A Research Review of FE/HE Links - A Report to the Scottish Executive Enterprise and Lifelong Learning Department

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Chapter 1 Introduction

Mike Osborne, University of Stirling

As a result of research recently completed on Widening Participation to Higher Education, a team from the Centre for Research in Lifelong Learning (Murphy et al 2002) has begun the process of identifying the implications for national policy in Scotland of current practices both locally and in other parts of the world. The further review of literature presented here builds on this work, and may contribute directly to the forthcoming policy reviews of higher education, in particular the forthcoming Comprehensive Spending Review and the Quinquennial Review of the Scottish Funding Councils.

In particular, we present further literature-based research that considers the areas of articulation between Further Education (FE) (and its equivalents in other countries) and Higher Education (HE), and progression from sub-degree to degree level education and training (a field of particular policy significance (SFEFC 2001)). This has been undertaken using existing literatures as an information source. This review does not consider in detail relationships between FE and HE that take the form of organisational links or franchise arrangements, although these forms of relationships form a backdrop for comparison.

The review covers research published research relating to Scotland and the UK in the last 5 years, and also draw on literature relating to the issues identified in other comparable countries. The focus for international study was those countries with similar systems of advanced post-compulsory education, namely the US, Canada, Australia and New Zealand. We also have considered selected European countries where there is little or no tradition of links between Vocational Education and Training (VET) and HE, including those with dual model parallel systems. The countries considered were Finland, France, Germany (and related systems in Austria) and Holland. Although we overviewed certain international sources (e.g. OECD 2001, Council and Europe 1996), we concentrated on those countries already researched in some detail in our previous study, adding further international comparators only where established research collaborators existed.

The review was informed by the staged approached as described by Cooper (1989) for literature reviews and started with an initial scoping exercise based on our previous work (Murphy et al 2002). Initial fields of categorisation for the review were the following issues, all of which have been identified in our previous research report: curriculum articulation; approaches to assessment; credit accumulation; teaching and learning approaches; student support systems in both FE and HE, and to support transition; retention; institutional incentivisation; labour market outcomes. Further scoping resulted in refinement of data categories to be included/excluded; scrutiny of existing reviews to determine their relevance in establishing categories; formulation of coding methodology to collect information.
Primary Sources were obtained from published research that has undergone rigorous peer-based review through:

- Scanning of existing reviews of the literature
- Scanning of journal articles and books, largely though not exclusively by electronic means
- Scanning of citations in books, journals articles, bibliographies and other printed and electronic sources

Secondary sources were also pursued on the basis that they, unlike primary sources, probably contained information most closely approximating all publicly available research. Computerised and manual searches covered the following: bibliographies; indexes of government publications; abstracting and indexing services; citation indexes; internet searching for websites and listservers; electronic media listings. A range of databases were consulted including ERIC, BIDS, Psychlit, SSCI and Dissertation Abstracts International. We will also explore grey literature via various sources including Education-line at the University of Leeds.

The data collected was critically scrutinised with judgements being made about whether particular material should be included or not. Criteria were established for judging the procedural adequacy of how data was generated (Cooper 1989: 63) and to ensure the validity of the review outcome using procedures recommended by Cooper (ibid: 79). Central to this process was a judgement of the soundness of the claims and their contribution to our understanding of the policy implications of particular forms of FE/HE articulation. Sources were classified using the fields of categorisation previously indicated. They were interpreted against a template of what their possible implications might be for future national policy.

The research in itself was not intended initially to involve secondary analysis of statistical data, but to be informed by such analyses. It was, however, established at an early point of the project that the present quantitative data on progression from FE-based HE to further HE in HEIs was limited, due to the lack of a unique identifier for students across the sector. Therefore novel statistical methods developed at Napier University were applied to the datasets provided by SFEFC and SHEFC to trace students crossing the sectors. We therefore provide relevant baseline data sets from SFEFC and SHEFC, as well original analysis of transfer patterns; in this study that data is limited at present to transfer into full-time study. We were not as originally hoped provide satisfactory data on the labour market outcomes of both those who only take FE-based HE and of those who subsequently progress through articulation to HEIs.

The forthcoming chapters are organised as follows. We begin by reviewing literature on FE/HE transfer in Scotland. We then summarise the main issues that emerge from each of the international studies that have been undertaken. We then present the substantive literature reviews upon which these issues have been based. Separate chapters cover
England, Australia, Canada, New Zealand and the US\(^1\); a further chapter collectively covers Finland, France, Germany (and Austria) and Holland\(^2\). We then present a chapter covering statistical data\(^3\). We end by identifying the main implications for national policy formulation in Scotland on articulation and progression from FE-based Higher Education to university level HE.

\(^1\) The chapters covering countries outside Scotland were commissioned from a set of international experts in the field: Professor John Field, University of Stirling (England); Dr Leesa Wheelahan, Victoria University of Technology (Australia), Professor Brian Burtch, Simon Fraser University (Canada), Professor Chris Duke, University of Auckland (New Zealand) and Professor Barbara Bonham, Appalachian State University (US).

\(^2\) We consulted a range of experts in compiling this material and thanks are due to the following: Pieter Vroegop: Leiden University, The Netherlands, Thomas Deissinger: University of Konstanz, Germany, Jean-Pierre Jallade: Université de Paris-Dauphine, France, Leena Jokinen: University of Turku, Finland, Joachim Loeper: University of Koblenz, Germany, Jan Nedermeijer: Leiden University, The Netherlands, Franz Reichl: Technische Universität, Vienna, Austria

\(^3\) Particular thanks are due to Iain Maclaurin at Napier University who provide the novel data analysis.
Chapter 2 Articulation links between further education colleges and higher education institutions in Scotland

Jim Gallacher, Glasgow Caledonian University

1 Introduction

The importance of the links between further education colleges (FECs) and higher education institutions (HEIs) in the provision of higher education (HE) must be understood in the context of two developments. Firstly the steady growth of HE in FECs as a result of which the majority of HE students in Scotland now begin their studies in FECs. Secondly the role of FECs in widening access to HE has increasingly been recognised in both policy documents and research. There is also evidence that many students who begin their studies on HNC/D programmes in FECs are interested in making the transition to HEIs, and completing degree qualifications, although this issue requires further systematic investigation. It is in this context that a review of FE/HE links is timely and important. This paper will be structured in the following way:

- A brief review of the growing importance of FECs as providers of HE level programmes;
- A discussion of the role of FECs in widening access to HE;
- What evidence is there regarding the links between FECs and HEIs which facilitate progression from HN to degree programmes?
- What opportunities do these links create for the students involved?
- What problems and difficulties are associated with the links between HN programmes in FECs and degree programmes in HEIs?
- What evidence is there that these issues are being addressed, and what further action is required in developing policy, provision and practice in this field?

2 The growing importance of FECs as providers of HE level programmes

A number of factors have contributed to significant changes in the FE sector in Scotland in the period since the mid 1980s. These have been discussed by Gallacher and Thompson (1999), and can be summarised as follows. Firstly there were the changes in the economic and occupational structure, the decline of traditional industries, and the associated decline in the demand for craft training. However at the same time there was the growing emphasis on the contribution of further and higher education to the vocational education and training in Government policy (DES, 1987; Scottish Office 1991; DES 1991). This was associated with the need for Britain to compete more effectively in an increasingly globalised market. Thirdly there was an emphasis on increasing and widening participation in FE and HE. In the late 80s and early 90s this was also associated with the contribution of FE and HE to vocationally relevant education and training, for example through the SWAP programme (SED, 1988).
Fourthly there were changes associated with the incorporation of colleges, when they moved out of local authority control, and were encouraged to take a more market oriented approach in developing provision, and in financial planning. Finally there was the growing emphasis on the ideas of a ‘learning society’ and lifelong learning which emerged in the second half of the 1990s (Dearing, 1997; Garrick, 1997; Scottish Office, 1998). Within these reports and policy documents the role of FECs was increasingly recognised as having a key contribution to make to the creation of a learning society, and in creating opportunities for lifelong learning. As a result of these factors FECs underwent a process of considerable change over this period.

FECs moved from being fairly marginal and often low status institutions to having a much more significant role in the Scottish tertiary education system. The number of people participating in courses within FECs has risen from 175,216 in 1985-86 to 383,543 in 1999-2000. Within this overall growth it can be noted that the area in which there has been the most steady, and in some ways the biggest growth, has been in full-time higher education courses. These figures represent a growth of over 300% over this period. This has been mainly in HNC/D programmes, although there has been some limited growth of degree programmes. Although part-time HN programmes were traditionally an important form of provision, providing opportunities for those in employment to gain qualifications, the early ’90s saw a major change in that colleges were encouraged into rapid expansion of their full-time higher education programmes. At this time growth of part-time HN programmes was limited, reflecting the new markets in which colleges were operating. However, as a result of capping of full-time numbers and the encouragement by Government of growth in part-time provision, numbers of part-time students have increased considerably in recent years, and over the period from 1985/86 – 1999/2000 they have increased by around 83%.

Table 1: Students enrolled in FE colleges by level and mode

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>FE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/T</td>
<td>30,374</td>
<td>27,500</td>
<td>30,709</td>
<td>38,176</td>
</tr>
<tr>
<td>P/T</td>
<td>114,81</td>
<td>199,60</td>
<td>194,13</td>
<td>273,36</td>
</tr>
<tr>
<td>HE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F/T</td>
<td>6,996</td>
<td>9,431</td>
<td>25,328</td>
<td>29,841</td>
</tr>
<tr>
<td>P/T</td>
<td>23,029</td>
<td>23,722</td>
<td>35,390</td>
<td>42,166</td>
</tr>
<tr>
<td>Total</td>
<td>175,216</td>
<td>260,253</td>
<td>285,557</td>
<td>383,543</td>
</tr>
</tbody>
</table>

Table 1: Students enrolled in FE colleges by level and mode
Source: SOEID 1999 and SFEFC 2001 (note these figures exclude students registered on non-vocational courses)
In is clear that this process of growth was already well established by the mid 1990s. However the recognition of the contribution of FE to a 'learning society' in the Dearing and Garrick Reports helped consolidate this role for FE. In the Dearing Report on ‘Higher Education in the Learning Society’ it is recommended that much of the expansion of higher education should be at what is referred to as ‘sub-degree level’ (Dearing, 1997: 100, Recommendation 1). The Garrick Report was not so explicit in its recommendation for ‘sub degree’ expansion, but did emphasise the importance of the links between colleges and higher education institutions (HEIs) in the development of HE, and recommended that ‘colleges and HEIs should actively collaborate to enhance and publicise access and articulation routes into degree programmes for students at further education colleges’ (Garrick, 1997: 49, Section 4.62 and Recommendation 7).

As a result of these developments HE provision within FECs is now a major aspect of the higher education system within Scotland, and it can be seen from Table 2 that over half of all entrants to HE begin their studies within an FEC.

**Table 2: Undergraduate entrants to Higher Education in Scotland, 1999/00, by mode of attendance and sector**

<table>
<thead>
<tr>
<th></th>
<th>HEIs</th>
<th>FEIs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>37,491 (64%)</td>
<td>21,012 (36%)</td>
<td>58,503</td>
</tr>
<tr>
<td>Part-time</td>
<td>14,852 (29%)</td>
<td>36,173 (71%)</td>
<td>51,025</td>
</tr>
<tr>
<td>total</td>
<td>52,343 (48%)</td>
<td>57,185 (52%)</td>
<td>109,528</td>
</tr>
</tbody>
</table>

Source: Scottish Executive 2001

In addition to this major growth in HE provision within the FE sector Table 1 also shows a very significant growth in part-time FE level provision within the sector. This reflects the ways in which many colleges were increasingly diversifying their provision, and providing a wide range of flexible provision for the communities which they serve (SFEU, 2000). In this respect many colleges can increasingly be seen to have become community colleges, providing a range of opportunities, which are important in developing the widening, access role which is discussed below. These developments help us understand the routes into and through HE, which many colleges have established.

### 3 FECs, widening access and social inclusion

The interest in the links between FE and HE can also be understood in the context of the growing emphasis which has been placed on widening access to education and training in educational policy in recent years. This emphasis on widening access has been a feature of educational policy over the past fifteen years, and can be seen in earlier initiatives, such as the Scottish Wider Access Programme (SWAP) (SED, 1988). However the recent emphasis on the importance of lifelong learning (LL) has also led to the recognition of the importance of the ‘learning divide’ which must be tackled if social divisions are not to become deeper within the ‘knowledge economy’ (Fryer, 1997). This has led to the
recognition of policies designed to ensure that groups who are in most danger of social exclusion are enabled to participate in education and training and through this to improve their position within the labour market and escape from problems of poverty and social deprivation. (DfEE, 1998; Scottish Office, 1998a; Fryer, 1997; Scottish Office, 1999a).

Within the present political climate FE colleges are now clearly viewed as key institutions in widening access, and promoting social inclusion and lifelong learning in the context of economic and societal changes. The potential role of the colleges in providing opportunities for lifelong learning and implementing the social inclusion strategy has been outlined in a number of key reports and policy documents. The Kennedy Report, while focussing on FE in England, has had a UK-wide impact. This suggests that ‘FE is the key to widening participation’ (Kennedy, 1997: 28). It also refers to the ‘progression opportunities’ required by a ‘self perpetuating learning society’, and the ‘imaginative public and private partnerships’ which ‘have the potential to break through existing barriers and deliver the widening of participation’ which FE can encourage (Kennedy, 1997: 28).

The Fryer Report advocates the need to establish a culture of LL, and recognises the role of FE colleges and the links which they have already established with their local communities as being of importance in achieving this goal: (Fryer, 1997: 73).

The contribution of FECs to LL is also recognised in both DfEE Green Paper (DfEE 1998, Section 4), and in the Scottish Green Paper, which refers to them playing ’a pivotal role in Scotland's educational system, and to providing flexible access to post school education for a wide range of adults' (Scottish Office, 1998:19) This theme is also taken up in the University for Industry (UfI) proposals in which the focus is on providing increased opportunities for people to gain access to education and training through creating new types of partnership (UfI, 1998).

More recently the key contribution of the FE sector to widening access and promoting LL has been developed in the Strategic Framework for Further Education (Scottish Office, 1999b). This document states that 'FE colleges offer by far the most popular route into LLL'. It also refers to a ‘Vision for Further Education’:

*Scotland's FE sector in the new millennium should form an accessible network of colleges, local learning centres, support agencies and flexible outreach arrangements, enabling people from every sector of the community to pursue lifelong learning for both vocational and personal development* (Scottish Office, 1999b)

The training and education needs of the 16-18 age group, and proposed responses, have also been outlined in the *Opportunities and Choices* Consultation Paper (Scottish Office, 1999c). The Beattie Report *Implementing Inclusiveness Realising Potential* (Scottish Executive 1999) also focused on the role of FE in the provision of education and training for young people who, because of physical or learning disabilities, problems with mental health and well-being, or through alienation and disaffection may 'slip out' of society.
Recent research has shown the role of FE colleges in contributing to widening access. The location of FE colleges close to the communities in which people live, and often in or near areas of social deprivation makes them accessible to people who are the target groups for the social inclusion strategies. Evidence from Raab & Davidson (1999) indicates that FE colleges are well situated to provide easy access to residents from the most socially deprived areas (measured on the basis of the Carstairs Deprivation Index). In these areas 77% of the population lived within walking distance of a college compared with 41% of the whole Scottish population. Research undertaken by Gallacher et al (2000) has examined the processes through which people re-engage with education within FE colleges, and the ways in which ‘learning careers’ can develop. There is also evidence that many students who initially enrol in non advanced courses progress to HE level programmes (Gallacher et al, 1997). The distinctive contribution of FECs to the participation of people from disadvantaged areas has been explored by Gillian Raab and her colleagues (Raab, 1998). This study involved establishing Standardised Participation Ratios (SPRs) for the areas in which people lived. Areas were identified on the basis of an Education Advantage Score. This is Census based score based on two Census indicators: the proportion of heads of households in social classes 1 & 2; the proportion of adults with post school qualifications. Postcode sectors were ranked on this score and divided into seven equal categories, where 7 represents the most educationally advantaged.’ (Raab, 1998, p38). SPRs are based on a calculation where ‘a ratio of 100 represents the national average. This means that the number of people participating in HE from a locality is equal to the number we would expect, averaged for the whole of Scotland, taking into account the age structure of the population in that locality.’ (Raab, 1998, p 6) A figure of over 100 means a higher than average SPR. A figure of less than 100 means a lower than average SPR.

Table 3: Standardised participation ratios by educational advantage score category for Scottish domiciled students (not post graduate) 1996-97

<table>
<thead>
<tr>
<th>Advantage Score category</th>
<th>In HEIs</th>
<th>In FECs</th>
<th>Distance learning</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All</td>
<td>Full-time</td>
<td>Part-time</td>
</tr>
<tr>
<td>1 = low</td>
<td>55</td>
<td>42</td>
<td>41</td>
</tr>
<tr>
<td>2</td>
<td>79</td>
<td>66</td>
<td>67</td>
</tr>
<tr>
<td>3</td>
<td>89</td>
<td>82</td>
<td>73</td>
</tr>
<tr>
<td>4</td>
<td>99</td>
<td>98</td>
<td>88</td>
</tr>
<tr>
<td>5</td>
<td>116</td>
<td>117</td>
<td>112</td>
</tr>
<tr>
<td>6</td>
<td>130</td>
<td>143</td>
<td>131</td>
</tr>
<tr>
<td>7 = high</td>
<td>164</td>
<td>203</td>
<td>238</td>
</tr>
</tbody>
</table>

Source: Raab/SHEFC, 1998
While it can be seen from Table 3 that there is a clear overall gradient between advantaged and disadvantaged areas, it can also be seen that this is even more pronounced among participants in HEIs, while participation in FECs is much closer to what might be expected as a national average. This evidence of differential participation rates between sectors can also be observed in UK national data (see for example UCAS, 1999). It would appear then that there is some evidence of FECs successfully recruiting students from socially disadvantaged areas, and enabling them to progress to HE level study. We must now consider the opportunities which exist for these students to progress into HEIs.

