding arrangements for education and training remain highly differentiated. This makes it particularly difficult for institutions to implement cross-sectoral programs. Although multi-sector delivery is now the preferred mode of delivery in regional and rural areas (Kirby, 2000; Schoemakers et al., 2000), these service providers face additional costs in coping with
the different funding and accountability arrangements for each sector. Sectoral divisions thus create tensions in the funding framework for education and training because they undermine the implementation of government policy goals.

Towards a cross-sectoral funding model

Post-compulsory education and training systems have grown in functional complexity as well as in scale. They must meet a wider and more complex range of demands, which cannot be met by tracks which serve distinctive purposes and clienteles. Old forms of specialisation by sector, course or institution are no longer viable. (Raffe and Howieson, 1998, pp. 171-172)

Australia’s sector-based funding system has been described as a set of “silos” which perpetuates rigid divisions between the sectors. As sectoral divisions are entrenched in the governments’ funding arrangements, institutions struggle to provide seamless transitions for students across the sectors. Although the traditional educational differences between the sectors are diminishing, rigid sectoral funding structures continue. Differences in their funding, administrative and accreditation arrangements now characterise the sectors to a greater extent than do differences in their clients, their courses or the outcomes sought from their educational programs.

Several government reports have argued that a cross-sectoral funding model would be more effective in supporting the policy goal of lifelong learning (Kirby, 2000; National Board, 1992; West, 1998). However a major obstacle to the implementation of a national cross-sectoral funding model in Australia is the different governance arrangements for each education and training sector. Institutions in each sector receive funding from the same three sources: Commonwealth; State; and private (ie. student fees and private sponsorship). However the amount of funding and the proportions obtained from each source differs in each sector, as illustrated in Table 2.

Table 2 Total expenditure and sources of funding by sector, Australia 1995-1996

<table>
<thead>
<tr>
<th></th>
<th>Public Schools</th>
<th>Private Schools</th>
<th>Vocational education</th>
<th>Universities</th>
<th>Adult community education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total outlays</td>
<td>$12.1 billion</td>
<td>$5.2 billion</td>
<td>$3.9 billion</td>
<td>$7.6 billion</td>
<td>$240 million</td>
</tr>
<tr>
<td>Sources</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>11.4%</td>
<td>38.6%</td>
<td>28.7%</td>
<td>52.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>State</td>
<td>83.6%</td>
<td>17.4%</td>
<td>53.3%</td>
<td>1.1%</td>
<td>22.1%</td>
</tr>
<tr>
<td>Private</td>
<td>5.0%</td>
<td>44.0%</td>
<td>18.0%</td>
<td>46.0%</td>
<td>73.1%</td>
</tr>
</tbody>
</table>


Notes: The estimates in this table are indicative only, as emphasised by Borthwick, (1999) and Senate Employment, Education and Training References Committee, (2000). Estimates for ACE funding are based on data from Victoria and New South Wales, which represent over three quarters of national ACE provision and estimates of revenue from the GST. It should be noted that Federal funding for ACE is not direct funding of providers but is sourced entirely from competitive tendering for specific purpose programs such as labour market programs and adult literacy and language programs. About half of State funding for ACE is also provided on a program basis. It is important to note that $240 million for ACE does not represent the full scope of provision as institutions in all sectors provide adult education courses which is not included in this calculation.
As there is no central authority with the power to implement a reform agenda across all the sectors, a cross-sectoral funding model would have to be implemented through agreement in Commonwealth/State forum such as the Council of Australian Governments (COAG) or the Ministerial Council for Education, Employment and Youth Affairs (MCEETYA). Achieving consensus between the Commonwealth and the States on major policy changes is difficult. Although the Australian National Training Authority (ANTA) was established through Commonwealth/State agreement in the early 1990s, other educational reform initiatives—such as the National Curriculum process in MCEETYA from 1988 to 1993, or COAG’s attempts to reform schools funding in the early 1990s—failed to reach consensus (see Painter, 1998; Spaull, 1987; Watson, 1998).

However it is possible to achieve a cross-sectoral funding model without changing the governance arrangements for each sector. While fundamental structural change may be desirable and even achievable in the long term, it is not a prerequisite for more consistent funding arrangements between the sectors. This paper identified four areas in which the absence of consistency between the sectors disadvantages institutions and students—particularly those involved in cross-sectoral programs. The key areas are:

1. Average course costs;
2. Resource allocation processes;
3. Student contributions; and
4. Equity strategies.

If the funding and accountability arrangements for each sector were made consistent in each of these areas, the administrative anomalies and inequities faced by institutions and students would disappear. Reform could proceed gradually through the establishment of Commonwealth/State working groups to review the funding arrangements in each of the above areas with a view to agreeing on a more consistent approach. The primary consideration for both policy and research should be maximising flexibility and equity for students as well as efficiency and effectiveness for institutions. In many cases—such as resource allocation processes—the reforms would be largely administrative and therefore would not involve additional resources. Through this process, Australia may eventually achieve a cross-sectoral funding model that meets the definition below.

**Definition of a cross-sectoral funding model:**
A system of distributing public funding for post-compulsory education and training based on principles that are consistently applied, regardless of the sector in which studies are undertaken.

Through collaboration, the Commonwealth and State governments could produce a consistent level of public funding, a consistent method of resource allocation, and a consistent regime of student contributions at each qualification level—regardless of institution (or sector) in which the course is undertaken. They could also produce a
cross-sectoral equity strategy to meet the needs of disadvantaged learners. Thus in spite of different funding sources and governance structures, all post-compulsory institutions would operate within a consistent funding and accountability framework.

Conclusion

All public education and training institutions in Australia are cross-sectoral providers to some extent, but the scope of cross-sectoral activity is limited by the funding arrangements for each sector. The sector-based funding and accreditation systems mean that it is very difficult to construct courses or programs of study that draw from each sector and are offered as a coherent whole. Although equity policies and programs are implemented in each sector, disadvantaged learners are marginal to each sector’s funding arrangements. In an era where the changing nature of work requires a reorientation of education provision from a “front-end” model to one which supports lifelong learning, sector-based funding arrangements appear inadequate to meet economic and social policy goals.

Models of cross-sectoral funding that involve a major re-structuring of the existing funding arrangements have a limited application in the Australian federal system because the sectors are funded in different proportions by two levels of government. We therefore propose a cross-sectoral funding model where public funding for post-compulsory education and training is distributed on the basis of principles that are consistently applied, regardless of the sector in which studies are undertaken.

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