

National Board of Employment, Education and Training

**Changing Context, Moving Skills:
Generic Skills in the Context of Credit
Transfer and the Recognition of Prior
Learning**

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Preface

The project consultants would like to place on record their gratitude to the National Board and its Secretariat, especially Laurie Carmichael, Ann Morrow and Annely Aueckens; not only for cooperation and support throughout the project but for making available the opportunity to work on a fascinating set of policy issues. These issues, as expected, proved to be easier to open than to close, especially in a three month study.

The project rested on the support of Professor John Anwyl, Julie Rodman and Rosemary O'Shea at the Centre for the Study of Higher Education, and the consultants are grateful for both the research assistance of Anna Zalevski and Mayling Szuto, the contribution of Sharon Humphreys at Victoria University, and the cooperation of the Bendigo Regional Institute of TAFE in releasing Barry Golding (especially Kevin Vallence, Graham Skewes, Graeme Trewartha and Ron Smith).

The consultants also benefited from discussions with other researchers and policy advisers working in closely related areas. Most importantly, the project could not have taken place without the willing cooperation of hundreds of students and staff in higher education and the vocational education and training sector, and the TAFE and university institutions which cooperated with the mailed student survey. Survey respondents had little time to complete questionnaires that contained contentious and contested phrases, and addressed highly complex issues. In the circumstances the response rates were excellent, and the consultants thank all those involved.

To meet an abbreviated project deadline, the report was completed as quickly as possible. However, the Board would have benefited from time to explore the data further. Nevertheless, the consultants are satisfied that the issues specified in the project brief were addressed. Appendix 2 was prepared by Barry Golding and Appendixes 3 and 4 by Robert Pascoe. Simon Marginson drafted the main report with close consultation with Barry Golding and Robert Pascoe. Annely Aeuckens of the National Board Secretariat met with the project team on 8 December during drafting, and Laurie Carmichael and Ann Morrow discussed the final report. Margaret Powles of the Centre for the Study of Higher Education provided helpful feedback on Appendix 2. Nevertheless, Barry Golding, Simon Marginson and Robert Pascoe share joint and several responsibility for the text of the main report.

Executive Summary

This study is focused on the formation of generic skills in post-school education—with emphasis on the formation of those skills in generalist courses such as those in the arts, humanities and social sciences—and the role of generic skills in student movement between the post-school sectors. As such, the study is partly concerned with the operation of the recognition systems—articulation arrangements, credit transfer, recognition of prior learning (RPL)—designed to assist student movement between sectors. Generic skills are the general skills, such as skills in communication, work organisation, working in teams, using technology, cultural understanding, etc. as identified by the Mayer committee (1992) and elsewhere. These skills are formed and used in context-specific ways but in part are also common to different sites. Generic skills are formed in all courses in TAFE and higher education. Generalist courses have an important role in forming advanced level work-related generic skills and thus contribute to the employability of graduates, although this is not their only educational role.

Before considering the role of generic skills in both recognition systems and student mobility, it is necessary to consider the character of student movement between TAFE and higher education. Policy makers have aimed open broader pathways between TAFE and higher education, for both efficiency and equity reasons, for example, through credit transfer. This present report, and other recent studies, reveal a high level of ‘traffic’ between the sectors. In the majority of cases there is no formal transfer of credit, suggesting scope for more use of recognition arrangements. But the movement between the sectors is far more multiple (movements back and forth between the sectors are common), fragmented, and spontaneous than policy has hitherto assumed.

Up until now policy makers have worked on the assumption, reinforced by the hierarchical character of career thinking, the market in credentials, and the current statistical presentation of educational outcomes (in which ‘highest qualification’ subsumes all others), that post-school education is a two-dimensional vertically structured system, in which everyone aims to reach the highest possible level in one particular field. Thus the main issue of inter-sector mobility has been seen as the need to broaden the ‘upward mobility’ paths from TAFE to university, especially for young people.

But the evidence gathered in the surveys and interviews conducted in this project shows that the conventional upward mobility model is *not* general to inter-sectoral movement. People may well pursue such a ‘vertical’ approach to the planning of their lives and the value of education (though the extent of this is perhaps debatable). Nevertheless, even in the framework of conventional vocational thinking, the most rational use of education is not always to move ‘upwards’. The conventional assumptions are deficient, in three respects.

First, while ‘upward mobility’ paths in some areas such as business, computing and engineering are well defined and used, many of the ‘vertical’ pathways opened up by recent reforms are little used, and have a mostly symbolic value.

Second, there is extensive horizontal movement between the sectors and between courses, adding a third dimension to the picture. Movement from university to TAFE is more common than movement from TAFE to university. Much of this movement is between courses which in the formal sense are unrelated, though combining them can make good sense. For example, students often move from arts courses at university to business or computing courses in TAFE. Rather than moving always ‘upwards’, people are more likely to move ‘across’ or ‘downwards’. They compile mixed portfolios of knowledge, skills and qualifications, changing their educational preparation to fit their current needs. Students moving from higher education to TAFE are often more interested in the skills than the qualifications.

Third, this inter-sectoral movement—and more generally, enrolment in tertiary education—occurs throughout adult life. The older people become, and the more that their actual experiences of work influence the pattern of educational enrolments, the further they move away from what policy has hitherto imagined as the ‘normal’ path. The reality we have yet to fully confront is that post-school education is moving from an almost sole preoccupation with the preparation of young people, to a system of recurrent education in which the education of school leavers is only one part; and a system in which many people use education to find new careers or simply to change direction. (The growth of postgraduate education also illustrates these trends). This is the natural consequence of the expansion of educational participation and social literacy, and the growth in economic and cultural demand for education, trends that feed on each other.