4 What evidence is there regarding the links between FECs and HEIs which facilitate progression from HN to degree programmes?

The nature and extent of the links between HN and degree programmes have been investigated in a number of studies. The Higher Education Quality Council (HEQC) undertook as study of the nature of the different types of links which had been established (HEQC, 1995), while Sharp and Gallacher discussed the nature of these links and examined the factors which had helped shape their development (Sharp and Gallacher, 1996) The most systematic of these studies is that undertaken by Alexander et al (1995), and while the data on which this is based is now more than five years old, more recent studies would confirm the patterns established in that study (e.g. Maclennan et al, 2000; Osborne et al, 2000). This data was based on a survey of all FE colleges to which 31 of the 45 colleges contacted responded, a response rate of 69%.

Table 4 shows the links between FE and HE, which were identified. It is clear from this table that articulation links are the most common ones in Scotland. However responses from colleges also indicated that the meaning of the term ‘articulation’ can vary considerably depending on the relationship which is established. Some are formally established, while others are fairly informal agreements. This leads the researchers to the following conclusions.

These results reinforce the argument that articulation does not mean the same thing to all colleges. It may be more useful to describe articulation links in terms of a continuum ranging from formal agreements with guaranteed places which enable students to progress to the next year of study, to informal arrangements with no guaranteed places, and where progression is a more open question. Within this continuum there will be considerable variations in the agreements, both within and between institutions. (Alexander et al, 1995, p31)
Table 4: Types of FE/HE links which exist

<table>
<thead>
<tr>
<th></th>
<th>Number of colleges involved</th>
<th>Number of programme links</th>
</tr>
</thead>
<tbody>
<tr>
<td>Articulation arrangements</td>
<td>27</td>
<td>281</td>
</tr>
<tr>
<td>Franchising arrangements</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Validated programmes</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Other types of link</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Alexander et al, 1995

Franchising was defined as ‘where an HEI approves an FEC to deliver all or part of one of its courses’ (Alexander et al 1995, p34), while a validated programme is one ‘where a FEC has developed and submitted a course/programme to a university to be validated for delivery by the FEC’ (Alexander et al, 1995, p36).

This study also shows that the majority of these links have been established between the FE colleges and the post 1992 universities (Table 5).

Table 5: Number of articulation programme links to different types of HEI.

<table>
<thead>
<tr>
<th></th>
<th>Number of articulation links</th>
<th>% of all articulation links</th>
</tr>
</thead>
<tbody>
<tr>
<td>New universities</td>
<td>164</td>
<td>58%</td>
</tr>
<tr>
<td>Old universities</td>
<td>82</td>
<td>29%</td>
</tr>
<tr>
<td>Other HEIs</td>
<td>35</td>
<td>12%</td>
</tr>
</tbody>
</table>

Source: Alexander et al, 1995

A similar pattern has also been noted by Smith and Bocock (1999) in their study of FE/HE links in England, where they have noted that although these links provide ‘a much needed and valued progression route, the vast majority of FE/HE links are with ‘new’ (post 1992) universities’ (Smith and Bocock, 1999, p297). Osborne et al have also noted that articulation agreements, and other links are more likely to occur with ‘non elite universities’ (Osborne et al, 2000, p244). Maclellan et al (2000) suggest that this reflects the differing institutional missions and priorities of these universities. They refer to the distinction between ‘selecting’ and ‘recruiting’ universities. ‘Selecting’ universities which are more likely to be pre 92 universities are less likely to provide articulated routes with credit transfer, whereas ‘recruiting’ universities are more likely to adopt a promotion based approach, and to actively establish links with FE colleges. These distinctions in institutional approach are also reflected in Murphy et al’s study of access to higher education. They also report differences in institutional policies and priorities, and suggest that differences in access policies, including FE/HE links, often reflect a complex set of factors, which includes differences in recruitment policies, which are designed to ensure
institutional survival within an increasingly competitive higher education market (Murphy et al, 2002). It does therefore seem clear, that while it has been noted above that FECs have had considerable success in widening access, the progression routes available to students after study in FECs are still limited. The introduction of the Scottish Credit Accumulation and Transfer System (SCOTCATS) does not really seem to have had a major impact in changing this pattern, and although much emphasis is now placed on the role of the Scottish Credit and Qualifications Framework (SCQF) in facilitating transfer with credit between sectors, it is not clear that the establishment of this framework will in itself address the underlying issues. These issues will be discussed further in section 7 below.

There is also evidence that the incidence of articulation routes varies between subjects (Table 6)

**Table 6: Subject areas involved in articulation programme links**

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of articulation links</td>
<td>93</td>
<td>49</td>
<td>29</td>
<td>20</td>
<td>23</td>
<td>45</td>
</tr>
<tr>
<td>Number of HNC/D courses</td>
<td>215</td>
<td>130</td>
<td>62</td>
<td>27</td>
<td>24</td>
<td>295</td>
</tr>
<tr>
<td>% HNC/Ds with articulation links</td>
<td>43%</td>
<td>38%</td>
<td>47%</td>
<td>74%</td>
<td>96%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Source: Alexander et al, 1995

This again reflects a complex set of factors. In areas such as social sciences, while the total number of articulation agreements is limited, they represent a relatively high percentages of all HNC/D courses in these areas, reflecting the fact that these courses have been developed largely to provide routes to degree level qualifications in these disciplines, rather than as vocational qualifications in their own right. The high percentage of articulation agreements in science may also reflect difficulties in recruitment to science programmes in HEIs. In other areas, particularly business studies, engineering and computing the number of articulation links is related to the total number of HNC/Ds, which have been established. It also reflects the growing tendency of students in these areas not to see the HNC/D as an end in itself, but as a step towards a degree level qualification, a tendency particularly associated with the growth of full-time HNC/D courses.

5 **What opportunities do these links create for the students involved?**

There have been no national studies of progression from HN programmes to HEIs in Scotland. However data published by the Scottish Executive indicates that 54% of students who obtained a ‘sub degree’ qualification in 2000 progressed to further full-time
study, but a number of these will not be undertaking degree level study (Scottish Executive, 2001). Data published by SFEFC indicates considerable variations, by subject group, in the percentages of students who gained an HN Group Award in 1999-2000 and progressed to degree level study. Thus 34% of social science students progressed to degrees, 30% of science and maths students, and 23% of business and management students. However in a strongly vocational subject area such as social work only 8% of students went on to degree study. It should also be noted that these data are limited, in that there was no information on destination for 36% of students who completed HN awards (SFEFC, 2001). More detailed information about the progression of HN students into degree programmes is provided in the study by Gallacher et al, which is based on students from 13 HN programmes in 6 FE colleges throughout Scotland (Gallacher et al, 1997). There was evidence that the HN route was of particular importance for older students with 63% of the sample of HN students studied being 21 years of age or older. Similarly the importance of this route for widening access was confirmed in that 49% of the sample were from social classes 3m, 4 or 5. Within this sample of students of HN students, who the researchers were able to track, 65% proceeded to degree study. However more detailed investigation would be required to establish accurate national figures regarding progression from HN to degree programmes. This study also showed that this educational route was allowing many students, and particularly older ones (21 and over), to gradually re-engage with study over a fairly long period of time. This distinguishes them from many traditional undergraduates, who have a fairly clear progression route from school to undergraduate education. By contrast 77% of these HN students had undertaken some form of education since leaving school, but before beginning their HN programme, and this figure was higher for the older students (89%). It is also notable that about 50% of the students who proceeded to degrees only decided that they wished to make this choice after starting their HN programme. There is therefore considerable evidence that the links between FECs and HEIs are providing routes back into degree level study for students from traditionally under-represented groups. However the evidence from this study reinforces the point made above that most of the routes into HE for these students are into post 1992 universities (Table 7).

Table 7: Type of institution to which FE/HE Route students progress for degree study (% of students)

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>% of students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-1992 university</td>
<td>62%</td>
</tr>
<tr>
<td>Pre-1992 university</td>
<td>9%</td>
</tr>
<tr>
<td>FEC</td>
<td>26%</td>
</tr>
<tr>
<td>Other HEI</td>
<td>3%</td>
</tr>
</tbody>
</table>

Source: Gallacher et al, 1997

The relatively high percentage of students who proceeded to degree level study within an FEC reflected the fact that within the sample of colleges chosen there was one with a franchised degree programme.
6 What problems and difficulties are associated with establishing links between HN programmes in FECs and degree programmes in HEIs?

We now have in Scotland two higher education systems, which have developed in parallel, but with little attempt to plan them as a joint system. However as has been indicated above a large number of students now progress from one to the other. It can therefore be expected that a number of problems and difficulties have emerged for both students and staff within the institutions.

The first set of issues refers to what Maclennan et al (2000) refer to as ‘curricular issues’. This relates to differences in both structure and content between HN and degree programmes. In some cases the structure of degree programmes is significantly different from that of the HN programmes, with students doing fewer subjects but in greater depth. This can also be associated with differences in the content of programmes, as a result of which HE admissions tutors may feel that students lack the necessary underpinning knowledge to successfully enter a degree programme with credit which will give advanced standing. However a number of staff within FECs have suggested that in some cases there is too much emphasis on the particular knowledge, and not enough on the underlying capacity to learn which has been acquired (Maclennan et al, 2000, p20).

A second but related set of issues is associated with the culture and ethos of the different institutions, study skills and methods of assessment (Gallacher et al, 1997; Maclennan et al, 2000). There are considerable differences between the experience of students on HN programmes in FECs and students on degree programmes in HEIs. These are associated with: the scale of the institutions; the size of teaching groups (groups in FECs tend to be relatively small) and teaching methods; assessment methods (Sharp and Gallacher, 1996; Maclennan et al, 2000). These differences can create difficulties for students when making the transition from FECs to HEIs. These have been documented by Gallacher et al (1997) in their study (Table 8).

Table 8: Problems experienced after starting the degree programme (Degree students, N=126)

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Assessment procedures</td>
<td>27%</td>
</tr>
<tr>
<td>Teaching methods</td>
<td>27%</td>
</tr>
<tr>
<td>Availability of staff</td>
<td>25%</td>
</tr>
<tr>
<td>Other problems</td>
<td>17%</td>
</tr>
</tbody>
</table>

Source: Gallacher et al, 1997

The type of problems associated with assessment procedure included: difficulties with exams when students had been used to continuous assessment; lack of explanation of
how students are assessed; strict time limits for course work; and the higher standards of work expected. Teaching method problems included: different teaching methods from the HNC/D; lectures which were hard to follow; inadequate tutor/lecturer contact; and that the degree structure is more formal than the HNC/D structure. Problems with staff availability included: staff not available; scattering of staff amongst campuses; difficulty in making appointments; and that staff were too busy or too difficult to approach. A total of 64% of these students experienced one or more problem after starting their degree programme. These difficulties have also contributed to a situation in which a number of staff in HEIs feel that students from FECs are not adequately prepared for entry into degree programmes. This can confirm their uncertainties about the value of establishing agreements with colleges which enable students to enter degrees with advanced standing (Maclennan et al, 2000).

A third set of issues surrounds the issue of funding. Funding problems can emerge from the point of view of both the students, and the institutions. Problems from the students’ point of view can be associated with the additional costs of study involved in attending an institution, which is further from home. It has been pointed out above that FECs are located close to many areas of deprivation. The research by Gallacher et al (1997) has also shown that for many the convenience of the college was an important factor in influencing their choice of where to study (Table 9).

Table 9: Importance of convenience of travel in choosing a college

<table>
<thead>
<tr>
<th></th>
<th>Older group (21 &amp; over)</th>
<th>Younger group (Under 21)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 210</td>
<td>N = 142</td>
</tr>
<tr>
<td>Very important</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Important</td>
<td>41%</td>
<td>43%</td>
</tr>
<tr>
<td>Not important</td>
<td>30%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: Gallacher et al, 1997

Maclennan et al (2000) report problems for students associated with travel costs, childcare, and the length of time, which was required to complete a degree. In this respect the financial burdens which result if students do not receive credit for their HNC or HND and have to ‘go back’ a year to gain entry to a degree programme, can be a disincentive to further study. This can compound the problems which many students, especially mature students already experience under the current student funding arrangements (Osborne et al, 2001).

The second set of issues associated with funding are from an institutional point of view. Maclennan et al (2000) suggest that there are important issues associated with
establishing a funding structure, which will support the development of this work. Developing and sustaining these links clearly involves costs for the institution. However whether institutions will see this as an important aspect of their income flow, or very peripheral, will depend on the institutions mission and priorities, as discussed above. It is clear that these types of links are much more central to the work of a number of the post 92 universities, but much more marginal to many of the pre 92 universities. This raises the issue of whether alternative funding structures could provide greater incentives for all universities to provide greater opportunities for FE students.

7 What evidence is there that these issues are being addressed, and what further action is required in developing policy, provision and practice in this field?

At present there is little evidence that much is being done at the level of national policy to address the issue of the two parallel systems of HE, which have developed, and the problems, which these have generated. The development of the SCQF is being presented as an important means through qualifications and credit can be brought together into one system (see for example Universities Scotland submission to the Enterprise and Lifelong Learning Committee’s Inquiry into Lifelong Learning http://www.scottish.parliament.uk/official_report/cttee/enter-01/enter-lli-index.htm). However while the establishment of this framework is an important step forward, it will not in itself resolve the problems outlined above. It seems clear that unless these problems are clearly addressed many universities will continue to award credit for HN awards only when they deem it to be appropriate. As indicated above the problems with awarding credit are complex, and in some cases reflect real problems associated with the structure and content of the different programmes. In other cases they reflect reluctance on the part of staff in universities to recognise HN study as the equivalent of levels 1 & 2 in a university. The Regional Fora which have been established by the Funding Councils, and which now involve both HEIs and FECs may be of value in addressing some of these issues, and developing stronger links between HEIs and FECs, however it is too early to evaluate their work. It seems increasingly important that these issues should be recognised and addressed at a national policy level. A number of possible alternatives have been suggested including the establishment of a joint tertiary education system, or the development of a community college model similar to that which exists in the USA. These suggestions require careful consideration, and evaluation, and it may be the case that what is required is further investigations of options, and a number of short or medium term measures which will contribute to a longer-term solution.

At present there is evidence of a range of measures, which are being taken by institutions to address these issues. These include the development of memoranda of agreement and other forms of collaborative arrangements (Alexander et al, 1995). There is also some evidence of the development of joint programmes to ensure smooth articulation.

A number of responses have also emerged to the problems which students experience associated with transition between the two systems. These include the provision of bridging courses, induction programmes, and various forms of on course support.
However the evidence from Gallacher et al’s study was that only a small proportion of students had actually attended any form of bridging programme.

The issue of funding is also one which has not really been adequately addressed. Following the Cubie Report there has been some improvement in the support for mature students. However there is still considerable evidence many of these students see funding problems as an important barrier to continued participation in higher education (Osborne et al, 2001). At the level of institutional funding a number of options have been suggested including: tiered funding with a higher unit of resource for levels 3 & 4; post code funding; credit based funding; project funding; and a joint system of tertiary funding (Maclennan, 2000). A number of these proposals have also been recommended in submissions to the ELLC Inquiry, e.g. NUS Scotland’s submission (http://www.scottish.parliament.uk/official_report/cttee/enter-01/enter-lli-index.htm). However all of these proposals require further consideration, and again it may be that what is required is a series of short or medium term measures to work towards a longer-term solution.

Conclusions

This brief review points to a number of conclusions. Firstly that the provision of higher education in FECs is now a major aspect of our tertiary education system in Scotland. It is clearly of importance in the widening access agenda, and for older students. A substantial number of these students now progress to degree level study in HEIs, although further work is required to establish accurate data about the extent of this progression. It is also clear that opportunities for progression are unevenly distributed, and far more opportunities to progress with credit exist in the post 1992 universities than in the pre 1992 universities. As a result of these developments we now have two systems of higher education in Scotland which have developed in parallel. Links and relationships between these systems are for the most part ad hoc arrangements which have been developed at programme or institutional level. Many of these are effective, and useful to students, but there is a need to address these issues at the level of national policy. While the establishment of the SCQF is a valuable step forward in establishing a national framework, a framework of this kind will not in itself resolve the underlying issues unless these are clearly recognised, and addressed as part of the process of establishing the SCQF.
Chapter 3 International Issues

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In this chapter we summarise the main issues that have emerged from the various country specific studies that have been undertaken. Our discussion largely focuses on countries outside Europe. We found little evidence of an attempt to use vocational colleges to deliver HE in mainland Europe. The closest model that approximates to the UK position is Finland where the polytechnic sector provides an alternative way of achieving a degree, and like FE in Scotland tends to orient itself to the needs of local and often geographically isolated students. Of course it should be stressed that a concern with widening participation, social inclusion and vocational education exists in all of the European states we considered.

1 Curriculum Articulation

One aspect that is striking about the national reports is the diversity of approaches taken to articulation and transfer in these countries. While similar debates and problems surface in each national set-up, countries such as the US, England, Canada and Australia have approached FE-HE links in quite distinct ways. For instance, there are no regulatory arrangements regarding transfer and articulation in Australia. No definition of articulation or bridging programmes in New Zealand. The terminology of access federations, franchising and validation is irrelevant in New Zealand, with little talk of articulation and linkages. While there is a great deal of discussion of FE-HE articulation and linkages in the English context, structures and procedures are rather ad-hoc and arbitrary (and also much less common that in Scotland). In contrast, all 50 mainland US states have a higher education coordinating authority.