It is a kind of cultural cringe to assume that all TAFE courses are necessarily at a ‘lower level’ than higher education, or that the knowledge and skills gained in a TAFE course are necessarily subsumed in well-articulated higher education courses ‘up the line’, so that vertical systems of credit transfer can be made universal. Courses and sectors are more heterogeneous than that. In recognition arrangements, qualifications at the same formal level *cannot* always be interchanged. Knowledge requirements are often more important than levels of achievement.

Further, knowledge and skills are partly specific to context and do *not* transfer automatically. (Research on expertise suggests it is in the acquisition of *particular* occupational and discipline based knowledge that general skills are enhanced). In this study most higher education staff and some TAFE staff cast doubt on the notion of generic skills as a universal currency that can be ‘cashed in’ everywhere). These factors suggest more complex and flexible recognition systems of articulation, credit transfer and recognition of prior learning are needed.

There should be greater scope for students designing their own educational paths, on the basis of better information about the alternatives in *both* sectors than is currently available. Recognition arrangements for movements from university to TAFE are as yet little developed, and most universities have yet to make a serious effort to design recognition of prior learning systems capable of broad use. The problem of the cost of recognition of prior learning is yet to be overcome, and this is a serious obstacle which must be addressed.

Further, in some cases the use of unspecified credit mechanisms may have directed attention away from the development of systems for unit/subject recognition. However, the falling away of school leaver demand for entry into higher education provides a more favourable policy and institutional environment for tackling the issue of improved recognition systems in higher education. Institutions have a stronger need to facilitate non-school leaver entry. In TAFE, recognition of prior learning arrangements and appropriately trained staff, are generally in place, but the process involves too many disincentives for students and teachers to be regularly used.

Cross-field combination of courses should be encouraged, especially general–vocational combinations. These produce graduates whose vocational competence is embedded in a very strong foundation of generic skills, making them more flexible and more employable. This may necessitate the extension of advanced level generalist courses in TAFE, including discipline-based study. Given the social stratification of tertiary education, it is important that advanced generic skills, which can powerfully increase capacity and confidence, are available to students in both sectors.

There should also be more scope for local negotiation between institutions in the articulation of courses, especially across the vocational education and training – higher education divide. In this project, it became clear that multi-sectoral institutions were handling recognition issues better than standalone institutions. The multi-sectoral institutions may well constitute an important general example for all institutions, and are worthy of closer study. It would also be useful to look more closely at private providers.

The Project

Project Brief and Organisation

Following the Board's three year reference on credit transfer and skill recognition spanning 1992 to 1994 (National Board of Employment, Education and Training 1994a), and earlier work on generic skills in generalist courses commissioned by the Higher Education Division of the Department of Employment, Education and Training (Marginson 1993b), the Board noted the need to examine the contribution of generalist courses to both higher education and TAFE to emerging vocational requirements, incorporating the role of such courses as preparatory to advanced vocational education (National Board of Employment, Education and Training 1994a, pp. 17–18).

Subsequently, the Commonwealth Minister for Employment, Education and Training, the Hon. Simon Crean MP, asked the Board to examine and report on the relationship between general and vocational education in terms of recognition arrangements in post-school education and training. The project was conducted at the same time as the separate but related work on multi-sectoral collaboration in post-secondary education and training (National Board of Employment, Education and Training 1995a).

The project brief prepared by the National Board summarised the project as

an examination of the development and improvement of employment-related generic skills in general and vocational courses in post-school education and training, and of the treatment of such skills in credit transfer and the recognition of prior learning.

The project has two main aims. First, the identification and analysis of issues surrounding the place of employment-related generic skills (for example, the Mayer key competencies or generic academic skills) in general and vocational courses and how these skills may be improved. Second, the means by which the transferability of these skills between the various components of the post-school sector can be ensured through the mechanism of credit transfer and the recognition of prior learning.

Increasing emphasis on the need for generic skills, such as interpersonal and communication skills, in all employment areas raises the question of whether they are sufficiently provided for in many courses. The focus of the project is on those aspects of generalist education which can provide generic skills appropriate to the workplace and which might provide credit for career development. The integration of transferable employment-related generic skills is necessary into both general and specialised vocational courses.

(National Board of Employment, Education and Training project brief).

The project brief also specified that the consultants would be required to 'gather information about the overall situation' and to examine a number of specific issues in addition to the above, including the implications of generic skills for 'curriculum development and course structure in the higher education, TAFE, adult and community education sectors and in courses given by private providers', to specifically examine generalist courses in higher education and their contribution to the development of transferable generic skills, and to examine vocational courses in the vocational education and training sector and 'the inclusion of a greater degree of transferable generic skills'. The consultants were required to undertake case studies and to take account of previous or concurrent work by other people and organisations, including the National Board itself and the Department of Employment, Education and Training. The specified duration of the project was three months, from September to December 1995.

The project was advertised for tender in August 1995 and the successful bidders were the team of Barry Golding (Bendigo Regional Institute of TAFE), Simon Marginson (Centre for the Study of Higher Education, University of Melbourne) and Professor Robert Pascoe (Dean of Arts, Victoria University). The project was housed and supported by the Centre for the Study of Higher Education, University of Melbourne. The project duration was from 18 September to 11 December 1995.

The National Board appointed a Steering Committee to oversee the project, consisting of Laurie Carmichael (Convenor), Ann Morrow and Robert Fordham. Annely Aeuckens from the Board Secretariat serviced the project and the Steering Committee. The Steering Committee met on two occasions—28 September and 15 November 1995.