While the majority of US states (34) have established state-wide articulation agreements, in Canada only a

\[ \text{minority of provinces – Québec, Alberta, and BC – have “articulated models” to ease transfer from colleges to universities … links between the colleges and universities are not particularly well-developed (Canadian report).} \]

US states are also engaged in activities such as specialized services for transfer students, governance structures to coordinate transfer and articulation, technological networks to support the administrative procedures necessary for the transfer system, etc. (Robertson & Frier, 1996). Compare this to Australia, where, “despite policy intentions and proclamations, however, pathways remain under-developed, and while not peripheral to the core work of each sector, are still not at the centre of policy”. There is also no shared language defining concepts or categories between or within sectors concerning articulation arrangements, credit transfer and other cross-sectoral arrangements, and no
regulatory arrangements regarding credit transfer, advanced standing or access from one sector to another at state or national levels.

It needs to be pointed out that the FE sector or equivalent serves different purposes in different national settings. Unlike many American colleges, Canadian community colleges act as “commuter institutions”, not offering degrees (in the form of associates degrees), but facilitating eventual entrance to University studies for those who are not taking strictly vocational/technical programmes. “Community college students may, for example, obtain a 2-year diploma from their institution, then transfer in to a University to obtain a baccalaureate degree. In our terminology, the diploma may “ladder” into degree-based studies.” The focus in New Zealand is on “articulation” if you can call it that, within rather than between institutions. So intersectoral work tends to take a back seat in this country.

There are also major differences at the institutional level. In the US, 5 types of arrangements exist between community colleges and universities:

- Articulation and co-ordination agreements
- On-site upper division course offering
- On-site degree programmes
- Satellite Campus
- Satellite university/university college

Tertiary education in Australia, has developed three types or models of institutional arrangements in tertiary education:

- Single-sector stand-alone HE and VET institutions with various links and relations between the sectors
- Dual-sector universities
- Co-located institutions.

In the English context, four broad multilateral partnerships arrangements exist between colleges and HEIS:

- Associate college agreements
- Regional or sub-regional networks
- Multi-agency partnerships
- Multi-college partnerships

These collaborative arrangements in England are “local or regional in nature, and can involve varying degrees of formality.” There is also a tendency in England for colleges and universities to develop bilateral franchising arrangements, rather than focus on developing articulation routes.

It seems clear from exploring the national reviews that the US has the most highly developed links between the FE-HE sectors or equivalents. At least one of the reasons for
this is that both 2-year community college and 4-year institutions are classed as higher education. But the US report does point out that “not all of these (articulation agreements) work as effectively or efficiently as they could. Transfer and articulation in colleges and universities continue to be top priorities in higher education policy”. The transfer process needs much work in a number of states.

Many of the policies only cover graduates with the Associate of Arts (A.A. degrees) and the Associate of Science (A.S. degrees). Those graduates with the Associate in Applied Science (A.A.S. degrees) which is a degree granted in technical or occupational type programs are frequently uncertain as to how their degrees will be interpreted.

This points leads into a more specific discussion regarding curriculum articulation. Although a great deal of the national reviews tended to gloss over this significant aspect of FE-HE linkages, what they did comment on in the main related to the traditional disjuncture between academic and vocational/technical curricula in different forms of institution. For instance, a major factor hindering linkage and progression in New Zealand is “the persisting dissonance between vocationally oriented competency based accreditation and the more academic tradition.” The US report cites research, which suggests that the emphasis (comprehensive/academic/vocational) of a community college is a contributing factor in the success of transfer and articulation. The transfer rates were higher if their focus was more comprehensive than emphasising technical programmes. It appears the multiple missions of community colleges can lead to confusion and difficulty in relation to transfer, with not all of their programmes transferable to four-year institutions.

In this regard, while Australia may lag somewhat behind their North American counterparts, the different curriculum approaches in each sector of tertiary education,

disguises the considerable although as yet largely unacknowledged commonality of content in courses offered in both sectors, with both offering vocational and general courses; commonality of learning-teaching process, with both sectors promoting the virtues of flexible and workplace-based learning; and both sectors even adopting common aims, the promotion of economic benefit through the development of human capital.

So there does appear to be some potential for a move towards a more integrated system in Australia, at least from the viewpoint of curriculum articulation.

One last issue highlighted in relation to curriculum was the role of faculty and staff in institutions. Some of the research cited in the US report emphasised the role of faculty and staff in increasing transfer rates from community colleges to four-year institutions. Also on a more negative note, the case of inter-institutional agreements not adhered to by some college deans or department chairs at four-year institutions, was another factor inhibiting transfer.
2 Approaches to Assessment

Surprisingly, for an issue at the heart of the debate over FE-HE linkages, only two of the national reports made explicit mention of assessment, New Zealand and Australia. Unsurprisingly, both referred to the difficulties involved in linking two sectors that utilise two different forms of assessment. In New Zealand, a major barrier to further linkage is “the abiding tension between the competence-based national qualifications framework and more holistic academic traditions with progression and grading through to complete degrees.” On this note, it appears that the recent introduction in New Zealand of the National Qualifications Framework has not helped articulation matters, and its vocational orientation “like competency approaches to the curriculum and assessment elsewhere, attracts significant academic and professional criticism as well as institutional resistance to its adoption.”

A similar scenario exists in Australia, with attempts to bring the two curriculum models closer facing “fierce resistance from both sectors”. The move towards competency-based training approaches in the VET sector is, according to the author of the Australian report, “widely regarded as an obstacle to articulation, credit transfer and other forms of course links between TAFE and HE.” Apart from the usual difficulties of trying to reconcile competence and norm-referenced approaches to assessment, two other reasons are given. First of all, HE is unable to gain an understanding of the extent to which TAFE students with credit share the same underpinning knowledge as do other students. Second, assessment outcomes are usually ungraded, and this disadvantages VET students in seeking entry to HE through competitive entry processes. On top of these problems, other research has found that TAFE articulators entering HE in New South Wales faced many obstacles and barriers, including diverse, inconsistent and unpredictable assessment procedures.

3 Credit Accumulation

There are number of interesting recent developments in the international area of credit transfer and accumulation that may incorporate some potentially transferable elements of best practice. At the national level, New Zealand has established a new school-level National Certificate in Education Achievement (NCEA), which has a credit-accumulation capability. According to the author of the report, this will "enhance flexibility and facilitate recognition of learning achievement." Clearly here is the opportunity to instigate a lifelong learning approach via credit links through schools, FE and HE.

A development in the US of relevance is the increasingly important role accrediting agencies play in "facilitating transfer agreements that treat community college students fairly,” which is significant, given that accrediting agencies have traditionally put restrictions on transfer and credit between 2 and 4 year institutions.

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4 However, TAFE institutions (both stand-alone and dual-sector) are increasingly providing graded assessment to help students access HE, but also, in response to demands by employers and students for results that discriminate between VET graduates.
In another section, it was mentioned that Canadian universities do not offer associates degrees, so strictly speaking, they do not offer a 2+2 credit transfer system. However, some colleges in Canada (but not the majority it seems) offer the "equivalent of the first two years of University education, mounting 1st and 2nd year courses that are given transfer credit at some Universities." It is surprising that this is not more common in Canada, given that "more students commence degree studies through community colleges, university colleges, or institutes than through direct entry to BC’s universities (British Columbia Council on Admissions and Transfer 2001, 5)." the link between some community colleges and some universities in terms of credit accumulation has a number of dimensions:

- Credit may be assigned directly where college and university courses are deemed to be essentially similar; i.e. there is a “match” between the courses.
- In some cases, bloc transfer can be given between a sending institution (college) and a receiving institution (university). This allows students to proceed into upper-level coursework without undertaking costly, time-consuming lower-division prerequisites.
- Even where direct credit is not granted, a student may receive given unassigned credit for certain courses. This is where a course is equivalent in credit terms, but there is no equivalent at the university.
- Unassigned credit may help a student to complete breadth requirements of a degree, if not the more specific requirements of a major or minor concentration. In some cases, no credit may be given.

On a regional level, while Canada as a whole operates a different system to the US, the province of British Columbia comes closer in terms of its credit transfer schemes. In both, transfer credit is an important link, as it allows students to obtain equivalent 1st/2nd year education at lower tuition costs than Universities, often in a more convenient, accessible, and affordable location than those of the four major provincial Universities. "Students may thus transfer in to Universities with equivalent standing to students who entered University directly in first year."

At the same time, it needs to be pointed out that North America does not operate a universal 2+2 policy. As stated earlier, Canada does not do associate degrees, and decisions over credit transfer are not automatic. For instance, according to research conducted in BC, a majority of transfer students were satisfied with transfer of credits between institutions, while students who had completed work in fairly specialized programs such as Visual, Performing and Fine Arts were "more likely to be disappointed in transfer credit decisions."

At an institutional and programme level, some developments in Australia may be of particular interest to the Scottish debate over FE-HE links. It should be pointed out first that Australia has two main modes of credit transfer, block transfer and curriculum mapping. Block release is somewhat similar to the American model of 2+2, except that in this case it is more of a 1+2 (1 year TAFE diploma and 2 years of a 3-year university
Curriculum mapping is more likely to occur in dual sector institutions, and "focuses on mapping the content, learning outcomes, standards required in assessment, and sometimes approach to teaching and learning, with varying degrees of rigor."

The developments of note that have occurred in Australian tertiary education, relate to two different forms of pathway between TAFE and HE. One of the major developments is the increasing number of enhanced pathways are being developed in Australia. Enhanced pathways offer articulating students more credit or advanced standing in the destination course than would otherwise be the case. An enhanced pathway is developed by both parties (TAFE and HE), but delivered in the TAFE institute. One model is the degree link offered jointly by the University of West Sydney and the Western Institute of TAFE. Students are able to complete a TAFE diploma and then undertake a further 18 months of study at UWS and graduate with a Humanities degree with a major in whatever discipline their TAFE diploma focussed on. At dual-sector universities enhanced pathways are increasingly offered, which in some instances combine modules and subjects from both sectors, but which have been packaged into the TAFE course. This occurs through cross-crediting the TAFE modules and HE subjects against each other.

Guaranteed pathways are also becoming more prominent. Most often, TAFE students must win access to the destination HE course through competitive entry processes before they are able to attain the credit transfer specified in the agreement. In contrast, guaranteed pathways reserve a place for the articulating student, provided they meet the standards of performance specified in the pathway agreement. This type of pathways has echoes of Compacts in Britain - the school-university link programmes that are increasingly being designed to widen participation in HE.

But both Canada and Australia seem beset by problems in the arena of credit accumulation, with Canada experiencing "shortfalls in credit recognition for some community college courses and programmes," and credit transfer and student movement in Australia remaining underdeveloped across the board (regardless of institutional type). This is due to the "different reporting, funding and accountability requirements to different levels of government in each sector."

The HEFCE backed recent introduction of foundation degrees in England is an interesting addition to inter-sectoral collaborations. Although only at the design stage, it is clear that government views partnerships between FE and HE as an effective way of increasing HE in FE, and that a move towards an American-style 2+2 model would facilitate greater participation and progression in English tertiary education. Whether or not England can avoid the credit transfer problems faced by Australia and Canada, is another matter.
4 Teaching and Learning Approaches

Differences in approaches to teaching and learning are often cited as a major barrier to the successful development of articulation and transfer between sectors. This is confirmed to some degree in the national reports. While only two of the reports dealt with this issue in any detail, their discussion of teaching and learning may offer some pointers to the development of successful attempts at articulation. Having said that, the findings produced by the US and Australia are to a degree contradictory. Both refer to the oft-mentioned differences in learning environments, with the US report emphasising different types of study skills (the major academic concern) and the Australian report focusing on the physical environment: “Classes [in TAFE] are generally smaller, contact hours higher, and curriculum and assessment is competency-based.” One reason cited in the US report for the ineffectiveness of transfer “is because of the large number of underprepared students who enter community colleges.” The conclusion appears to be drawn that what they refer to in the US as “developmental education” in community colleges is a crucial factor in ensuring successful articulation, with research by Swallow & Fodor (1999) finding “positive effects on transfer students’ grade point average (GPA) using a study skills course specifically designed for these students at a four-year college.” This effect on students’ GPA is significant, given that the impact on the student academically is referred to as “transfer shock”, a term that has been used “to characterize the temporary dip in transfer students’ academic performance (or grade point average-GPA) in the first and second semester after transferring.”

This “transfer shock”, however, does not appear as pronounced in the Australian context. Although certainly differences exist in the learning and teaching environments, these do not cause the same level of surprise or apprehension among transfer students as their US counterparts. “While differences may exist in the learning environments … sufficient commonality exists in the environment and content areas to assist students in coping with higher levels of study.” Other research cites in the Australian study suggested that, while there “were some differences between TAFE and HE students in approaches to study (deep, surface, achieving etc) and in their learning preferences, … overall, the two groups of students were characterised by much similarity, and that these were more important than the differences.”

5 Student Support Systems

It is difficult, when discussing links between education sectors, to separate off issues around student support as a discrete set of problems, as they clearly have an effect on issues like credit transfer, retention, etc. So much of material and research in this area is guided, explicitly or not, by concerns over the development of effective support mechanisms. However, the national reviews do highlight some issues that are central to the question of support in the development of articulation and transfer agreements. Some of these are familiar. For instance, financial is a major in the US transfer context. Include in this are the "high cost of a four-year college, limited financial aid for students transferring from one institution to another, low number of grants or scholarships
specifically for transfer students, and transfer students who receive acceptance letters after financial aid application deadlines." Another issue in US transfer is the financial version of 'transfer shock, with students from lower socio-economic backgrounds finding it "difficult if not impossible" to afford tuition at four-year institutions.

The Canadian report points out that there can be a huge financial disincentive to transferring out of community colleges, and not just in terms of higher tuition rates. Transfer shock in the shape of decreased GPA can lead to "delays in degree completion, higher costs of education, and in some cases, being placed on academic probation and/or being required to withdraw from university."

Administrative support systems were identified in the Australian review as having a crucial impact on the success of articulation agreements. Administrative separation between different institutional forms "means that it is difficult to develop seamless arrangements for students," an obstacle which is compounded by an almost "complete lack of systemic arrangements to support student movement between sectors, or other forms of cross-sectoral collaboration."

The report cited a study, which suggests that although the majority of transfer students found the administrative processes fairly straightforward, it appeared that the reason students experienced this as relatively unproblematic was "because of the very high level of support from teaching and administrative staff" (Wheelahan, 2001a).

On an issue that has particular relevance to the Scottish situation - geographical distance - both the US and Canadian reports indicated that the proximity of colleges and universities to home was a significant factor in decisions on attending and transferring. The US report indicated that adult students with families and other responsibilities "sometimes find it difficult to transfer to institutions that are located at such a distance from their home," and quoted from Hirose (1994) who stated that "if there is no state university within a hundred miles of that community, few students will progress beyond the community college."

Another concern in the US with support for student transfer, relates to the traditional 'open door' policy of community colleges and the more recent erosion of it, with limited public funds and tight budgets being cited as two reasons for the "concern about the large number of entering students needing basic academic skills instruction." Open admission is still in place as a guiding principle, but concern is on the increase over the number of under-prepared students.

Finally, a summary of research in Canada tends to reflect some of the general issues when it comes to student support.

students considering transfer to universities should have access to pertinent information, that applicable "policies, practices, and procedures" should be more understandable, and that colleges and universities should work together to provide better matches between curriculum and pedagogy.
6 Retention

Although student retention was mentioned as a concern in the New Zealand report, unsurprising given their “remarkable” open entry policy there, research findings are discussed in the US and Canadian reports that relate directly to the experience of completion among transfer/articulated students. There are two separate sets of findings of note. The first refers to a comparison of completion rates for both transfer and non-transfer students. Both the US and Canadian findings tend to suggest that non-transfer (i.e., student enrolled from high school into 4-year institution), are more likely to complete than transfer students from community colleges. US students who begin their college degree at a community college and transfer to a four-year college are “less likely to complete their degree than students initially enrolled in a four-year institution.” Concerns have also been raised in Canada about the “relatively weak performance” of students transferring from college to university programs. Research cited suggests that Canadian students who begin university studies directly from high school (enter first-year university classes) are, similar to their US counterparts, more likely to receive degrees than their transfer-in counterparts from colleges (and this is when clear transfer links are articulated).

The second finding relates to the differences between those who transfer with a complete associates degree from a community college and those that do not. This refers to the US as Canadian community colleges do not offer such degrees. According to research cited in the US report, completion rates for degree programmes are much higher for those transfer students who had already gained an associates degree from a community college.

The bachelor’s degree attainment rate was much higher among the minority of community college transfers who completed associate degrees before transferring: 43 percent of associate’s degree completers had received a bachelor’s degree by 1994, compared with 17 percent who transferred without any credential (Lannan, 2001: pp. 6-7).

For both transfer and non-transfer students, other research by Belcheir (2000, p. 3) identifies “continuous enrollment, mainly full-time enrollment, and first semester GPA” as the most significant factors in predicting graduation for transfer and non-transfer students.

Indirectly related to retention is course performance, which is referred to in the Australian report. Overall, research suggests that Australian transfer/articulated students perform just as well as their school-leaver counter-parts.

The pass rates for TAFE articulators in HE are comparable to other groups of students, particularly school-leavers, demonstrating that they are able to cope with study at this level. National comparative data showed mixed results with TAFE students in some states experiencing lower pass rates, but overall the rates were comparable (Dobson, Sharma and Haydon, 1998). Institutionally based research also
demonstrates that TAFE articulators achieve results comparable to other groups of students (Ramsay, et al., 1997; Wheelahan, 2001a).