Methodology and Conduct of the Project

In the face of the extensive brief, and the short duration of the project, the consultants gathered evidence in a cluster of research zones that were selected because of particular relevance to one or more of the themes of the

project. The consultants identified three overlapping areas that needed to be brought together:

- (1) data on the existing quantity and character of movement between the post-school sectors;
- (2) data on recognition systems; and
- (3) data on the character and role of generic skills in post-school courses (especially but not only generalist courses) and of the systems of teaching, learning, assessment and skill description used in relation to generic skills.

Through the research process, the consultants sought to identify ways and means of improving the acquisition and recognition of generic skills, and improving the efficient and equitable functioning of systems of student movement between the sectors.

In their project bid the consultants undertook to:

- (1) gather the relevant policy and academic literature;
- (2) draw data from earlier work by Golding (for example, 1995b, 1995c, 1995d, 1995e, 1995f) concerning the two-way movement of students between higher education and TAFE;
- (3) survey and interview a sample of students who had moved from higher education to TAFE, and a matching sample of students who had moved from TAFE to higher education;
- (4) interview and perhaps survey a group of teachers and policy officers in the vocational education and training sector;
- (5) interview and perhaps survey a group of academic teachers and managers in the higher education sector; and
- (6) examine the techniques used to define, describe and manage generic skills in course structures, and in recognition systems between sectors.

Since 1992 there has been a considerable volume of policy related research in the areas encompassed by this project. The consultants had access to a wide range of recent material, in addition to that of the National Board itself. The Department of Employment, Education, Training has conducted or supported a number of projects concerning the potential for competency based approaches in the different sectors that were drawn on in the preparation of this report, including Bowden and Masters (1993), Marginson (1993b), McCurry (1995) and Lohrey (1995).

Other work on transfer and generic skills used in the preparation of this report included that of Marginson (1994), Lilly (1995b), Wilson and Lilly (1995) and Misko (1995). The literature on recognition systems emanating from both government and universities included work by Cohen et al. (1992), Cohen and Gonczi (1994) and Haydon (1995). In addition to

Golding's work cited above, studies of pathways and inter-sectoral movement by Millican (1995), Dwyer (1995), the National Training Consultative Committee (1995) and the earlier work of Mathers (1981) were particularly useful. In addition to the report by Pascoe (1995) on community colleges in the United States, publications by Heinemann (1993) and others were consulted. Further references are cited in the text of this report and included in the bibliography.

Steps (1) to (3) were carried out as originally planned. The largest survey, specified in (3) above, was conducted in three multi-sectoral institutions—the Royal Melbourne Institute of Technology (RMIT), Swinburne University of Technology and Victoria University (VU)—and in three groups of matching institutions—Monash University and Holmesglen TAFE; the University of Ballarat and the School of Mines and Industries (Ballarat); and La Trobe University (Bendigo) and Sunraysia TAFE. All of these institutions were located in Victoria.

In relation to steps (4) and (5), the primary research technique used was survey rather than interview, both because of the need for quantitative data and because of time constraints. However, questionnaire respondents were provided with considerable space for written comments. Some phone interviews were conducted. The sample of higher education academics was small and caution should be used in interpreting the results. Private providers and adult and community education were included in the survey specified in the vocational education and training staff survey but, of the small groups in each category, only half provided returns. The sub-groups were too small to be disaggregated and they were left within the total vocational education and training sample.

It is proposed that in relation to private providers, a separate study be carried out. Part of step (6) had been covered in the work of McCurry (1995) for the Australian Council for Educational Research, released during the project, but data were gathered concerning the use of generic skills in course objectives in higher education and two generalist courses in TAFE. A planned focus group with deans of arts based in Victoria was cancelled because this was felt to be not sufficiently representative, and instead the deans of arts were surveyed on a national basis.

At the request of the Steering Committee, the consultants investigated the Coffs Harbour (NSW) campus of Southern Cross University, which has integrated higher education, TAFE and senior secondary facilities; and examined the question of associate degrees in higher education. Time and expenditure constraints ruled out a planned case study in Western Australia.

The consultants were impressed by the degree of inter-sectoral cooperation, and the integration of facilities, achieved at Coffs Harbour. Certain course components are now planned and designed in conjunction between higher education and TAFE; student admissions are handled jointly; there are no visible status differences in the facilities provided to all three sets of students; and there is clear potential for the further development of multi-sectoral credit arrangements. The campus provides a stimulating environment for senior secondary students, and encourages the use of senior schooling by adults, often preparatory to enrolment in vocational courses. In that respect the school level courses function as preparatory generalist courses. The Coffs Harbour model could become much more widespread in future.

This report summarises the main findings of the project, focusing on matters of policy importance. Only a small proportion of the data generated during the project, considered to be of most relevance to the project themes, have been included in the main report.

More detailed supporting data are provided in the Appendixes. Appendix 1 contains the questionnaires used in the project surveys. Appendixes 2 and 3 explain the methodologies and report the main findings of those surveys. Appendix 4 summarises the use of course objectives related to generic skills, in generalist courses in higher education in arts, humanities and social sciences. The Appendixes do not exhaust the data generated during the project and it is hoped to further develop the data for academic purposes, including publication, at a subsequent stage.

Context of the Project

Changing Relations between Education, Training and Work

The project took place following almost a decade of policies designed to modernise the education and training systems, and to achieve the closer integration of the different sectors of education and training as well as a closer synergy between programs in education and training and policies on industry development and the labour markets (for an early international example of these policies see OECD 1987). Secondary retention to year 12 had doubled since the early 1980s and participation in higher education and TAFE has also grown very significantly (for example, National Board of Employment, Education, Training 1995b).

The accelerating turnover of technologies, credentialism, continued unemployment, especially among young people, the decline in full-time work relative to part time and casual work (Sweet 1995), and demands for recurrent education, retraining and 'second chance' entry have increased both the economic and the social-cultural importance of education and training systems. Whether at work or in the business of living, or in the education and training systems themselves, there is a need for greater flexibility, the capacity to adjust and to respond to new situations and changing requirements. This has increased the importance of those generic attributes that can contribute to flexibility, such as lifelong learning, problem solving and working in groups.

The processes of education and training reform have reflected the different histories and traditions of universities, TAFE, private training and adult and community education. From time to time this heterogeneity has created obstacles to cooperative arrangements, for example in relation to recognition systems. Nevertheless, there are certain signs that a closer symbiosis between the universities and the TAFE systems is in the process of development. The National Qualifications Framework has been established and credit arrangements are being extended. Recently, commentators from both sectors have referred to the need to learn from the strengths of the other sector (for example, Hall 1995, p. 2; Pickett 1995, p. 3; Freedman 1995, pp. 8–9). The establishment of vocational education research centres at Monash University, Griffith University and The University of Melbourne, in addition to the longer established group at the University of Technology, Sydney, may create a basis for stronger links and more common ground.

Generalist Education and Vocationally Specific Education

All courses serve a range of purposes, some of which relate to work (Marginson 1993a, pp. 3–27). The particular character of these purposes, and mix between different purposes, may vary by course. While the boundaries between ‘general’ and ‘vocational’ education overlap (Finn 1991; Keating in National Board of Employment, Education, Training 1994a, p. 67), there *is* a distinction to be made between general education and vocationally specific education. General (generalist) education is education that is not tailored to preparation for any *particular* occupation or vocation—for example, arts, humanities, social sciences and natural sciences courses in universities, or basic literacy courses in TAFE.

Vocationally specific courses range from industry training, para-professional courses or apprenticeships in TAFE to professional courses in universities, such as nursing, medicine or law. As these examples suggest, TAFE and higher education share responsibility for both kinds of education. The distinction between the general and the vocationally specific does not mean that generalist courses have no vocational role or relevance. On the contrary: generalist courses develop general (‘generic’) skills and attributes, and these skills are of primary importance in the workplace. All courses contribute to the formation of such generic skills, but good generalist courses should be especially effective in generic skill development.

The purposes of generalist courses vary significantly, and may include the acquisition of basic literacy, pre-vocational preparation, broad personal development, the acquisition of knowledges, and the development of intellectual skills and cultural attributes. The first three of these purposes are more likely than the others to be associated with generalist studies in TAFE. Except for basic literacy, all of these purposes have been associated with generalist courses in higher education. Generalist courses in higher education traditionally emphasise academic knowledges and skills and are subject to international bench-marking in these areas, whether formal or informal.

The surveys of vocational education and training (mostly TAFE) and university staff conducted as part of this project asked respondents to indicate agreement or disagreement with a number of different statements about the role of generalist courses. The university respondents, a much smaller group (see Appendix 3), were mostly drawn from the generalist courses and, as expected, were highly positive about the role of those courses. The TAFE staff were drawn from a mix of fields of study. On the whole, their perceptions were similar to those of the university staff.

*Table 1: Attitudes to Generalist Courses: Vocational Education and Training and University Staff**

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean**
Generalist courses serve a number of desirable vocational and non-vocational functions	VET	86	9	5	4.4
	Uni	86	10	3	4.4
All post-school courses, whether generalist or occupational, should prepare students for work	VET	66	5	29	3.6
	Uni	52	19	29	3.3
Generalist courses help students to become more responsive, flexible and adaptable in future	VET	62	25	13	3.8
	Uni	71	24	5	3.9
Generalist courses help students to 'work out who they are' and increase their confidence	VET	62	30	8	3.8
	Uni	75	15	10	4.1
Generalist courses are a luxury we can't afford	VET	3	6	91	1.4
	Uni	5	10	86	1.5
For people marginal to work/ education, it is more important to learn general skills than occupationally specific skills	VET	36	30	35	3.0
	Uni	48	14	32	3.4

* *In this table and all similar tables in the report, only valid cases are included. Reading across the table, some totals fall short of 100 per cent, because of rounding.*

** *maximum agreement = 5.0*

There was overwhelming agreement that generalist courses served both vocational and non-vocational functions, and few respondents disagreed with the statements that generalist courses help students to develop flexibility and to find confidence. On the statement that all courses, whether generalist or occupational, should prepare students for work, there was 66 per cent agreement in the vocational education and training sector but less agreement in the higher education sector. On the question of the relative importance of generalist and occupationally specific courses in relation to disadvantaged people, TAFE respondents were evenly divided.

Student Movement between the Sectors

The work on inter-sectoral student movement by Golding (1995b; 1995c; 1995d; 1995e; 1995f), Millican (1995) and the National Training Consultative Committee (1995) reveals patterns of student movement that for many will be unexpected. These patterns are more complex, fragmented and contingency driven than is generally realised. This corroborates work by Dwyer (1995) and others on the post-compulsory age group.

There are several different kinds of users of education and training, with different expectations and behaviours. There is very active traffic in both directions between TAFE and higher education, with more movement from higher education to TAFE than the other way round. More than *half* of the students moving in each direction have previously enrolled in *more than one* tertiary course. There is also a small group, approximately one student in every ten, which appear to be concurrently enrolled in both sectors (Golding 1995c). In the context of credentialism and labour market insecurity, recurrent education has assumed a growing importance in tertiary education, relative to the importance of school leaver entry.