7 Institutional Incentivisation

In exploring the role of institutional objectives in developing links between sectors, some familiar themes are highlighted. In particular, a desire/necessity to compete for markets of students in order to achieve the objectives of self-preservation and institutional self-preservation and institutional survival, were emphasised in the New Zealand and Australian reports as constituting a serious disincentive to successful transfer and articulation. In Australia, there are "no institutional incentives to undertake cross-sectoral collaboration, other than market positioning and advantage," while competition in New Zealand between institutions for "more 'cheques on legs' in a system of uncapped growth does not make for generous inter-institutional collaboration." The need to "nurture and hold on to their own" and the desire to preserve jobs and status in each sector by disguising industrial disputes as "disputes over philosophy, teaching styles and standards," has led to a similar situation to that of Scotland, where the impetus (at least at government policy level) has shifted away from a concern with competition and market forces to developing collaborative work in the form of institutional affiliations and mergers.

In the New Zealand context, efforts to develop collaborative arrangements links at an access level among Auckland's universities, "have won enthusiastic support from chalkface professional bridging educators concerned that competitive separatism does not serve Maori and Pasifika or even institutional interests well." Like all change, however, this shift has been a painful one for some concerned, with the uncovering of "reluctance and personal discomfort about moving so much against the well-established separatist and competitive grain of institutional tradition."

Other barriers to institutional collaboration include the disjuncture between different assessment and curriculum models in each sector (already discussed), plus also what the Australian report refers to as the "dead weight" of administrative requirements, which acts as an "almost irresistible counterforce to policy that seeks to deepen and extend collaboration."

Interestingly enough, administration was also identified as a key factor in increasing articulation and transfer. US research has found that transfer rates have increased as a result of the "active endorsement and encouragement" by administrators. "Institutions with high transfer rates had key administrators who gave high priority to the transfer mission."

According to the Australian report, staff in general are a key component of any means to develop FE-HE links, especially when staff from the different sectors "have established good, collaborative, and trusting relationships" (Schoemaker, et al., 2000; Sommerlad, et al., 1998; Wheelahan, 2000; 2001a). In particular, the report suggests that effective
articulation is most likely to happen when "designated staff are employed to develop links between the sectors, a role described by Sommerlad et al., (1998) as that of ‘boundary spanner’.

8 Labour Market Outcomes

If the national reports are anything to go by, it will be extremely difficult to compare and contrast labour market outcomes for articulated students. Both the New Zealand and the Australian reports make mention of the fact that data does not exist for this cohort. New Zealand data is not able to distinguish labour market outcomes “between different categories of students.” In Australia, there is no data comparing the labour market outcomes of TAFE articulators who graduate from HE with other HE graduates. Having said that, the Australian report does concede that some general conclusions can be arrived at via the course and university attended by the transfer students.

TAFE students find it more difficult to enter the elite universities, and HE courses with high TER scores (Cohen, et al., 1997), entry to which results in higher graduate employment outcomes and starting salaries (DETYA, 1998).
Links between vocational education and training and higher education in Australia

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Introduction

The development of pathways between the four sectors of post-compulsory education – senior secondary school, adult and community education (ACE), vocational education and training (VET), and higher education – is seen by Australian governments and policy-makers to be of fundamental importance to promote and sustain near universal levels of participation, lifelong learning, and social inclusion (Gallagher, 2001; Karmel, T., 1998).

Federal government planners expect that during their lifetime 45% of today’s teenagers will attend higher education and 45% VET, with increasing numbers attending both. They estimate that around 70% of today’s teenagers will complete a tertiary qualification (Aungles, Karmel and Wu, 2000: 6-12). Aungles et al. (2000: 12) argue that access to tertiary education has reached saturation and that “there appears to be limited scope for further substantial increases in access to tertiary education”. While this may be so, access to higher education remains a key social policy concern, as students from disadvantaged backgrounds are not represented in proportion to their numbers in the population, particularly students from low socio-economic backgrounds, and rural and isolated backgrounds (NCVER, 2001a). Elite universities have even fewer students from low socio-economic backgrounds, resulting in high levels of stratification within the higher education sector, as well as between the sectors. School students are selected to higher education on the basis of a tertiary entrance rank, a measure that is correlated with socio-economic background (Kirby, 2000; Pascoe, McClelland and McGaw, 1997). The elite universities focus on school-leaver populations with high scores, leaving the newer and less prestigious universities to compete for mature age students and other students from non-traditional backgrounds.

Higher education institutions are required to report against equity indicators and to annually submit equity plans to the federal government, which, in return, disperses Higher Education Equity Programme funding. However, the amount involved is miniscule, approximately 0.1% of total government expenditure on higher education. Less than half of it is dispersed on the basis of performance (DEST 2001: Table 216).

In this context, pathways are the key mechanism to increase access to higher education for students from disadvantaged backgrounds. Despite policy intentions and

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5 Higher Education institutions refer mainly to publicly funded universities. However, as there are five universities that comprise both a higher education and a Technical and Further Education sector the term university is not used synonymously with higher education.

6 Indigenous students are represented proportionally to their numbers in the population, but they are concentrated in lower level courses, and experience higher fail rates and attrition rates.
proclamations, however, pathways remain under-developed, and while not peripheral to
the core work of each sector, are still not at the centre of policy. This paper considers the
factors that promote and hinder pathways within Australian post-compulsory education,
with a major focus on the two tertiary education sectors – vocational education and
training and higher education.

This paper will consider:

- problems arising from inadequacy of data, as this limits the extent to which an
evaluation of pathways and patterns of student movement is possible;
- a brief examination of the structure of tertiary education, as the context in which
pathways are developed determines their scope, effectiveness, and form. This will
include a review of (the lack of) institutional incentives and (the lack of) national
policy frameworks;
- approaches to pathway development, curriculum, assessment, credit transfer,
teaching and learning approaches;
- how students experience, and are supported to make, the transition from TAFE to
higher education; and,
- the outcomes that have resulted from these arrangements.

Data

The four sectors of post-compulsory education and training in Australia are responsible to
different levels of government within Australia’s federal system. This has resulted in
different data collections in each, making it very difficult to accurately determine the
extent of student movement between and within each sector. Higher education and
vocational education and training define, count and fund student units differently, and
they differ in the extent to which they record and report prior study of students in another
sector. It is difficult even within the sectors to account for student movement, as attrition
is sometimes due to students moving institutions within or between sectors, and not to
dropping out of study (McInnes, Hartley, Polesel and Teese, 2000; Teese and Watson,
2001).

There is no shared language defining concepts or categories between or within sectors
concerning articulation arrangements, credit transfer and other cross-sectoral
arrangements (Carnegie, 2000; Schoemaker, Allison, Gum, Harmoni, Lindfield, Nolan
and Stedman, 2000; Sommerlad, Duke and McDonald, 1998). Equity categories, while
similar, are defined differently, particularly those concerning the low socio-economic
background and non-English speaking background elements (Watson, Kearns, Grant and
Cameron, 2000). The reliability of some data elements (particularly basis of admission in
higher education) is questionable (Doughney, 2000).

While reporting within each sector is comprehensive to a greater or lesser extent,
reporting on patterns of student movement is only possible at the most general level. This
is an inadequate basis for a national lifelong learning policy which seeks to track patterns
of student movement and student outcomes, and for ensuring students are able to be
granted credit for prior learning undertaken in another sector.

This situation arises from the “Balkanisation” of each of the sectors. Institutions within
each sector, in reporting to their respective governments, focus on sectoral priorities, that
is, enrolling their students and reporting to government. There is no-one to whom sectors
or institutions are required to report cross-sectoral activity. While pathways and other
collaborative arrangements remain unfunded, unregulated, unco-ordinated, not
monitored, and excluded from performance indicators, it will be difficult to collect the
data needed, and knowledge about patterns and outcomes of student movement will
remain vague, diffuse, and only possible at a very general level. The recent establishment
of a centre focussing on education and training within the Australian Bureau of Statistics
may help to redress this situation (Teese and Watson, 2001).

Structure and composition of Australian post compulsory education

Responsibility for education and training is shared between the federal and state
governments. Higher education is directly funded by and accountable to the federal
government, whereas the school, VET and ACE sectors are all state government
responsibilities. While there is some national co-ordination through joint federal-state
ministerial councils, considerable diversity remains between the state and territories’
VET, ACE and senior schooling systems.

Tertiary education underwent dramatic reform in Australia in the late 1980s. Colleges of
advanced education, the sector equivalent to polytechnics, were amalgamated with
universities. Publicly funded HE institutions are now mostly self-accrediting universities
(Dawkins, 1998; Maling and Keepes, 1998). Of Australia’s 37 publicly funded
universities, five are recognised as dual-sector universities with a significant load of
higher education and vocational education and training students, four of which are in
Victoria, with the fifth in the Northern Territory. This reflects the influence of state
governments, which although they do not fund universities, establish them through state
Acts of Parliament, and influence them through their legislative control of governance.
HE students pay approximately 46% of the cost of their courses through income
contingent loans, loans which are repayable once their income reaches designated
thresholds (Watson, Wheelahan and Chapman, forthcoming).

Reforms to VET were more closely focussed on the need to achieve labour market reform
and on supplying the skills needed by employers (Goozee, 1993; Keating, 1994; Senate,
2000). Vocational education and training consists of publicly funded institutes of
Technical and Further Education (TAFE), private providers including employers, and
community based, not-for-profit providers. However, TAFE is the largest component,
constituting 75% of all enrolments and 85% of delivery (NCVER, 2001b). VET students
pay approximately 11% of the cost of their courses, but are required to pay fees in
advance, with a large percentage of students eligible for fee exemptions (Watson,
Wheelahan and Chapman, 2001). There are significant differences between the states’
VET systems, in location of portfolio, funding, governance and institutional autonomy. (Burke, 2001; Keating, 2000; Wheelahan, 2000). But all VET systems are required, as a result of national agreements, to implement training packages based on competency-based models. These are similar to the National Vocational Qualifications in England. There are no equivalents to GNVQs.

The differences between the states have significant implications for the development of pathways and other collaborative arrangements. For example, Australia’s largest state New South Wales (population of almost 6.5 million) has a centralised TAFE system, and is more interventionist in curriculum, articulation, credit transfer and pathways, while permitting local initiatives that augment state-based arrangements. In contrast Australia’s second largest state Victoria (population of 4.7 million) is more decentralised and marketised, with the single sector TAFE institutes and TAFE divisions of the dual-sector universities having greater autonomy and being more likely to enter into individual arrangements with other providers to secure market advantage.

The federal government funds 30% of VET provision, with the remainder funded by the states. The federal government has used this minority funding share as a policy lever to dramatically increase traineeships and apprenticeships. The traineeships program has two aspects: the reform of traditional apprenticeships, and the expansion of work-based entry-level training to vocations and areas of the economy not covered by older apprenticeships. The result has been a considerable expansion of traineeships over recent years, particularly among the 17 to 19 year age group, and their growing extension to older students. Participation in traineeships is likely to increase even further in view of the broad political support for workplace based entry-level training at both levels of government and by prominent politicians in both major political parties. However, because traineeships have not been developed within a general policy of lifelong learning, there is no view on how they may relate to HE, if at all, or how traineeships may be updated to take account of knew knowledge and technologies.

The adult and community education sector consists of small and dispersed neighbourhood houses, community centres, and other community based and generally not-for-profit providers. It is the least funded and most diffuse of the four sectors of post-compulsory education and training, with varying levels of government support (Watson, *et al.*, forthcoming; Golding, Davies and Volkoff, 2001). In spite of this, it is of central importance in re-introducing adults to study, and in providing pathways to further study, although it has not been mapped into pathways frameworks in any meaningful way.

Apparent retention of year 10 students to the 12th year and final year of secondary education reached a high of 77% in 1993, before declining to 72% in 1999 (ABS, 2001). There are probably numerous causes of the fall, including an improved labour market for young people. Nonetheless, Australian governments are concerned that the fall in apparent school retention to year 12 may be at least partly because of a perceived over-emphasis in senior secondary education on the academic curriculum and assessment needed to gain entry to HE. Governments are therefore placing increasing importance on the role of senior secondary education in providing vocational education and pathways to
tertiary vocational education and training as an alternative to the more academic route to HE, which apparently isn’t meeting the needs of all young people.

The most important development to date is the provision of VET-in-schools: modules or subjects that count towards both the senior secondary certificate and VET qualifications. VET-in-schools has expanded dramatically from a modest beginning a few years ago, so it is still too early to assess its success in improving outcomes for young people who might otherwise drop out of the education and training system before age 18. But it is an innovative development for Australia, bridging as it does the divide of ‘vocational’ and ‘academic’ studies that has been entrenched in secondary education since WWII.

Institutional dual-sector arrangements: dual-sectors and co-locations

There are three types or models of institutional arrangements in Australian tertiary education: single-sector stand-alone HE and VET institutions with various links and relations between the sectors, dual-sector universities and co-located institutions. Each model has policies that govern credit transfer and other arrangements that support the movement of students across the sectors. Each is affected by the division of responsibility for tertiary education between the federal and state governments, and increasingly, each is affected by differences between metropolitan and regional location.

Single sector institutions are the most numerous, but institutions vary considerably in the importance they give to inter-sectoral collaboration. The TAFE and HE sectors within the dual-sector universities are integrated to varying degrees, with teaching and courses remaining sectorally based in all institutions\(^7\), whereas most corporate, administrative and services for students are fully integrated.

Outside of Victoria, co-located institutions, mostly comprising a campus from a senior secondary school, a TAFE and a HE campus, are emerging as an important model for providing access to comprehensive post-compulsory education in regions beyond commuting distance from the major cities that can support separate institutions. They are integrated to varying degrees, but the partners are mostly administratively and financially independent, with many administrative, corporate and student services remaining distinct to a greater or lesser extent. There are approximately 11-12 co-located institutional arrangements in Australia. More are planned.

Relationship between institutional type and credit transfer, and supporting student movement

Broadly speaking, each institutional type approaches credit-transfer and other collaborative arrangements differently. However, regardless of approach, the outcomes

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\(^7\) This is a little different at the Northern Territory University: courses are institutionally based, but an enterprise agreement involving unions from all sectors has resulted in an agreement that permits cross-sectoral teaching.
are most successful when staff from the different sectors have established good, collaborative, and trusting relationships (Schoemaker, et al., 2000; Sommerlad, et al., 1998; Wheelahan, 2000; 2001a). This is most likely to happen when designated staff are employed to develop links between the sectors, a role described by Sommerlad et al., (1998) as that of ‘boundary spanner’.

The dual-sectors have an advantage to the extent that they are part of one institution, and are more likely to collaborate over the content of courses in each sector, rather than only developing pathways on the basis of completed qualifications. This has led to a range of models, some of which include components drawn from both sectors. The dual-sectors also attempt to provide administrative support to their students in navigating the requirements of moving sectors, with varying levels of success. The dual-sectors are large institutions, and as such are sites of contested organisational and political culture, with relationships ranging from close and collaborative, to hostile. Rather than being a negative, this is a sign of engagement of staff in the dual-sector character of the university.

Co-located institutions must cope with the problems the dual-sectors experience, but must also contend with complexities deriving from the fact that the partners are usually satellite campuses of a parent body, and most often do not have a common pool of funding for joint curriculum initiatives. Their administrative separation means that it is difficult to develop seamless arrangements for students. Despite these problems, they have created new opportunities for students. For example, at the Coffs Harbour co-location, retention to year 12 at the local senior secondary school increased, and 60% of students won a place at higher education, twice the state average. A further 13% went to study at TAFE (ALP 2001, 2001: 49).

Single-sector institutions vary in the extent to which they see collaboration as important. Those committed to collaboration (for example, the University of West Sydney Nepean under the previous federated structure, Sommerlad, et al., 1998), have created many pathways between courses in each sector, but these are mostly on the basis of completed qualifications, rather than detailed curriculum mapping which identifies equivalencies or at least inter-course relationships at levels lower than completed qualification.

Credit transfer, dual-sector awards and the extent of student movement between the sectors remains under-developed even at dual-sector universities and co-located institutions. This is because of the different reporting, funding and accountability requirements to different levels of government in each sector. The dead weight of administrative requirements is an almost irresistible counterforce to policy that seeks to deepen and extend collaboration. Industrial issues are often masked as disputes over philosophy, teaching style and standards, but upon closer examination are just as often as much about preserving jobs and status in each sector. The different accreditation and curriculum models in each sector also militate against collaboration. This is discussed more fully in later in this paper.
These obstacles are compounded by almost complete lack of systemic arrangements to support student movement between sectors, or other forms of cross-sectoral collaboration.

**Government support for cross-sectoral collaboration**

Commonwealth Government policy, since Labor Education Minister Dawkins’ reforms of the late 1980s, but particularly since the election of the current conservative government in 1996, has been to develop markets in tertiary education, and to use market mechanisms to promote the most effective structures for tertiary education. Hence, there are no regulatory arrangements regarding credit transfer, advanced standing or access from one sector to another at state or national levels. There are no cross-sectoral performance indicators or accountability arrangements in either sector. There are no institutional incentives to undertake cross-sectoral collaboration, other than market positioning and advantage. There is no source of independent advice to government on tertiary education since the disbanding of the National Board of Employment, Education and Training (NBEET) by the conservative government in 1996. Even the Commonwealth Department of Education, Science and Training is ‘Balkanised’ with separate divisions for VET and HE. The result is that the newer, less prestigious higher education institutions are most likely to collaborate with VET, as they are competing with each other for students.

Having said that, the Commonwealth has funded the development of several ‘co-locations’ involving collaboration between TAFE and higher education institutions in regional areas, and some of these have involved the more prestigious universities established before 1987. State governments have also funded specific projects from time to time.

**Australian Qualifications Framework**

The only systemic framework that spans post-compulsory education and training is the Australian Qualifications Framework (AQF), which was established on 1 January 1995. Unlike the qualifications frameworks in England and Scotland, the AQF has no accreditation or recognition functions, and nor does it have quality assurance functions (Keating, 2000).