In policy circles, the dominant notion of inter-sectoral movement is that of a vertically upward movement between TAFE and higher education, what might be called the 'upward mobility' model of student transfer. The efforts of government have been focused on broadening and facilitating this pathway, for both equity and efficiency reasons. Thus credit transfer policies have been focused on one-way arrangements (for example, National Board of Employment, Education and Training 1989, 1993a and 1993b; Australian Vice-Chancellors' Committee 1993). The Australian Qualifications Framework epitomises the upward mobility model (Ministerial Council on Education, Employment, Training and Youth Affairs 1994). Such models generate the assumption that students move between sectors in order to progress from a 'lower' to a 'higher' level of education and that the 'higher' qualification subsumes the 'lower'. Much of the supporting policy research has focused on the success or otherwise of transferees granted course credits. Golding has argued that:

The new framework preserves the traditional unequal and poorly justified lateral relationship between 'education' on one hand and 'training' on the other using a two-dimensional hierarchy; from school to TAFE to higher education in one dimension, and using an hierarchical system of awards in the other dimension.

(Golding 1995e, p. 14).

Using this kind of vertical thinking, it appears common sense that students moving from TAFE to higher education should receive full or close to full credits for the years successfully completed in TAFE, providing that the learning in the TAFE course is consistent with the requirements of the subsequent course. Thus a model of inter-sectoral relations which only has the vertical dimension tends to create unrealistic expectations. It misses the fact that the sectors (and courses) are heterogeneous. TAFE courses are typically shorter than higher education courses, are somewhat more likely to be occupationally specific and designed with the cooperation of industry, and include a range of occupations with no counterpart in higher education. Because many TAFE courses provide skills and knowledge that are not provided in higher education courses, they are not necessarily subsumed in the latter. A lateral model of inter-sectoral relations allows these factors to be taken into account.

Until recently, there was little consideration of student movement from higher education to TAFE. Following the aforementioned work by Golding and Millican, the National Board notes that former higher education students enrolled in TAFE demonstrate a range of motivations from those:

- wishing to round off an uncompleted higher education course in a vocational domain;
- moving into new occupations;
- wishing to explore options without vocational motives; and
- supplementing general higher education with more specifically vocational studies in TAFE.

A significant number of students move from generalist courses in higher education to 'white collar' para-professional and general-vocational courses in TAFE in such areas as computing, management, marketing and advertising, professional writing, office skills and occupational health. (Note that the term 'move' here and elsewhere in the report does not necessarily designate an *immediate* movement or passage from one sector to the other. These movements are often delayed by several years, especially in the case of movement from university to TAFE.)

The National Board found that 'the movement of higher education students to TAFE has many positive aspects', notwithstanding a danger that entrants from higher education might crowd out school leaver entrants into TAFE (National Board of Employment, Education and Training 1994a, pp. xiii-xv and pp. 41-50). Nevertheless, there are still comparatively few policies in place at any level which facilitate student movement, other than that of the standard upward mobility model. One exception is Western Australia (see paragraph 29). New South Wales TAFE has developed policy on two-way transfer, and some institutions now routinely report two-way outcomes, including Victoria University.

This phenomenon of complex two-way movement, with both a lateral dimension and a vertical dimension, poses questions for policy research.

- What are the prior personal, educational, vocational and motivational characteristics of the students concerned?
- What can their experiences tell us about the adequacy of current recognition arrangements?
- For example, in what situations are prior formal learning and informal learning being recognised?
- Are the acquisition and recognition of generic skills occurring and what role, if any, do these skills play in facilitating access and course credits?
- What arrangements best facilitate two-way lateral movement?

Analysis of the existing data on inter-sectoral movement suggests that the following hypotheses could be tested:

- student movement could usefully be modelled on a two-way basis;
- previous education and/or work experience affects motivation to transfer between sectors; and
- most such student movement takes place outside standard credit arrangements.

These issues are important. Student movement between the sectors impinges on a number of key areas of policy, including:

- the roles of the post-school sectors and the relationships between them;
- the systems of articulation, credit transfer and recognition of prior learning;
- the balance and the relationship between general and vocational education;
- the patterns of opportunity, access and equity; and
- considerations of efficiency, including the avoidance of waste and duplication.

Recent doctoral work by Golding elaborates on the characteristics and experience of students engaged in movement between the sectors. This work was used to guide the development of survey and interview questions for the present project. Golding suggests that, while both groups are heterogeneous, certain differences can be isolated between the bulk of the TAFE to higher education transferees, and the higher education to TAFE transferees.

Those transferring from TAFE to university are more likely to be involved in a planned movement, and in a related or identical field of study; for example, in business studies or engineering. Such movement is usually designed for upward vocational advancement and motivated primarily by the formal

vocational qualification. In contrast, those moving from university to TAFE, about half of whom completed their last higher education course, are likely to be making an improvised shift in response to an immediate or anticipated need for skills, often but not always vocational in character. They are likely to be entering a new and completely unrelated field of study. Typically, the need to enrol in TAFE did not become apparent until after the end of the last higher education course.

Table 2: Students Who Have Moved between the Tertiary Sectors: Match between Study in Current Sector and Study in Previous Sector

Students Moving From:	Present Course Compared to Previous Course in the Other Tertiary Sector:				
	<i>Identical</i>	<i>Very Similar</i>	<i>Somewhat Similar</i>	<i>Vaguely Similar</i>	<i>Totally Different</i>
	%	%	%	%	%
University to TAFE	0	9	15	13	67
TAFE to university	14	24	31	10	22

Because Golding's previous findings in Victoria are consistent with those in Millican's study in Queensland, and with the aggregated National Training Consultative Committee data, it was decided to confine the present study to student movement in Victoria. The study reported in Golding (1995f) encompassed a sample of approximately 3600 Victorians involved in movement between the sectors, half in each direction. The present study involves an effective sample of 746 persons who had commenced study in 1995 in one of the sectors after at least one previous experience in the other sector (for more details see Appendix 2). There were 281 initial returns, constituting a response rate of 38 per cent. (Late returns were unable to be encompassed in this report but will be incorporated in subsequent data compilations.)