The AQF covers senior secondary school, VET and HE. It designates which qualifications are offered in each sector and the descriptors that accompany each (ANTA, 1999: 4). The AQF has not been effective in promoting a more seamless system “as articulation arrangements all remain state and institutionally based. As well, the multitude of credit transfer and advanced standing agreements may well be observed more frequently in their breach than in their implementation” (Keating, 2000). The AQF has been most effective in underpinning the scaffolding of qualification levels within the VET sector. At a system-wide level it has been relatively effective in maintaining the
boundaries between the sectors and thereby sectoral peace, rather than in facilitating the seamless movement of students between sectors with advanced standing and credit.

The sectoral peace is precarious. The AQF is under tremendous pressure, reflecting the blurring between the sectors, and the efforts of each to increase their market share (Keating, 2000). Senior secondary schools are offering higher-level VET qualifications. VET is trying to move in on offering degrees and graduate certificates and graduate diplomas that the AQF specifies as HE-only qualifications, while HE is making a move on two-year associate degrees, or advanced diplomas by any other name – a VET based qualification (Maslen, 2002). Competition between sectors may damage the potential for collaboration as “each party must be sensitive to the needs of the other” (Wheelahan, 2000: xii).

**Impact of accreditation frameworks and curriculum models on pathways**

Unlike England and Scotland, there is very little overlap in qualifications or course levels offered between the HE and VET sectors, with VET mainly delivering sub-degree programs and HE delivering three year degrees (with no exit points) (NCVER, 2001a). The different curriculum and accreditation models of each sector disguises the considerable although as yet largely unacknowledged commonality of content in courses offered in both sectors, with both offering vocational and general courses; commonality of learning-teaching process, with both sectors promoting the virtues of flexible and workplace-based learning; and both sectors even adopting common aims, the promotion of economic benefit through the development of human capital.

The CBT model in VET and the curriculum-input model in HE are not easily reconcilable. The move to CBT based training packages in VET is widely regarded as an obstacle to articulation, credit transfer and other forms of course links between TAFE and HE (AVCC, 2001; Carnegie, 2000; Wheelahan, 2000). This is for two reasons: first, HE is unable to gain an understanding of the extent to which TAFE students with credit share the same underpinning knowledge as do other students. Second, assessment outcomes are usually ungraded, and this disadvantages VET students in seeking entry to HE through competitive entry processes (Wheelahan and Carter, 2001).

Attempts to bring the two curriculum models closer face fierce resistance from both sectors. Some of this may be the desire to maintain historical distinctions which are believed to have served the nation well. More favourably, some arguments suggest that differences between the sectors serve different needs that will last well into the future. ANTA (1997) argues that the purpose of TAFE is not to be a feeder to HE, but to offer vocationally relevant qualifications and specific skills needed by industry. This narrow understanding of the role of the VET sector has been contested (Wheelahan, 2001). However, even accepting ANTA’s argument, it ignores the fact that one of the purposes

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8 However, TAFE institutions (both stand-alone and dual-sector) are increasingly providing graded assessment to help students access HE, but also, in response to demands by employers and students for results that discriminate between VET graduates.
of TAFE/VET is to act as a feeder to HE, and that in the context of lifelong learning, the two roles should not be mutually exclusive.

**Targeted programs, targetted courses, and alternative access programs**

Where the needs of disadvantaged learners are funded all, it is usually through specific purpose programs within the sectors, rather than systemic funding. The three key mechanisms are: targeted programs, enabling courses, and alternative access mechanisms. Pathways, credit transfer, and other types of cross-sectoral course links, are a separate category, considered later in the paper.

**Targeted programs**

Targeted programs are mostly offered through tender in the VET and ACE sectors, with each competing for funding. Providers see this competition as destructive, since substantial resources must be devoted to the competition itself, which particularly disadvantages the ACE sector, and results in lower expenditure per program overall (Watson, et al., forthcoming).

**Alternative access mechanisms**

Two approaches are taken in HE in developing alternative access mechanisms: the first is to develop large scale programmes that encompass all students without selecting students on the basis of specific equity related criteria, but which are premised on criteria that are inclusive of disadvantaged students. The alternative entry schemes at the University of New England (UNE) and Victoria University of Technology (VUT) illustrate this approach, as was the scheme in place at the University of West Sydney (UWS), until it ceased in 2001. All three universities are focussed on serving their geographic region, which in each case comprises large numbers of students from designated equity categories. The UNE program is, and UWS program was, based on pre-offers made to students before completing secondary school, while the one at VUT was premised on matching prospective students (not only school-leavers) to a course and a pathway (often starting in TAFE) based on the student’s level of academic preparedness and vocational aspirations. The VUT scheme is being reworked to include a greater emphasis on pre-offers made to school students and mature-aged participants in the ACE sector from its region, drawing on the lessons of UNE and UWS. Each has been successful in increasing participation from their region, and by extension, by students from disadvantaged backgrounds.

VUT’s experience from its alternative entry scheme was that while several hundred students gained entry to the University (both to TAFE and HE), increased access of students from equity groups was not limited to this mechanism, with the percentage of commencing students from disadvantaged backgrounds admitted to HE by other
mechanisms also increasing. It may well be that the scheme was of symbolic importance in the region, encouraging students who otherwise may not have aspired to tertiary education to seek access (Wheelahan, 2001a).  

The second approach is to develop programs that include students on the basis of their membership of a target equity group. This is the basis of most access programs, and they tend to be smaller in scope. Ramsay et al. (Ramsay, Tranter, Charlton and Sumner, 1998: 64) report that three models seem to exist:

Firstly there is the quota approach, by which each course or faculty sets aside a specified percentage of places (typically five percent) for access program students. Secondly there is the assisted TER, or bonus point system, by which students have their tertiary entrance score, or ranking, adjusted to assist entry into the university’s courses. Lastly there is the individual assessment of students’ academic potential and educational disadvantage.

They report that in the absence of reliable data that it is difficult to draw comparative and evaluative conclusions about the success or otherwise of these schemes (Ramsay, et al., 1998: 68), but they do offer guidelines for effective practice based on their research and the experiences of the universities they included in their study.

Targeted courses

There are two types of special course designed to support disadvantaged students’ access to accredited tertiary education: enabling courses and bridging courses.

Enabling courses give students general study skills and basic tertiary literacy and numeracy skills. In 1998, 5.4% of VET students were undertaking enabling courses, and they were predominately from disadvantaged backgrounds (Phan and Ball, 2001: 14). Enabling courses in VET are mostly at lower levels of provision, and students usually require further support to undertake higher-level VET or HE studies. The consequence is that this route is not the most effective as a pathway from VET to HE. HE enabling courses offer less promise, having declined from 6.9% of commencing load in 1989 to 1.1% in 1999 (DETYA, 2000: table 23).

Somewhat more promising are bridging courses, which equip students who have demonstrated potential in general to undertake tertiary education with specific skills needed for their preferred course. Thus, bridging courses in mathematics and physics are common for students seeking admission to engineering courses. Bridging courses are not recorded separately in national statistics so it is hard to quantify the scale and trend of provision. But the frequency of references in undergraduate prospectuses suggest that bridging courses are still an active if limited means for supporting disadvantaged students’ access to specific courses.

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9 See Golding, Pascoe and Marginson (1996) for a discussion of the symbolic importance of pathways.
Course links: pathways, credit transfer and dual-sector courses

Collaboration between the sectors has increased markedly as institutions try to meet the diverse needs of their students. Different types of pathways and course models have emerged. These include learning pathways, credit transfer, and different types of dual-sector awards.

Course links: Pathways

Pathways offer students the possibility of flexibility, different entry and exit points, customisation, access, credit transfer, and contextualised learning that integrates learning to learn skills with vocationally relevant ones. This is not to downplay the importance of targeted programs, access programs and enabling courses. However, these will inevitably remain at the margins of provision (with perhaps, the exception of large scale institutional programs like the ones described above).

Learning pathways can be standardised or customised. Standardised pathways are formally approved by the institutions involved, and ensure that all students meeting the specified conditions are granted the same benefit, usually credit transfer. Customised pathways are developed where no standardised pathway exists, or to meet the specific needs of individual students or groups of students.

Increasingly, enhanced pathways are being developed in Australia. Enhanced pathways offer articulating students more credit or advanced standing in the destination course than would otherwise be the case. An enhanced pathway is developed by both parties (TAFE and HE), but delivered in the TAFE institute. One model is the degree link offered jointly by the University of West Sydney and the Western Institute of TAFE. Students are able to complete a TAFE diploma and then undertake a further 18 months of study at UWS and graduate with a Humanities degree with a major in whatever discipline their TAFE diploma focussed on. At dual-sector universities enhanced pathways are increasingly offered, which in some instances combine modules and subjects from both sectors, but which have been packaged into the TAFE course. This occurs through cross-crediting the TAFE modules and HE subjects against each other.

Guaranteed pathways are also becoming more prominent. Most often, TAFE students must win access to the destination HE course through competitive entry processes before they are able to attain the credit transfer specified in the agreement. In contrast, guaranteed pathways reserve a place for the articulating student, provided they meet the standards of performance specified in the pathway agreement. The UWS degree link program comprises guaranteed pathways, as does VUT’s alternative entry scheme.

Course links: credit transfer

Two approaches are used to negotiate credit transfer in Australian tertiary education. The first is on the basis of block credit, where a completed TAFE qualification is deemed to
be equivalent to a block of study in the degree. Usually a TAFE diploma\textsuperscript{10} equals one year or one third of an ordinary three-year HE degree. Credit is based on the presumed commonalities derived from shared disciplines, rather than a detailed mapping of the content of both courses. The UWS degree\textit{link} program is undertaken on the basis of block credit, as are most of the pathways in New South Wales.

The second model is based on curriculum mapping, which focuses on mapping the content, learning outcomes, standards required in assessment, and sometimes approach to teaching and learning, with varying degrees of rigor. This is more likely to occur in dual-sector institutions, and other institutional arrangements that generate close relationships between the parties, for example, in the co-located institutions (Schoemaker, \textit{et al.}, 2000; Wheelahan, 2000). This approach can also occur between stand-alone institutions, but is less likely to occur at an institutional level. In this instance, it is most likely at a course level where pockets at one institution develop relationships with pockets at another.

The advantage of this approach is that it can result in more credit being granted to articulating students. These arrangements are, however, expensive to maintain, as every time courses change in one or the other sector the pathway has to be renegotiated. Within the VET/TAFE training package framework, different providers may have widely diverging delivery plans for the same qualification as the focus is on the competency outcomes (not ‘inputs’), resulting in institution specific agreements between TAFE and HE providers, and is less likely to result in generic, state-wide agreements between TAFE institutions and individual HE providers. The exception is New South Wales, which still retains centralised curriculum across the state, despite the training package framework.

As self-accrediting bodies, universities are under no compulsion to develop pathways or grant credit-transfer. The extent to which universities do develop pathways and grant credit varies, with the newer, less prestigious universities more likely to make such arrangements.

**Course links: dual-sector awards and nested awards**

Two types of dual-sector programs will be discussed: dual-sector awards and nested awards. While they are not numerous, they are increasing (DEST, 2001), mainly in dual-sectors and co-locations, to obtain market positioning.

Dual-sector programs combine two awards, one from each sector, so that students complete both in less time through cross-crediting subjects in each. They have been developed by analogy from joint HE courses such as the joint arts/law degree and the joint accounting/information systems degree that have proliferated in Australian HE in the last decade. Dual-sector awards may draw on complementary fields of study, for example, information technology or accounting. Alternatively, they may draw on the same discipline, but in a way that embeds TAFE qualifications in degree programs (for

\textsuperscript{10} which is often two years study, but this has become variable since the introduction of training packages, and is often less
example, a certificate as a lab technician within a science degree), allowing students to obtain an early credential, to use for part-time or casual work. Dual-sector programs of this nature do not really offer great potential for increasing access to students from disadvantaged backgrounds, because in order to gain entry to such a program students must first meet the entry requirements of the HE component of the award (Schoemaker, et al., 2000; Wheelahan, 2000).

Nested awards, on the other hand, do have potential to increase participation. Nested awards commence in TAFE and conclude in HE with various exits along the way. Students are able to work in areas related to their study, or they can leave and re-enter study at a later time. There are several examples of nested awards at dual-sector or co-located institutions (Schoemaker, et al., 2000). Nested awards particularly lend themselves to supporting students to move from para-professional to professional areas (like nursing)\(^\text{11}\), again providing students with an early credential. They may also appear more accessible to students from non-traditional backgrounds, both in gaining admission, and in developing aspirations for HE. This is because they offer school-leavers and mature aged students “progression by internal promotion (not selection by score)” which “would provide the security that is currently the preserve of a minority of students at the top of the curriculum” (Teese, 2000: 229).\(^\text{12}\)

Nested awards are institutionalised within sectors, for example, from certificate to diploma level in TAFE/VET, or the (now very common) graduate certificate to graduate diploma to masters program route in HE. Cross-sectoral nested awards remain under-developed, but are increasing in their importance.

**Evaluation of student outcomes and experiences**

This final section will consider the outcomes of the cross-sectoral arrangements discussed in this paper.

**Basis of admission, prior TAFE study, and credit transfer**

Of those who applied for a HE place through the joint tertiary education admissions process in Victoria in 2001, 69% of school-leavers received an offer for a high preference course, as did 62% of TAFE graduates, while only 44.3% of students who applied on the basis of incomplete TAFE studies (VTAC, 2001: table B2) received a similar offer. These percentages have not substantially changed since 1997, showing a small decline in each category.

\(^{11}\) Unfortunately, the industrial competition and resulting tension in the health sector between university educated nurses and TAFE educated nurses, with the former supervising the latter, is replicated within tertiary education, and this means that there are almost no examples of nested awards in nursing in tertiary education.

\(^{12}\) Teese is here referring to integrated programs spanning senior secondary school and TAFE, but this is within the context of a discussion that includes higher education, particularly higher education institutions serving the most vulnerable sectors of the population.
This does not necessarily represent all TAFE articulators entering HE courses, particularly at the dual-sector universities. For example, VUT TAFE students use internal course transfer forms to gain admission to HE courses, as the policy is premised on giving preference to its own students where possible\textsuperscript{13}. Moreover, VUT students are also often admitted to their HE course without having quite completed their initial TAFE course.

These diverse arrangements make it difficult to state with any confidence definitive outcomes for TAFE articulators concerning basis of admission to HE, and data on prior TAFE study and credit transfer. For example, analysis of the DETYA 2000 selected HE statistics show that only 6\% of students commencing HE at VUT were admitted on the basis of prior TAFE study, and that only 11\% of students admitted to that university in 2000 had completed a TAFE qualification (DETYA, 2001: tables 15 & 16). However, internal institutional research at VUT demonstrates that approximately 20\% of commencing students had prior TAFE study (Wheelahan, 2001a). Similar results were found at the University of South Australia in 1996 (Ramsay, Tranter, Kain and Sumner, 1997). The DETYA 2000 student statistics consequently show that there is very little difference between the dual-sectors and single-sectors for basis of admission on the basis of prior TAFE studies (9\% cf 7\%) or highest prior qualification (12\% cf 11\%).

Other research has shown that in Victoria, the dual-sector institutions admitted almost three times as many TAFE graduates to bachelor degrees as the single sector institutions. Dual sector institutions were more likely to grant TAFE graduates credit than were single sector institutions (50\% cf 35\%), while the quantum of credit granted was lower in the dual-sectors compared to single-sectors (15\% cf 21\%) (Cummins, Rutten and Wagstaff, 1998). It is not clear why the extent of credit transfer was lower at the time the research was undertaken, or if this still be the case in light of the efforts of the dual-sector universities to enhance links and student pathways. The new universities and the former institutes of technology were also more likely to admit prior TAFE students and to grant them credit than the elite universities (Cummins, et al., 1998).

**How TAFE articulators experience the admissions process**

Cohen, Lewis, Stone and Wood (1997) found that TAFE articulators entering HE in New South Wales in 1996 faced many obstacles and barriers, including diverse, inconsistent, unpredictable assessment procedures. They also found that a quarter of all TAFE graduates “had no information about university admissions and it was found that much of what respondents felt they knew was in fact inaccurate information” (Cohen et al., 1997). While the situation may have improved in that time, it is still problematic.

Researchers at VUT interviewed 50 students who had articulated from a TAFE course within the university at the end of 1999 to a HE in 2000. The results were a surprise to researchers, as they unexpectedly found that almost half of this randomly selected sample

\textsuperscript{13} Although, in truth, it cannot be said that the policy is always applied with equal vigour throughout VUT’s HE sector.
had entered TAFE as a deliberate strategy to enable them to progress to a specific HE course, and that they had sufficient knowledge of the structure of tertiary education to enable them to broadly understand how to do so. The remainder decided to articulate to HE at different times in their TAFE studies, and were mainly made aware that they could do so by teaching staff from both sectors. Seventy-two percent of these students found navigating the administrative processes quite straightforward, while the remainder did not. However, upon analysis it is clear that the reason students experienced this as relatively unproblematic was because of the very high level of support from teaching and administrative staff (Wheelahan, 2001a). Students navigating the transition from single-sector institutions are less likely to receive the same level of support.

**Learning environments in TAFE and HE and pass-rates**

The learning environment in TAFE is quite different to that in HE: classes are generally smaller, contact hours higher, and curriculum and assessment is competency-based. Also, TAFE teachers are more likely than HE teachers to be formally qualified as teachers, as well as in their industry or discipline. However, there have been few research projects that have sought to determine how students experience this transition. VUT found, of the 50 students it interviewed, that most students were able to identify differences in the learning environment between TAFE and HE, and notwithstanding those differences, 80% stated that TAFE had been important in preparing them to undertake their HE studies. This suggests that while differences may exist in the learning environments that sufficient commonality exists in the environment and content areas to assist students in coping with higher levels of study (Wheelahan, 2001a).