The survey found that the median age of university to TAFE movers was 33 years, while the median age of TAFE to university movers was 23 years. This age difference between the groups was associated with a number of other differences, and conditioned the values and opinions of respondents.

Of those moving from university to TAFE, 12 per cent were still enrolled at university, and a total of 28 per cent had transferred inter-sectorally at least once before. Of all students moving in this direction 47 per cent were enrolled at associate diploma level, 35 per cent in TAFE certificates and 18 per cent at advanced certificate level. The major fields of study were business (25 per cent), computing and information technology (22 per cent) and engineering (12 per cent). Of these students, 67 per cent were moving into a completely different field of study in TAFE, and only 9 per cent had enrolled in a very similar or identical field of study as their university course. Almost half of these students saw their new course as a form of retraining. Few students moving in the opposite direction, from TAFE to university, saw their new course in that light.

Of those moving from TAFE to university, 5 per cent were still enrolled in TAFE, and 19 per cent had a previous history of inter-sectoral transfer. Most of these students had entered courses in business (40 per cent), applied science (13 per cent) or arts (10 per cent). Compared to studies of previous yearly cohorts, fewer had moved to university engineering courses. A total of 22 per cent had enrolled in a completely different field of study to their previous course in TAFE, while 14 per cent had enrolled in the same field of study. This last group, comprising only 14 per cent of half of those students who were involved in inter-sectoral movement, were classic 'upwardly mobile' transferees.

The survey found that vocational motivations played a strong role with both groups of students, but considerations of upward mobility were more important for the group moving from TAFE to university than for the group moving from university to TAFE. Whereas the students entering higher education were on the whole more interested in the qualification than the skills, those entering TAFE from higher education were clearly more interested in gaining new skills than in gaining a qualification *per se*. This reflects both the reality that higher education qualifications are more prestigious overall, and the fact that the older group moving from higher education to TAFE is using education differently.

In the light of this extensive two-way movement, the majority of it lateral rather than vertical in character, the conclusion of the consultants is that policy makers and system managers should seek to facilitate student flexibility and choice. This requires the development of recognition systems (see below), and also the provision of better information about the courses available and about articulation and credit arrangements.

Table 3: Vocational Motivations of Students Moving between Sectors

Statement	Students Moving From	Agree	Neutral	Disagree
		%	%	%
I am studying my present course to gain vocationally specific training	uni to TAFE	85	5	10
	TAFE to uni	77	16	8
My previous course did not give me enough specific vocational skills	uni to TAFE	30	31	39
	TAFE to uni	38	15	46
I have chosen my present course in order to keep open my vocational options	uni to TAFE	62	19	19
	TAFE to uni	69	21	20
I have chosen my present course more for the qualification than the skills	uni to TAFE	22	20	58
	TAFE to uni	40	31	28
I have chosen my present course more for the skills than the qualification	uni to TAFE	65	23	12
	TAFE to uni	33	21	36

In its report, *Your guide to advanced standing for TAFE and university students* (Western Australia Department of Training 1995a), the Department demonstrates the kind of information which can and should be provided in each State and Territory. It is essential that the information provided to prospective students should be user friendly, not only in the provision of accurate information about pathways, but in the provision of information about the actual student movement going on, in such a manner as to encourage students to use the wide range of opportunities available to them. For example, biographical cameos could be used, featuring different kinds of movement.

Generic Skills and Skill Transfer

Generic Skills

General or generic skills are skills that are common to more than one work site, more than one occupation or more than one field of knowledge. Communication skills are the best known example of generic skills. Most discussion about generic skills is about *work related* generic skills. The Mayer committee developed seven generic work related ‘key competencies’ which it applied ‘to work generally rather than being specific to work in particular occupations or industries’ (Mayer 1992, p. 5). An eighth competency, cultural understanding, was developed separately. Misko (1995, p. 30) cites a definition of work related generic skills as those ‘overt and covert behaviours which are fundamental to the performance of many tasks and sub-tasks carried out in a wide range of occupations and which are basic to both specialised applications and job specific skills’.

Generic skills operate at both elementary and sophisticated levels. More developed generic skills unlock the full range of professional and academic knowledge. For example, skills such as using technology in knowledge synthesis and system design will be the key to intellectually based work in the future. At the same time, some of the courses in basic social literacy now use the Mayer competencies, such as the 1995 Victorian Certificate of General Education for Adults. Research by the Australian Bureau of Statistics reported by the National Board of Employment, Education and Training (1995b, pp. 208–214) suggests that adult and community education had a greater effect on the generic skills of unemployed people, young people, those who had never worked and those without post-school qualifications, than on students as a whole. One manager in TAFE stated in responding to the project survey that:

In my work with a wide range of educationally disadvantaged and non-achieving students these general skills are the ones lacking and needing lots of attention before the ‘real’ learning takes place. Often they haven’t been developed in home or school environments.

(TAFE senior manager, education, female, 51 years).

This project was focused primarily on work related skills. Nevertheless, as Candy and Crebert (1991) and Marginson (1993) note, generic skills—even those related to language—are never completely universal, so as to be

applicable without regard to time or place. For example, the generic academic skills developed in education differ in certain respects from those formed in workplaces. Communication requirements at work place greater emphasis on oral communication, interpersonal persuasion and a variety of short written presentations; university requirements develop the capacity to write essays and research reports within the frameworks of particular academic disciplines. Indeed, these skills are specific to the knowledge domain, as well as to the site. General skills are also purpose bound, and vary according to the interests they serve. As one TAFE respondent to the staff survey stated ‘general skills are tools, they are not ends in themselves’.