Smith (2001), and Fuller and Chalmers (1999) found, in their respective studies, that there were some differences between TAFE and HE students in approaches to study (deep, surface, achieving etc) and in their learning preferences, but that, overall, the two groups of students were characterised by much similarity, and that these were more important than the differences.

The pass rates for TAFE articulators in HE are comparable to other groups of students, particularly school-leavers, demonstrating that they are able to cope with study at this level. National comparative data showed mixed results with TAFE students in some states experiencing lower pass rates, but overall the rates were comparable (Dobson, Sharma and Haydon, 1998). Institutionally based research also demonstrates that TAFE articulators achieve results comparable to other groups of students (Ramsay, *et al.*, 1997; Wheelahan, 2001a).

There are no data comparing the labour market outcomes of TAFE articulators who graduate from HE with other HE graduates. Broad conclusions can be drawn however, and these are that the labour market outcomes depend on the university that the student attended, and the course in which they studied. TAFE students find it more difficult to enter the elite universities, and HE courses with high TER scores (Cohen, *et al.*, 1997),
entry to which results in higher graduate employment outcomes and starting salaries (DETYA, 1998).

**Conclusion**

The Australian marketised system of tertiary education has not resulted in coherent frameworks to support student transition from one sector to another. The sectors are under pressure, as a consequence of the blurring of their roles in light of the demands of the ‘new economy’, and from pressure to increase market share. Rhetoric of seamlessness is strong, but so is defence of the sectoral distinctions. It is anticipated that students will move taking from each sector what they need to craft their own individualised portfolios. This suggests that students have the ‘market knowledge’ needed to do so, and all research says this is not the case. The Victorian government has recently implemented local planning networks to support students at risk moving from school to VET, but they have been unable to effectively map the HE sector into this, because of its independent status (Kirby, 2000).

In summary, the key obstacles to developing effective pathways in Australia include:

- the lack of coherent national policy framework on lifelong learning that considers the relationship between sectors, or the role, function and purpose of tertiary education as a coherent whole;
- the absence of a central government, advisory, policy or administrative body that considers post-compulsory or tertiary education as a whole;
- inconsistent and incommensurable data definitions and collections;
- differing accreditation, curriculum and assessment frameworks, particularly the rigid demarcation between the sectors with HE mainly offering three-year degrees, and TAFE mainly offering training packages, similar to NVQs;
- the different tiers of government which each sector is funded by and accountable to, resulting in differing funding and counting formula, and reporting and accountability guidelines;
- the absence of regulatory and reporting mechanisms, cross-sectoral performance indicators, co-ordinating arrangements or institutional incentives relating to credit transfer, articulation, pathways or other collaborative arrangements between the sectors;
- the different cultures, traditions, and status of each sector; and
- the different industrial awards and conditions covering teaching staff.

The factors that promote student movement between the sectors include:

- first and foremost, trusting and collaborative relationships between staff from both sectors. Teachers in both sectors must have confidence in the courses offered in the other sector, and this is more likely to occur when teachers collaborate in shaping the learning environment so that it is consistent and complementary. Collaboration must also occur between teaching and administrative staff so that it
is not too difficult for students to navigate the administrative processes involved in moving from one sector to the other;

- the employment of designated staff (boundary spanners) to create and manage the links between the sectors, whether in dual-sectors, co-locations, or single-sector institutions;
- institutional frameworks and policies that support the development of pathways, credit transfer, and dual-sector programs;
- accurate, timely and high quality information provided to TAFE students about future studying options, how they may access these options, and who to contact for additional information and support; and,
- encouragement and support from TAFE teachers to students to continue studying.

The debate over whether TAFE is a ‘feeder’ for HE is an important one. One role of TAFE is as a feeder to HE, as one role of HE (although unacknowledged) is as a feeder to TAFE, particularly for those students who have not completed their degrees. In the context of lifelong learning, the distinctions between vocational and general education become less important, as all students need lifelong learning skills. Consequently the role of TAFE as a feeder and as a destination in its own right, should not be mutually exclusive. However, unless and until the sectors are freed from their rigid curriculum frameworks, and national policy and institutional incentives are established, it will be difficult to realise these goals in practice. Until this is so, the national models in place in Australia have limited benefit to Scotland.

At some stage Australia will need to review the relations between its VET and HE sectors, as it reviewed and eventually radically restructured its advanced education and university sectors in 1988. In conducting such a review Australia will need to confront at least these fundamental questions, which may also be relevant to Scottish FE and HE.

1. System structured by the market or by more explicit planning?

The reforming federal Labor education minister John Dawkins introduced market mechanisms into HE in the late 1980s to make it more responsive to students and employers. It was argued then that HE was controlled too closely by government co-ordinating bodies, institutions and ultimately academics. Some social democrats argue that the marketisation of HE should be extended even further to the allocation of public funding by a market-like mechanism such as vouchers (Baldwin, 1997; Latham, 1998; Karmel, P., 2001).

But as the review of the Aotearoa/New Zealand experience for this study has reported, a heavily marketised system is difficult to direct to the social goals that communities and their governments expect of HE and VET. A balance needs to be struck, then, between planning for specific outcomes and structuring the market to respond to individuals’ desires (if not needs). There are indications that the high point of the marketisation of Australian HE has passed, but a judgement still needs to be made about the extent of sectoral planning that should be undertaken by government.
2. Programmatic or institutional differentiation?

There is general agreement amongst Australian HE and VET policy analysts that tertiary education should be differentiated to cater for the different needs of different students and the economy. Such a differentiation should at least be at the program or course level: Australia needs courses with a diversity of content, at different levels, in a diversity of learning-teaching modes and at a diversity of locations. Australia has traditionally carried this across to the institutional level, grouping courses with similar content, level and learning-teaching modes into institutions of a distinctive type. This has lead to a crude isomorphism: lower level vocational courses are grouped into lower level vocational institutions, while higher-level general courses are grouped into higher-level general institutions – universities.

The gradual erosion of the distinction between the HE and VET sectors leads one to question the continuing need for differentiation at the institutional as well as sectoral levels. One possibility would be to expand the model of the dual-sector institutions so that the diversity of courses is provided within institutions and sectors, not between them. Alternatively, the institutional and sectoral distinctions could be re-drawn more consistently according to criteria more relevant to contemporary and emerging needs.

3. Heavily segmented or more comprehensive system?

A single system could still be comprehensive, with different institutions and possibly different parts of institutions having distinct roles within similar funding and other arrangements. This was Dawkins’ aim in establishing the unified national system of HE in 1988. But the unified system has been criticised as degenerating into the uniform national system of HE. An alternative view is growing in voice if not in numbers that Australia should move to a more formally and heavily segmented system of post-compulsory education, for example, like that in California, with its legislated segmentation of HE into research-intensive universities, comprehensive universities and community colleges.

There is, however, doubt about whether Australia could support such exclusive institutions (like Berkeley) without starving the rest of the system or starving all but the highest achieving students of opportunities to study at the highest level. The issue has been raised but not yet settled in Australia: the extent to which the nation wishes to concentrate resources and opportunities in a few high achieving institutions, and the extent to which resources and opportunities should be spread more evenly between institutions and students.

4. Extent of institutionalised support for inter-sectoral transfer

A single, broadly based comprehensive system of post compulsory education has less need of formal institutionalised transfer mechanisms since these are likely to be
established within institutions, even between courses of different levels and with very different content and orientation, as we have observed with dual-sector institutions. But a system with differentiated or segmented sectors and institutions needs formal, institutionalised student transfer mechanisms to ensure that students are not trapped in the field and level at which they enter tertiary education.

So the way Australia answers the prior questions about the extent of explicit system planning, institutional differentiation and sectoral segmentation should determine the extent of its institutional support for inter-sectoral transfer.

Acknowledgement

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Review of Further Education/Higher Education Links in Canada

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Preface

Canadian post-secondary education is administered by the 10 provinces and 3 territories. Community colleges have been an integral part of higher education since the 1960s, complementing the post-secondary role of Canadian Universities. Some brief background points should be mentioned for those unfamiliar with Canada. The Canadian population is approximately 30 million (28,846,761 according to our 1996 Census), with about 80 percent of residents living in urban areas (Micromedia 2002, 1-45 & 1-50). Constitutionally, responsibility for the administration of education is vested with the provinces and territories of Canada, not with the federal government. This decentralized approach can be seen as a mixed blessing, avoiding a centralized, standardized approach to further and higher education, but also encouraging a parochial (provincial) focus on educational offerings. Canada has one of the highest post-secondary participation rates for 18-21 year olds, and has 92 universities and 175 community colleges affiliated with the Association of Universities and Colleges of Canada (AUCC 2001).

With the second-largest landmass of any nation, provincial and territorial control of education, and considerable linguistic and cultural diversity, it is not surprising that post-secondary education in Canada is both diversified and complex. Links between community colleges, universities, and institutes might fairly be termed strong, tenuous, and sometimes non-existent. Research on post-secondary institutions and experiences have tended to focus on Universities, with rather limited studies of Canadian community colleges in the past five years. In fairness, there are signs of increased interest in community college programs, such as the inclusion of profiles of 128 Canadian community colleges in the recent Maclean’s survey of higher education (Johnston 2001). Initially, the Maclean’s researchers surveyed only Universities. This report will highlight some arrangements between the colleges and other post-secondary institutions, available research findings on transfer credit for example, and recurrent themes and issues associated with further and higher education in Canada.

Community Colleges in Canada

The term “community college” is not used in all Canadian jurisdictions. The term “regional college” is used in Saskatchewan, for example, “public college” in Alberta, and Collège d’enseignement général et professionnel (CEGEP) – College of General and Vocational Education or simply “junior college” - in Québec (Johnson 1990, 125; AUCC 2001, xxiv). For the sake of simplicity, the generic term “community college” will be used to indicate a post-secondary, publicly-funded institution other than Universities. In British Columbia, community colleges’ offerings are divided into four broad categories: academic (with transfer credit to University), career and technical (with specific
programs targeted for work), vocational (“short applied programs”), and adult basic education (for people who have completed high school graduation requirements) (Francis 2000).

George Butlin (2000) noted that unlike many American colleges, Canadian community colleges act as “commuter institutions”, not offering degrees, and facilitating eventual entrance to University studies. As will be noted below, there are various degrees of articulation between colleges and universities, with some provinces – BC, Alberta, and Québec – establishing considerable transfer of credits from college studies to university programs. There are also innovations such as the University College institution – which is degree-granting at the Undergraduate level, but does not provide graduate studies. The BC University College initiative is essentially the “exception to the rule” in Canada, where colleges are generally not focussed on academic as distinct from vocational/technical programmes.

As of 1994, there were approximately 150 community colleges with over 700 “satellite campuses” across Canada. It was estimated that 1.5 million students were taking non-credit courses and 500,000 were registered in credit courses (Dennison 1995, 3). In the 1998-99 academic year, full-time enrolment (FTE) in Canadian community colleges was approximately 403,500. The numbers increased by 1.2 per cent over the 1997-98 academic year. Statistics Canada reported that these enrolments had increased by 9.3 percent over enrolments five years previously (Canadian Press 2000).

Butlin (2000) traced wide variations in community college employment patterns in the various provinces and territories. Only 35% of college staff in Saskatchewan and the Yukon were employed full-time (35%), compared with 95% of college employees in New Brunswick (95%), and 90% of their counterparts in Manitoba (90%). Regional differences were also noted with respect to “dropouts” from colleges and universities in Canada. Thus, both university and college students in British Columbia, the Prairies, and the Atlantic provinces were more likely to leave post-secondary studies than students in either Ontario or Quebec (Butlin 2000).

The following Table gives an overview of community colleges in the ten provinces and the three Territories (NorthWest Territories, Yukon, and Nunavut).
Table 1: Community Colleges in the Territories and Provinces of Canada

<table>
<thead>
<tr>
<th>Province/Territory</th>
<th>College designation</th>
<th># of colleges</th>
</tr>
</thead>
<tbody>
<tr>
<td>British Columbia</td>
<td>Community College</td>
<td>15 (including 5 University Colleges)</td>
</tr>
<tr>
<td></td>
<td>University College</td>
<td></td>
</tr>
<tr>
<td>Alberta</td>
<td>Public College</td>
<td>10</td>
</tr>
<tr>
<td>Manitoba</td>
<td>Community College</td>
<td>4</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>Community College</td>
<td>9</td>
</tr>
<tr>
<td>Newfoundland</td>
<td>Provincial College</td>
<td>1</td>
</tr>
<tr>
<td>NorthWest Territories</td>
<td>Community College</td>
<td>1</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>Community College</td>
<td>1</td>
</tr>
<tr>
<td>Nunavut</td>
<td>Community College</td>
<td>1</td>
</tr>
<tr>
<td>Ontario</td>
<td>College of Applied Arts &amp; Technology</td>
<td>25</td>
</tr>
<tr>
<td>Prince Edward Island</td>
<td>Community College</td>
<td>1</td>
</tr>
<tr>
<td>Québec</td>
<td>Collège d’enseignement général et professional (CEGEP), or “Junior College”</td>
<td>48</td>
</tr>
<tr>
<td>Saskatchewan</td>
<td>Regional College</td>
<td>8</td>
</tr>
<tr>
<td>Yukon</td>
<td>Community College</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>125</td>
</tr>
</tbody>
</table>

Source: Adapted from Micromedia (2002), section 9; Heritage College (2002).

Some jurisdictions report a growing demand for community college programs. In Manitoba, the number of full-time students in community colleges increased by over 40 percent between 1993 and 2000. As a case-in-point, Red River College (Winnipeg, Manitoba) experienced “a record-setting increase of over 500 full-time students” in one year. Enrolment increased by 12 percent, leading to problems of overcrowding, lack of established classroom space, and demands for additional government spending (Canada Newswire Service 2000). In contrast, several college campuses were closed in Nova Scotia in the mid-1990s (“Closing … 1996). There appears to be a clash between restraint in post-secondary education costs on the one hand, and demands for career-directed offerings by the colleges. To date, I have found no systematic study of factors that might explain why some provinces expand their college offerings, while others are at a standstill or are reducing access.

Transfer Credit between the Colleges and Universities

Community colleges do not have a uniform linkage with Canadian universities. As mentioned above, only a minority of provinces – Québec, Alberta, and BC – have “articulated models” to ease transfer from colleges to universities. Formal arrangements allow college students with designated prerequisites to gain credit in university programs, ideally providing greater access to further educational opportunities. While problems in transfer credit have been identified, the point remains that for most provinces, links
between the colleges and universities are not particularly well-developed (see Andres 2001).

For example, in British Columbia, articulation of credit between colleges and Universities was part of the mandate for community colleges (Andres 2001). Some “comprehensive” community colleges may offer the equivalent of the first two years of University education, mounting 1st and 2nd year courses that are given transfer credit at some Universities. This arrangement is a boon to students, since more students commence degree studies through community colleges, university colleges, or institutes than through direct entry to BC’s universities (British Columbia Council on Admissions and Transfer 2001, 5). Credit may be assigned directly where college and university courses are deemed to be essentially similar; i.e. there is a “match” between the courses. In some cases, bloc transfer can be given between a sending institution (college) and a receiving institution (university). This allows students to proceed into upper-level coursework without undertaking costly, time-consuming lower-division prerequisites. Even where direct credit is not granted, a student may receive given unassigned credit for certain courses. This is where a course is equivalent in credit terms, but there is no equivalent at the university. Unassigned credit may help a student to complete breadth requirements of a degree, if not the more specific requirements of a major or minor concentration. In some cases, no credit may be given.

In British Columbia, transfer credit is an important link, allowing students to obtain equivalent 1st/2nd year education at lower tuition costs than Universities, often in a more convenient, accessible, and affordable location than those of the four major provincial Universities. Students may thus transfer into Universities with equivalent standing to students who entered University directly in first year. Transfer mechanisms are guided by “general principles for flexible and innovative transfer.” These principles are:

- “Students should be able to complete all lower division [1st and 2nd year courses] degree requirements at a college, provided that the college offers a reasonable variety of courses in their chosen discipline”
- “Neither transfer nor direct entry students should be advantaged or disadvantaged as a result of the transfer process” (British Columbia Council on Admissions and Transfer 2001, 7).

BCCAT is responsible for facilitating and coordinating credit among post-secondary institutions, and providing an annual report – in print and on-line formats - that denotes specific credit arrangements. BCCAT undertakes in-house research, funds provincial articulation meetings, and produces the BC Transfer TIPS handbook (the acronym TIPS stands for “Transfer Information for Post-secondary Success). Updated information is available on the Council’s website, (www.bccat.ca).

In Québec, the situation is quite different. Their CEGEP system requires that all Quebec students undertake “pre-university programs” and obtain a diploma before applying to a Québec university (Butlin 1999; Dennison 1995, 6). Students enter a CEGEP after their eleventh year of education. There is no grade 12 possibility, such as the other provinces
offer. This contrasts with other provinces where students complete grade 12 (or 13, for the moment, in Ontario) and then proceed directly into college or university programmes. As noted in Table 1 (above), there are 48 CEGEPs in Québec, allowing students ready access to such preparatory institutions. In Canada’s largest province – Ontario – a “parallel” system is in place, with Universities seen as quite distinct from many community colleges. This arrangement does not allow for the ready integration of credit transfer between the two, unlike the British Columbia system (Dennison 1995).