In investigating the development of generic work related skills, the consultants used the skill descriptors provided by the Mayer committee, plus four further generic skills which were felt to usefully supplement the Mayer cluster. The first two of these, ‘learning and teaching on demand’ and ‘understanding and designing systems’ were originally developed by the New Standards Project in the United States, which adopted a list of generic skills similar to that of the Mayer committee, but also added these generic skills to fill two perceived gaps. Here the consultants intended ‘learning and teaching on demand’ to incorporate the important notion of lifelong learning (National Board of Employment, Education and Training 1994b).

In addition the consultants added two further skills to cover what were perceived to be additional gaps in the list provided by the Mayer committee and the New Standards Project. ‘Reflecting and imagining’ was intended to capture the qualities of creative, imaginative, critical and lateral thinking which are often mentioned in the literature (for example, Misko 1995, pp. 7 and 11; Barnett 1994, p. 59).

‘Learning from experience (e.g. mature personal judgement)’ was intended to capture the contribution of professional and occupational socialisation to the exercise of work related attributes. Barnett (1994, p. 58) notes the need to develop ‘the ability to frame a situation in a range of possible ways and the capacity to identify the appropriate skills to bring to bear on the situation as defined’. It is one thing to have access to skills and knowledge: it is another to know when and how to use them. One of the academic respondents to the project survey put it like this:

The term ‘general skill’ suggests that it is a ‘job lot’—either you have it or you don’t. [But] the usefulness of skills comes in the ability of the skilled person to apply them to a range of situations.

(Senior Lecturer, university, physiology, female, 34 years).

Skill Transfer

‘When we use the term *transfer* in relation to knowledge, skills and attitudes we generally mean that what is learned in a previous context is either repeated in a similar context or adapted in some way to a new context’ (Misko 1995, p. 2). The British term for generic skills is ‘transferable skills’, which would suggest that skills once formed are readily and automatically transferred. However, the context specific character of learning and skill deployment, which limits transferability, is an important theme in the literature. (See, for example, the work of Perkins and Salomon (1989) and Barnett (1994)). Recent work by Misko (1995), Lohrey (1995) and Lilly (1995) explores the limits of transferability. As Misko (1995, p. 4) notes there are countless anecdotal examples of the failure to transfer skills from education to work. In the exercise of the same skill in different places, there are both common and context specific elements. As one university staff member stated in response to the project survey:

General skills are developed in specific contexts; in the nature of the case they are transferable across contexts, but they are not separable from all contexts. There are degrees of generality specifically applicable to *all* skills.

(Dean of arts, university, philosophy, male, 59 years).

Skills developed in education will not always be required in the workplace and will not always transfer readily into work. The problem for government and educators becomes the maximisation of those conditions which assist skill transfer to occur. The capacity to transfer skill is affected by certain generic skills that can be enhanced in education, such as lifelong learning, and the capacity to deal with multiplicity and difference (Marginson 1994). Lifelong learning is a pre-condition for the exercise of all other skills and knowledges in new and unfamiliar situations. Motivation and confidence also play important roles in skill transfer. Studies of expert behaviour suggest also that context-specific knowledge is important in the expert use of skills, highlighting the importance of discipline based learning (Misko 1995, pp. 12–24).

Findings that experience and content specific knowledge are major factors in producing expertise have special implications for generic skills training and for vocational educators who are worried about whether generic competencies will transfer from the learning situation to the workplace. The findings from the literature on experts and novices point solidly in the direction of specific knowledge training. This has implications for proponents of the discovery method of learning who generally believe that learning will occur purely as a result of knowing how to access information...

Such findings also question the wisdom of putting in place a curriculum based on the development of a set of generic skills or competencies and hope that these can be used to prepare students for the world of work. They also suggest a case for protecting the role of the traditional academic, professional and trade disciplines for the building up of these skills and knowledge bases. Embedding training in the context of the traditional disciplines makes sense because they provide a ready made knowledge base.

(Misko 1995, p. 24).

This suggests not that the formation of knowledge can be substituted for the formation of generic competencies, but that each needs the other. Generic competencies are necessary if knowledge is to be used effectively in both educational and occupational settings. Correspondingly, in either setting, and for either academic or work related purposes, the formation of competencies depends on the acquisition of knowledge.

Lohrey (1995, p. 8) suggests that ‘the key competency implementation program has been affected by a lack of clarity in the use of the terms “generic” and “transferability”’. Certainly, the surveys of vocational education and training and higher education staff that were conducted in the course of this project revealed a range of attitudes towards questions of skill transfer. Table 2 shows substantial variations between the attitudes of university and vocational education and training (largely TAFE) staff. For example, university staff believe that the communication skills learned in higher education courses are like those used at work, whereas TAFE staff strongly disagree. Both agree that the communications skills learned in TAFE courses are like those required at work. Nearly half of both groups disagree there is a universal skill in problem solving, but a clear majority reject the notion that working in teams must be learned anew in each site. Most TAFE staff believe that the general skills learned in TAFE are readily transferred into higher education. Few university staff agree. The inter-sectoral tensions were evident in a significant minority of responses to the staff survey. ‘Higher education needs to come down off its high horse’, stated one TAFE respondent.