The Centre for Education Information (2001) explored experiences of over 6,000 British Columbia students who, after enrolling in institutes, university colleges, or community colleges, continued on to further education. Most (65%) continued on the University studies, primarily the University of British Columbia, Simon Fraser University, and the University of Victoria. The great majority (86%) of respondents were either “very satisfied” or “satisfied” with transfer of credits between institutions. On the downside, students who had completed work in fairly specialized programs such as “Visual, Performing and Fine Arts” were more likely to be disappointed in transfer credit decisions (ibid.).

Even where clear transfer links are articulated, concerns have been voiced over what appears to be the relatively weak performance of students transferring from college to university programs. Lesley Andres (2001) reported that students who begin university studies directly from high school; i.e., enter first-year university classes, are more likely to receive degrees than their transfer-in counterparts from colleges. Some of these findings date back to the 1980s, and we should be cautious about treating such differences as axiomatic. Indeed, of all the students who receive degrees in BC, more begin their post-secondary studies in colleges, university colleges, or institutes than through direct entry to University.

Andres (2001) used interviews with 47 lower mainland (Greater Vancouver) students who transferred from a local community college to a University in Greater Vancouver. She found that most respondents planned to transfer from college to University studies (indeed, 37% of students at this college were enrolled in university transfer studies, as opposed to applied programmes [31%] and general studies [32%]). Reasons cited for attending college included proximity to home, lower tuition fees, reduced requirements for admission, and using college as a “stepping stone” to ease into university studies.

Andres (2001) found that while most respondents were generally complimentary about transfer credit arrangements, concerns were expressed over declines in GPA (grade point average), misleading or unhelpful advising (primarily in the college, not university context), loss of credit, difficulties interpreting the BCCAT Transfer Guide, and difficulties adjusting to the more impersonal environment of university. Loss of credit and poor academic performance can lead to delays in degree completion, higher costs of education, and in some cases, being placed on academic probation and/or being required to withdraw from university. Andres (2001) recommends that students considering transfer to universities should have access to pertinent information, that applicable “policies, practices, and procedures” should be more understandable, and that colleges
and universities should work together to provide better matches between curriculum and pedagogy.

The point is that we do not have a tradition of systematic research on college and post-college experiences, and certainly not a tradition of inter-provincial/territorial comparisons of linkages between colleges and other post-secondary institutions. Butlin (2000) is an exception to this pattern, as his research incorporates a national focus.

**Other Transfer Links**

The previous section focussed on transfer of academic credits among community colleges, university colleges and universities. Wider initiatives have also been undertaken to strengthen recognition of work done at other institutions or in the workplace. Mobility and transferability are listed as fundamental advocacy issues by members of the Association of Canadian Community Colleges. For example, as of 1999 there were 102 college signatories to the pan-Canadian protocol. This protocol involves acknowledgement and transfer of “learning acquired through formal education, workplace training and work and life experience” (Association of Canadian Community Colleges 2002). The rationale for this protocol is set out in Box 2 (below).
Box 2: Rationale for Pan-Canadian Protocol among 102 Community Colleges

“There is a growing recognition in all sectors related to post-secondary education (school, student, government and industry), that to compete in the new knowledge-based economy, Canada needs to build a capacity for learning and training that widens access to learning opportunities for individuals and for enterprises, and increases labour force productivity.

To meet the requirements of rapid change in post-secondary education and in the labour force, colleges are increasingly entering into agreements with industry for employee training, and with each other for program sharing and the transferability of learning.

At the same time, colleges, along with governments at the provincial and federal levels, are developing policies to address the need for increased student mobility and accessibility to post-secondary education and skills training. What is needed now is a Pan-Canadian protocol on the transferability of learning that can be ratified by colleges across the country. It is becoming increasing apparent that the ability to move easily between work and school, and between post-secondary institutions, increases the efficiency of learning and saves valuable time and cost to the individual, to industry and to society.

If Canada is going to compete successfully in the global market and continue to be productive domestically, the labour market requires more advanced skills and education and a frequent renewal of skills. Skilled human capital is rapidly becoming a major source of competitive advantage, wealth and prosperity. The easier it is to access education for individuals, and the more mobility they are afforded by post-secondary institutions, the more likely individuals are to upgrade their skills on a continuous basis. Credit transfers and prior learning assessment are an effective and efficient way of providing opportunity for these workers to upgrade their skills and knowledge base.

A protocol would furthermore allow colleges to identify common standards; encourage dialogue between institutions and college systems; set or target provincial and national standards; maximize the use of resources; and, increase awareness of articulation goals and principles.

A Pan-Canadian protocol for the transferability of learning among colleges benefits everyone. The clear advantages to the student are greater mobility and accessibility, both in studying and in the workplace. The ability to transfer credits easily between institutions, and the ability to move easily from work to school and back, encourages increased college participation, and a more active, knowledgeable and skilled workforce.”

Taken verbatim from Association of Canadian Community Colleges (2002), www.accc.ca
Despite such initiatives to increase recognition and transfer of credit, most studies of Community Colleges have focussed on more specific issues, such as dropout (or “post-secondary leaving”) rates (see Grayson 1997; Koodoo and Pachet 1998). George Butlin (2000) conducted a study of post-secondary in Canadian community colleges and Universities. He noted that unlike many American colleges, Canadian community colleges act as “commuter institutions”, not offering degrees, but facilitating eventual entrance to University studies for those who are not taking strictly vocational/technical programmes. Community college students may, for example, obtain a 2-year diploma from their institution, then transfer in to a University to obtain a baccalaureate degree. In our terminology, the diploma may “ladder” into degree-based studies.

There were also regional variations in dropout rates. For example, more than one-third of high school graduates in British Columbia left university while only 13% of their Ontario counterparts – and 14% of Quebec high school graduates - left University. Intermediate rates of university leaving (approximately 25%) were identified for students in the Atlantic region (Newfoundland and Labrador, Nova Scotia, Prince Edward Island, and New Brunswick) and the Prairie region (Manitoba, Saskatchewan, and Alberta).

With respect to community colleges, Butlin (2000) reported that “[High school or equivalent] Graduates from the Atlantic region and Prairie provinces had odds nearly 2 times higher for community college leaving compared to Ontario students. There were no differences in the odds of community college leaving for students from Quebec compared to Ontario students. The odds of community college leaving were 3.3 times higher for British Columbia students compared to Ontario students”.

Factors positively correlated with post-secondary leaving included: parents without post-secondary education (20% of school leavers, compared with 15% of students whose parents had no post-secondary education). Nevertheless, “Parents’ level of educational attainment did not affect the odds of university leaving, after controlling for the effects of other predictors such as high school marks, high school leaving and failing a grade in elementary school.” Butlin (1999) points out that the “higher odds of university and community college leaving in British Columbia may have something to do with the university transfer system in this province. British Columbia has a highly developed university transfer system in which students can transfer to a university without earning a community college/CEGEP diploma … In addition, British Columbia has a relatively high number of part-time students at both the community college and university levels. Part-time students are more likely to leave without completing their programs than full-time students ….” (Butlin 1999).

The progression of high school to community college and then possibly to university is not always straightforward. Some university graduates undertake community college or other, non-university studies to complement their degrees. For example, the Information Technology Institute (ITI) is a private Instructional Technology Institution, which requires applicants to complete a university degree prior to admission (Sibley 2000).
Privatization and Government Cutbacks

Government policies and private sector influences on education have generated an ongoing debate about post-secondary education. A noticeable trend has been an entrepreneurial focus, tied in with the federal government’s support for vocational training. Another trend has been a policy of cutting back federal contributions to public education and other social welfare activities (Dennison 1995a, 13). Such a “restructuring” of government expenditures and emphasis on privatization and the private sector is often presented as the major influence on the direction of community college offerings (Witchell 1990).

One instance of this is the announcement of a new post-secondary institution in Ontario, based on a partnership between Durham College (Oshawa) and the newly formed Ontario Institute of Technology. The new institution will focus on “high-waged employment” and will grant both diplomas and degrees (Daily Commercial News 2001). Advocates of stronger linkages between the private sector and the colleges cite many benefits to such collaboration, including lessened demands on government budgets, and work-oriented curricula that can ease the transition from formal studies to employment. Links between business, industry, and community colleges are often celebrated as a means of increasing revenues and tailoring programs to ever-changing work contexts (Wells 1998).

Private-sector influences and government cutbacks have also attracted criticism. Concerns over corporate influence in the colleges have been voiced by author John Ralston Saul and others. These concerns include undue control over curriculum, amount of time required for fundraising, and pressures to value “training” over more academic education. Ralston Saul urged college administrators to resist what he termed a “corporate, managerial approach” and to preserve core educational approaches and programmes (Canadian Press 2000a).

Levin (2000) contends that there is clearly a trend toward a corporate-style, managerial approach in community college governance, but there are countervailing pressures to heighten staff and student input for decision-making. In several American and Canadian jurisdictions studied, it appears that only British Columbia and California “requires or encourages shared or participatory governance” through such measures as faculty involvement on governing boards and the presence of educational councils. Other commentators highlight the impact of declining government expenditures on post-secondary education, and gender-based issues such as the appreciably higher number of women instructors with part-time and limited-term appointments, compared with male instructors (Barnetson 2001).

Attracting Non-Traditional Populations

In a general sense, community colleges have long served the needs and interests of non-traditional populations, for example, through an emphasis on work training unlike the more “academic” focus of the universities (Nova Scotia Business Journal 1998).
Nevertheless, there is a strong scholarly tradition in Canada that explores the difficulties some populations experience in gaining occupational and educational opportunities within Canada’s “vertical mosaic” (Porter, 1965; Helmes-Hayes and Curtis 1998). The recent literature identifies more specific populations that have not traditionally enjoyed access to post-secondary education.

Women’s participation in post-secondary studies has increased dramatically in the past 30 years, with female undergraduate students outnumbering male students in virtually all Canadian universities and community colleges. Nevertheless, concerns have been raised about under-representation in some programs. At Toronto’s Instructional Technology Institute (ITI) women accounted for just over a quarter (28%) of the incoming students in May 2000 (Sibley 2000). Sibley adds: “The figures are equally dismal for women enrolled in computer science courses in Canadian universities … while there were 15,270 male students in computer science programs in 1998, there were only 4,130 women” (ibid.).

In recent years, considerable attention has been given to ways of attracting and retaining Aboriginal students. This category is quite broad, including status and non-status Indians, Metis, and Inuit. At approximately 700,000 people, the Aboriginal population is estimated at 2 percent of the Canadian population (Baker 1995, 209), although some place this as high as 4 percent of the total population.

Studies have confirmed that First Nations people have a much lower participation rate in post-secondary education. Specifically, they are one-seventh as likely as the general population to graduate from university, and only half as likely to graduate from high school (Wright 1998). The 1991 Canadian census found disparities in educational attainment between Indian and non-Indian populations, with only 3% of the former completing degrees compared with 15% of the general population (Baker 1995, 209).

To remedy this, some colleges have established Tribal Councils, steering committees, and have modified their offerings to reflect Aboriginal concerns and values. Indeed, there has been a renaissance of educational initiatives within aboriginal communities, oftentimes in partnership with non-aboriginal stakeholders (see Castellano, Davis and Lahache 2000). In some cases this involves bilateral negotiations between college administrators and First Nations representatives. It may also involve on-reserve resources such as Learning Centres which provide assessment and preparation for post-secondary studies or completion of high school equivalency. In this case, the First Nations band has formed a formal partnership with Capilano College in North Vancouver, B.C. (Wright 1998, 85). There are many other examples, such as the partnership between Heritage College and the James Bay Cree School Board, which provides college preparation for Cree students in northern Québec (Heritage College 2002).

There has been a positive trend toward greater educational participation of aboriginal students, with a 30% increase in aboriginal adult students in colleges and universities between 1986 and 1992 (Baker 1995, 209). Baker isolates several factors associated with success of aboriginal students. These include: location, preparation, community linkages, peer support, cultural support, family and childcare services (the majority of aboriginal
students in the mid 1990s were mature women with children), and a “culturally hospitable environment” (1995, 211-212).

The province of Saskatchewan has had a strong legacy of encouraging college and university attendance by Aboriginal people. The Saskatchewan Indian Federated College (SIFC) and Saskatchewan Indian Institute of Technologies (SIIT) were established in 1976. SIFC began with less than ten students, and now has over 1300 students, while SIIT has over 2,000 students in the 1999/2000 academic year (Windspeaker 2001). It is fair to stay that the Community College sector has a vital role to play in providing opportunities for Aboriginal people.

Summary

“While the colleges play a major role in the sociocultural and economic life of this country, very little systematic effort has been made to document their contributions, to analyze the changes that are occurring within them, or to examine the issues which must be addressed if they are to continue to play a viable role” (Dennison 1995, 9).

Community colleges are a relatively new addition to Canadian post-secondary education, tied to the expansion of educational opportunities in the 1960s and 1970s, but often out of the limelight accorded Canadian universities. While some community colleges have become degree-granting, their primary roles seem to be diploma and certificate programs, often of an applied nature, with some linkage to further studies at the “upper levels” (3rd and 4th year) of University programmes. The growth of degree-granting University Colleges in British Columbia is a recent innovation that spans the traditional roles of colleges and universities.

Pan-Canadian accords (protocols) have also been forged to increase recognition of work undertaken within and outside community colleges (www.accc.ca). Students interested in post-secondary studies can also avail themselves of a number of print and electronic resources devoted to college and university programmes (www.canlearn.ca). These initiatives and resources should be considered in light of the lack of a national educational policy in Canada and a tradition of local and provincial autonomy in the administration of educational initiatives. There is also an overarching pressure to “restructure” expenditures and programmes to conform to market-oriented, cost-recovery principles, This highlights privatization and greater involvement of the private sector generally in educational matters.

Even where formal inter-institutional links are established, there are persistent problems of poor access to useful information, lack of preparation for further education at University, and shortfalls in credit recognition for some community college courses and programmes. The recent literature highlights not only successful and unsuccessful example of linkage (credit recognition and transfer credit, for example), but also wider concerns over program content, reduced government funding despite increased demand
for places, and a “restructuring” tendency that adversely affects students, instructors, and other staff (see Meaghan 1997)

Rising tuition costs and general financial pressures on students have been identified as factors of social exclusion. This is often presented in a general context of privatization, where post-secondary costs are passed on to students or non-government sectors, as federal and/or provincial governments retrench their expenditures on post-secondary education (Dennison 1995a, 8). Specific populations such as women and aboriginal peoples have been identified within this exclusionary framework. In addition, many cite instances of resisting and reducing exclusionary practices for such non-traditional populations.

The diverse and divided nature of the Canadian educational landscape has not been captured in a comprehensive review of the community college sector, let alone its links with other educational institutions, particularly universities. This overview highlights key themes within the provincial and territorial post-secondary systems, but it cannot provide more than a starting-point for future, comparative (cross-national) studies of further education and higher education.
Chapter 6 Further and Higher Education Links in England

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The UK’s higher education system

The UK’s higher education traditionally possesses a reputation for elitism. However, this may reflect wider concerns about social class and education in the UK than it tells us about the evidence. In this respect, the UK system appears to follow a rather similar trajectory to that of other higher education systems in Europe. Indeed, following two decades of faster growth than elsewhere, by the early twenty-first century the UK could well be counted as having the least elitist system in the continent. As well as a diverse range of continuing education programmes, the system has one of the highest age participation rates in Europe. The UK perhaps comes closer than any other European society to the American model of mass higher education, and the government has announced that it aims to push participation up to American levels in the near future, while ensuring that opportunities are widened for those who are under-represented and under-achieving in higher education. For these reasons, the UK system offers an important model of the relationship between an expanded system and social inclusion.

For most of the twentieth century, higher education in Britain catered for a tiny proportion of the population, and the system was strictly hierarchical, with the ancient universities at its peak. Following the growth of secondary education after the Second World War, policy makers during the 1960s decided to expand the higher education system, both through growth in the existing institutions and through the foundation of a number of new ones (exceptionally, in the British case this included the Open University (OU), which provided open entry to a diverse programme of part-time distance degrees). Although the rate of growth slowed during the 1970s, it took off rapidly during the mid-1980s and continued to grow, albeit unsteadily, through the 1990s. By then, the UK’s higher education system consisted solely of universities and colleges; polytechnic status was abolished under the 1992 Further and Higher Education Act, with all but one of the ex-polytechnics choosing to style themselves as universities. After the Act, the English Funding Council created a mechanism for deciding which colleges of higher education (CHE) should be redesignated as universities. In Scotland and Northern Ireland, the devolved administrations have effectively encouraged the CHEs to merge with universities. The UK system is therefore unusual in Europe in consisting predominantly of a single unified set of institutions; although a small number of CHEs remains, all HEIs are funded on exactly the same basis.

As in the 1960s, the recent growth was largely through expansion in existing institutions. However, a small amount of higher education growth was concentrated in colleges of further education, which had previously been restricted to the provision of a very small amount of what was technically termed “non-advanced further education”. Even this was tightly regulated by local authorities. Recently, however, policy makers in all four UK nations have identified further education colleges as important vehicles for securing
wider participation, just as two-year college programmes often appeal to wider strata of society than four-year university programmes in the USA.

Even a brief analysis of student characteristics in UK higher education confirms both that much has changed as a result of expansion, and that some aspects of inequality have been surprisingly durable. The English system is far the largest of the four UK nations, and it has published the most up-to-date data. The following summary therefore concentrates on England, where currently the age participation rate (APR) is equivalent to 33% of all young people. However, I would emphasise that the governments of Scotland, Wales, and Northern Ireland have expressed parallel concerns for increasing participation and widening opportunity, and broadly similar measures are in place in all four of the UK nations. There is only one private university in the UK; the University of Buckingham, which recently celebrated its 25th anniversary, is comparatively small and is attended largely by overseas and postgraduate students; it is not discussed further in this report.

The English Higher Education Funding Council supports courses in 90 universities and 41 higher education colleges (HEIs, together known as the higher education system) as well as in almost 300 further education colleges (FECs). Some 437,000 new entrants began courses in HEIs in 1999-00, while 41,000 began higher education courses in FECs. Data are available for five categories of student which are relevant to the question of accessibility: age; gender; social class; ethnicity; and disability (NAO 2002).

Historically, the UK system has traditionally provided a second chance for adults. The tradition of extra-mural education arose in the late nineteenth century in order to provide courses that made university education available to adults (including women, who were then excluded from most intra-mural education). Until the late twentieth century, such courses rarely led to a qualification, but most of the provincial universities had developed schemes for mature age entry before the expansion of the 1960s (defined formally as those aged 21 and over at time of entry to undergraduate programmes, or 23 and over in respect of postgraduate programmes). The Open University has always been intended exclusively for mature age entrants. Nor has there ever been a statutory requirement in the UK, as in so many other European countries, for adults to possess the school-leaving qualification before entering higher education. Institutions have been free to offer places to adults who have other qualifications, or even none. While most institutions have sought some evidence of capacity for study from mature age entrants (though not necessarily in the form of the Advanced Level General Certificate of Education or Higher National Certificates expected from typical young entrants), the OU has from the outset offered open entry to its degree courses. In practice, there are enormous variations by institution and subject. There are far more mature age entrants in the ex-polytechnics and higher education colleges than average, and far fewer in the ancient universities. Most mature age entrants are in vocational social science subjects (nursing, business studies, education, social work), but a bare handful enter medicine, dentistry and veterinary science.

Women, although hugely under-represented until the late twentieth century, are now strongly represented in UK higher education. Currently, women account for 57% of all
students. Out of thirteen broad subject areas, women form less than half of all students in three only: mathematical and computing science; architecture, building and planning; and engineering and technology. The feminisation process has encompassed equally the systems of the four nations.

Despite the rapid expansion of the UK system, remarkably little change has taken place at system level in the social class background of students. The participation of students from so-called social class V (unskilled manual) doubled in the last decade of the twentieth century, but similar rises have taken place across the social classes, so that their share in the overall student population has stayed the same. There are significant variations among institutions, with the lowest proportions of students from manual worker backgrounds (categories V, IV and III M) in the ancient universities, while the highest proportions are in the large ex-polytechnics and general colleges of higher education. The proportion of students from the poorer social classes also varies enormously by subject, with high proportions entering education, and mathematical and computer sciences, and low proportions in medicine, dentistry and veterinary science (a subject band which has proven open to women, but which has the lowest conversion rate of all subjects for applications from the poorer social classes). Scottish and Welsh higher education students display a similar socio-economic pattern to England; while poorer social classes are better represented among students from Northern Ireland, this appears to be a product of specific local circumstances (Field 1997).

Ethnic minorities comprise a high proportion of higher education students. Currently some 6% of the working age population in England are ethnic minorities, compared with 15% of all students. It is widely acknowledged that there are wide variations within this broad category; studies based on specific localities suggest that some groups, such as people from Pakistani backgrounds, are poorly represented in higher education. There is also a marked gender effect. The APR among ethnic minority women almost reaches 60%, as against 48% for ethnic minority men, 31% among white women and 27% among white men. Ethnic minorities form a much smaller proportion of the population in the other three nations of the UK, and there is some evidence to suggest that the system has been less successful than in England in attracting such students.

People with a declared disability accounted for 5% of the 1990-00 full-time intake. At first sight this contrasts with the 18% of adults with a declared disability in the workforce, but it must be remembered that most full-time students are relatively young, and institution level studies suggests that they are also likely to under-declare disabilities. A recent cohort study suggested that an 18 year old with a disability (including those which make higher education impracticable) is 40% as likely to enter higher education as one without disability. There are marked differences by subject; once again the conversion rate for applications to medicine, dentistry and veterinary science is the lowest among all 13 subject bands.

The UK government has made clear its concern to widen opportunities for under-represented groups in higher education. Similar objectives are shared by the devolved governments in Northern Ireland, Wales and Scotland. The subject formed an important
element in the reviews of higher education undertaken in the four UK nations under the Conservatives, and published in 1997 shortly before Labour came to power. In its 1998 White Paper on lifelong learning, the government set out a number of general objectives for widening participation. In particular, the Prime Minister set out the goal of working towards 50% of all 18 to 30 year olds by 2010; progress towards this target will be reported in 2002. At the same time, the government has argued that as the benefits of higher education mainly accrue directly to those who participate, in an expanded system students and their families should pay a greater portion of the costs. In particular, the government replaced the student grant system with a support system based on low interest loans and introduced a yearly tuition fee. This appears to have encouraged students and their families to examine more closely the balance between costs and benefits of higher education, with a particularly negative impact upon the volume of mature age entry into higher education.

At national level in England, three broad types of measure have been adopted in recent years to widen participation. These are:

- National programmes of incentive funding, usually managed by the Funding Council, to encourage institutions to target under-represented groups. The English Funding Council launched a three-year Disability Special Initiative in 1996, building on previous similar initiatives dating from the early 1990s; a programme of partnerships with schools and colleges in 1998; summer schools to raise awareness and aspirations among schoolchildren from under-represented backgrounds in 1999; the establishment of Action on Access (a UK-wide support team to promote good practice) in 2000; to increase the participation of state school educated students at institutions recruiting them at low levels in 2001; and to form partnerships of HEIs, FECs and employers to develop two-year Foundation Degrees in 2001.

- Adjustments by the Funding Council to its block grant mechanism, allocating additional funding to institutions for students from particular target groups. The English Funding Council introduced differential funding for part time and mature students in 1998; for students from neighbourhoods with below average participation in 1999; for students with Disabled Students’ Allowances in 2000. Since 1999, the English Funding Council has published data on institutional progress on widening participation, so that these figures are in the public domain.

- The Government has sought to adjust its student support system so as to favour particular groups of student. There are slightly different mechanisms for student support in the four nations, but broadly similar goals have inspired parallel adjustments; Disabled Students’ Allowances ceased to be means tested in England in 1998; the loans system was extended to part time students on low incomes (on a limited basis) in England 1999; the Disabled Students’ Allowance scheme extended to part time students in England in 2000.

A wide range of measures has also been adopted by institutions. These include outreach programmes, often involving schools, FECs and community based organisations that help bring HEIs into contact with disadvantaged groups; the development of access courses, summer schools, taster sessions and other activities designed to help individuals (often
adults) to prepare for entry to HEIs; agreements with schools and FECs on progression arrangements; recognition of vocational qualifications and experiential learning for entry purposes; creation of special student support systems, financial and personal, to help individuals experiencing difficulties in completing their studies; the adoption of family-friendly approaches, such as provision of childcare facilities on campus or the organisation of teaching around school hours; and the development of more flexible and open systems of study that are designed to meet the needs of a wider range of students. While not all institutions have adopted such measures with equal enthusiasm or effectiveness, they represent a considerable shift in practice over the past two decades.

There is, then, a wide range of policy designed both to expand and broaden participation in higher education in England as in the rest of the UK. Within this, the role of further education has assumed particular importance. The contribution of FECs to wider participation was discussed by the National Committee of Inquiry into Higher Education (the so-called Dearing Committee), which reported in 1997. It also attracted attention from Ministers, particularly after the election of the new UK government in 1997. Previously, the legacy of non-advanced further education was – in the words of a recent account – “very much an anomalous and residual responsibility”, and the Further Education Funding Council accordingly operated “a policy of ‘no policy’” (Parry and Thompson 2001, 2). While the level of higher education in FECs expanded during the 1990s, it did so largely as a result of educational entrepreneurship on the part of expansionists in the colleges and some universities, rather than in reaction to deliberate national policy. By 1994, when the government brought an end to further expansion of full-time undergraduate places in higher education, some one in eight of all students were studying in FECs.

**Higher education in further education colleges**

Higher education has long been a feature of the British further education sector. Non-advanced further education in England, as it was known before the 1998 Education Reform Act, included higher national diplomas (HNDs) validated by BTEC, degrees validated by the Council for National Academic Awards, and a wide range of professional qualifications, funded by the DES through the local education authorities. Under the 1988 Act, most advanced further education courses were ‘prescribed’ in a schedule of programmes that came within the remit of the Polytechnics and Colleges Funding Council (PCFC); others – including full time HND courses – came under the remit of the FEFC. It was estimated by FEFC that in 1994/95, around 5% of the student population in FECs was enrolled in higher education (FEFC 1996, 3).

One of the recommendations from the Dearing Committee report was that responsibility for funding all categories of publicly funded higher education in England should be taken on by HEFCE. Since 1999, HEFCE has been responsible for the funding of all first degree, postgraduate, Higher National Diploma and Certificate (HND and HNC), Diploma of Higher Education, Certificate of Education and since 2000 Foundation Degree courses. As a result, responsibility for funding a wide range of additional HE
courses in FECs transferred from FEFC to HEFCE from the academic year 1999-2000. In addition, in 1997 the responsibility for quality assurance arrangements for higher education within FECs passed to the Quality Assurance Agency for Higher Education (QAA).

As noted above, HEFCE inherited a pattern which had simply grown, and which was somewhat complex. As well as students on HNC and HND courses, the colleges were also teaching significant numbers of students on other undergraduate level courses, many of them operating under a variety of bilateral and multilateral franchise agreements. In 1998, HEFCE was responsible for funding 30,000 HE students in 72 FECs. From 1999-2000, HEFCE found itself funding 288 such colleges; the combined MASNs of FECs in 2001-2002 came to 37,950, equivalent to just 4.6% of the total for all English institutions (HEFCE 2001b).

However, the students were widely and unequally distributed across the HE system. In a small number of institutions, there are significant numbers of HE places: the MASN for 2001-2002 was 2,712 in the largest case (Bradford College) and 2,591 in the second largest (Birmingham College of Food, Tourism and Creative Studies). At the other end of the spectrum, Daventry Tertiary College, Stourbridge College and Woolwich College each had a MASN of 6, while New College Swindon and Merton College had MASNs of 2. In total, there were in 1999-2000 104 colleges with fewer than 100 FTE directly funded HE places. It is clear, then, that there are huge variations in the scale of activity between different institutions.

There is also great variety in the arrangements under which FECs provide HE. Colleges do not have the power to award their own higher education qualifications, but a variety of arrangements exist whereby students can study for HE qualifications. Some higher education courses, including many leading to higher level vocational qualifications, lead to awards from professional institutions or the major public examining bodies. Otherwise, colleges’ HE provision - including HNCs and HNDs - is offered almost entirely in partnership with HEIs. One again, the arrangements for collaboration can vary widely. However, the most significant since the 1980s has been franchising, where part or all of a course designed in an HEI is delivered in an FEC.

Much of the growth during the 1980s and 1990s came in the form of franchising agreements. Unlike Scotland, FECs are required to deliver HNC/Ds under a franchise agreement with a partner university. It is hardly surprising, then, that in a survey of FE-HE partnerships in the early 1990s, virtually all HE work was described as being franchised (Bird 1996, 20). Other partnership arrangements studied by Bird included:

- Joint provision, relatively rare in the UK, where the HEI awards the qualification but teaching and course development are undertaken jointly (as in the University of Warwick 2+2 degrees);
- Validation, a much more common option, where an HEI agrees to award a named qualification and the FEC is responsible for course design, delivery and quality.

14 MASNs (Maximum Student Numbers) effectively represent full time equivalent targets.
assurance; and

- Articulation agreements, where students completing a higher education course in FE can enter into the second or third year of a course in an HEI (this is much less common in England than north of the border).

At the time of Bird’s survey, these arrangements were typically bilateral in nature. However, in some cases they had started to evolve into local or regional partnerships, and this evolved more systematically into formal consortia when HEFCE assumed responsibility for funding HE in FECs. Consortium arrangements were also required by HEFCE in the development of prototype Foundation Degrees.

In an analysis of HE provision within FECs, FEDA distinguished between four broad multilateral partnership arrangements between colleges and HEIs:

- **Associate college agreements** – between a higher education institution and several FECs. These aim primarily to facilitate progression to HE, perhaps initially in the college and then the university. Colleges have access to some university facilities and services, usually but not always in return for a ‘tied’ sole university agreement. FEDA suggested that “potentially such agreements can deliver a wide range of support for staff, students and institutional development, with colleges having something to offer the university in, for example, guidance and support, key skills and specialist vocational facilities”.

- **Regional or sub-regional networks** – these can provide diverse mutual support and development; each FEC can devise its own distinctive contribution to the network while building on their local mission. According to FEDA, this was “an ideal context for the development of credit accumulation and transfer schemes (CATS)”.

- **Multi-agency partnerships** – until now these have mainly been based on a single skill area, such as engineering, and may have involved one or more FECs, university, industry providers, Training and Enterprise Councils (TECs), Education Business Partnerships and so on. However, several colleges indicate that they will want to involve the new Regional Development Agencies (RDAs) and Learning and Skills Councils (LSCs) in planning provision across the FE/HE boundary. FEDA suggested that there was “potential here for new supportive partnerships, and, for example, the shared use of facilities and premises. This could also be an effective vehicle for joint outreach delivery of HE as currently practised, for example, in Leeds and Barnsley”.

- **Multi-college partnerships** – some FECs share specialist staff and facilities and undertake joint staff development, without necessarily involving an HEI. Such groups usually include one or two large college providers. This was represented by FEDA as an effective context for specialist colleges, such as in agriculture and land-based industries (HEFCE 2001a).

Typically, then, collaborative arrangements are local or regional in nature, and can involve varying degrees of formality. They vary enormously in detail; for instance, some require an agreement to “exclusive rights”, while others do not prevent other collaborative arrangements with different partners.
There is relatively little evidence with respect to the quality of HE teaching in FECs, but what exists is again suggestive of some variation. Most college provision of any scale has been examined by QAA during the subject review process. The resulting scores have been generally respectable, and certainly do not generally give any reason for doubting the capacity of the FE sector as such, there have been occasional exceptions. HEFCE has also identified a need for FECs to develop a more systematic approach to building an appropriate environment for higher education provision. In 2000, HEFCE announced details of a new £9.5 million fund to help further education colleges (FECs) to develop their higher education (HE) programmes, intended “specifically to raise the quality and standards of HE learning and teaching” and ensure that “the student experience in FECs is comparable to that in HEIs” (HEFCE 2000). This fund had been developed in consultation with the FE sector and QAA. A second phase of £18.5 m of funding has recently been announced by HEFCE (2002) which is also allocating increasing funds to partnerships between FECs, HEIs (and schools) in its continuing effort to raise participation levels to the government’s 50% target (HEFCE 2001c).

The English picture is, then, a very varied one. This largely reflects the size of the English system, which is roughly ten times the size of its Scottish equivalent, and this is manifested in the tendency for colleges and universities to develop bilateral franchising arrangements, many of which are local or regional in nature. Franchising is also a response to specific requirements - for example, in respect of HNC/Ds – which stand in contrast with the Scottish system. Moreover, by comparison with Scotland, the numbers studying higher education courses within FECs are relatively small. However, the English FECs have been highly successful in attracting adult returners, and this has given them a significance in policy terms that belies their size. In 1994/95, over 90% of higher education students in FECs were studying on a part-time basis, and were overwhelmingly found in courses designed to provide professional development to those already in work (FEFC 1996, 5). Two-thirds of HE students in FECs were over the age of 25, 60% were male, and 82% were white (FEFC 1996, 6). Despite the ambiguities that have persisted even after the Dearing report, then from a policy perspective the FE sector in England has played an increasingly significant part in government’s plans for wider participation. The introduction of Foundation Degrees, which has been focused particularly upon the FE sector, may therefore prove a litmus test for the development of HE within FE in the future.

Conclusions

Where next? Compared with Scotland, English FECs look like something of a sleeping giant when it comes to the expansion of higher education towards the 50% target set by the government for the end of the decade. Current policy trends envisage a considerably expanded role for the FE sector in delivering higher education. At present, the design framework for prototype Foundation Degrees suggests that government hopes to see HE in FE develop largely through partnership arrangements that bring together FECs, HEIs and employers. The track record of FECs in the QAA subject review process has suggested to many that the quality of higher education teaching in the colleges is
generally high (Ecclestone 2001). Taken together, this suggests that one likely scenario for the medium term is that HE in FE will undergo considerable growth.

Of course, this assumes that there will be considerable expansion of demand for HE places. This assumption is not borne out by evidence; in recent years, demand for HE places in England has levelled out, probably in part because the labour market for young adults is relatively buoyant. Even among senior policy makers, it is not unusual to hear doubts about the viability of the 50% target.

The second assumption is that significant proportions of any new entrants will wish to study in an FEC. Yet there must be doubts over the capacity of the FE sector to attract significant numbers of new entrants into HE. Despite the government’s intention to expand the HE system through FECs, overall numbers have not grown. Thanks in part to growth of numbers within the HEIs themselves, there was a tendency for declining numbers to opt for study in FECs. Overall, in 2000-01 directly funded FECs recruited 50,100 FTE students in HE, which was 3,800 fewer than the total of 53,900 FTE places for which HEFCE provided funds. As a result, significant numbers of colleges suffered claw-backs. On balance, it seems that although FECs are in principle well placed to attract non-traditional students, in practice the overwhelming majority of applicants are still choosing to pursue their studies in a university. There is also some anecdotal evidence that HEIs who are experiencing difficulties in recruiting to their (expanded) targets have started to reduce the scale of their franchising activities. As a result, FECs are vulnerable to competition from those HEIs who have unfilled places. It is too early to tell whether the introduction of Foundation Degrees will bring about significant change in this traditional preference.

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1 The official data are categorised using the official system devised for the 1991 Census. The six groups used are Professional (I), Managerial (II), Skilled non manual (IIIN), Skilled manual (IIIM), Semi-skilled manual (IV) and Unskilled manual (V).

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15 Fundable home and EC students