The perceptions of TAFE staff concerning the transferability of general skills across sectors in either direction corresponded closely to perceptions of students actually involved in moving between the sectors (see Appendix 2 for more details). In contrast, university staff were much more negative about the transferability of TAFE skills to university contexts (16 per cent agreed that the skills are readily transferred) than were the students involved in that transfer from TAFE to university (60 per cent). Somewhat more students were prepared to state that general skills acquired in higher education were readily transferred to TAFE (56 per cent) than were higher education staff (47 per cent).

Table 4: Attitudes to Skill Transfer: Vocational Education and Training and University Staff

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean*
Communications skills required in TAFE are like those used at work	VET	61	20	19	3.5
	Uni	58	26	16	3.4
Communications skills required in higher education are like those used at work	VET	24	22	55	2.6
	Uni	71	0	29	3.6
Solving problems is fundamentally the same anywhere in work or education	VET	50	11	40	3.2
	Uni	43	10	48	2.6
There is no such thing as a 'general' skill—all skills are specific to their different context	VET	13	5	83	1.9
	Uni	14	14	71	2.4
Working in teams is something that must be relearned in each new site	VET	29	10	62	2.4
	Uni	19	10	71	2.4
General skills acquired in TAFE are readily transferred to higher education	VET	64	20	16	3.7
	Uni	16	42	42	2.7
General skills acquired in higher education are readily transferred to TAFE	VET	66	11	24	3.6
	Uni	47	37	16	3.3

* maximum agreement = 5.0

Table 5: Generalist Courses and Generic Skills: Attitudes of Vocational Education and Training and University Staff

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean*
The attributes formed in generalist courses help students to transfer their occupationally specific skills from education to work	VET	69	23	8	3.8
	Uni	67	24	10	3.8
Generalist courses are more effective than occupationally specific courses in preparing students in general skills	VET	28	34	39	2.9
	Uni	43	43	14	3.4
Generalist courses are more effective than occupationally specific course in preparing work related general skills	VET	13	36	52	2.5
	Uni	33	33	33	3.1

* maximum agreement = 5.0

Generalist Courses and Generic Skills

Staff who were surveyed on balance agreed that generalist courses formed attributes that helped students to transfer occupationally specific skills between education and work. There was less agreement that generalist courses were the more effective means of forming generic skills, especially work related skills. University staff, mostly from generalist courses, were more positive about generalist courses than were TAFE staff.

Where Skill Development Takes Place

Both surveys identified a variety of responses to the question about where work related skills had been developed. Understandably, answers were conditioned by respondents' own biographies. (The subjective character of these responses, and the limitations it places on the data, is discussed in more detail in Appendixes 2 and 3.) Students moving from TAFE to university were less likely to have had their general skills formed at work, compared to the older group moving from university to TAFE. Those moving from university to TAFE were much more likely to identify university rather than TAFE as a site which made a 'major' contribution to the formation of generic skills as specified in the questionnaire. Those moving in the opposite direction named university only slightly more often than TAFE, and being a younger group were more likely to nominate school and home. It was striking that for both groups, work, and for the TAFE to university group, school as well, were more often nominated as making a 'major' contribution, than were either of the post-school sectors. However, the answers varied considerably by the different skills themselves. In summary, the survey found that, for the groups of students who were surveyed:

- 'Collecting, analysing and organising information', 'Understanding and designing systems' and 'Expressing ideas and information skills' derive primarily from university as well as from the workplace, and in the case of TAFE to university transferees, also from TAFE;
- 'Using mathematical ideas and techniques' for transferees derive mainly from school or university, and in the case of university to TAFE transferees, also from university;
- The workplace is the primary site for the development of skills associated with 'Planning and organising activities', 'Working with others and in teams', 'Learning from experience', 'Solving problems', 'Using technology' and 'Learning and teaching on demand';
- TAFE plays a significant role in relation to skills associated with 'Using technology';
- The home setting contributes significantly to the skill of 'Learning from experience';

- ‘Reflecting and imagining’ are skills respondents associate primarily with the home; and
- ‘Cultural understanding’ is a skill respondents associate primarily with school and university;

Overall, the workplace setting contributes most in terms of the aggregated opinion of the respondents. Respondents tended to place more importance on their workplace or first tertiary setting, than on their schooling or their subsequent tertiary setting. University to TAFE transferees, being older, placed less emphasis on the role of school and more on home; in many cases they may be alluding to their current family rather than their family of origin.

Table 6: Where Skill Development Takes Place (1): Views of Students Who have Moved from University to TAFE

General Skills	Proportion of all Survey Respondents who Stated That a Major Contribution** to Skill Development Occurred in:				
	<i>School</i>	<i>TAFE</i>	<i>Higher Education</i>	<i>Work</i>	<i>Home/Other</i>
	%	%	%	%	%
Collecting, analysing and organising ideas and information	24	19*	63*	41	19
Expressing ideas and information	32	21	52	45	27
Planning and organising activities	19	12*	47*	64	31
Working with others and in teams	11	20	33	75	23
Using mathematical ideas and techniques	56	14	51	28*	10
Solving problems	27	11*	45	60	42
Using technology	7*	32*	45*	54	22
Cultural understanding, including civics	22	12	41	30	44
Learning and teaching on demand (‘lifelong learning’)	17	22	43	58	40
Understanding/designing systems	10	17	51	49	20
Reflecting and imagining	23	19	34	22	62
Learning from experience (e.g. mature personal judgement)	13	17	23	72	65

* indicates statistically significant differences ($p < 0.05$) between university to TAFE responses, and TAFE to university responses.

** the setting which was named by the highest percentage of students is indicated in **bold**.

Staff from higher education and vocational education and training were asked questions about the same matter—where skill formation took place. But in their case, unlike the students, it was *not* their *personal* skill formation. They were asked to make *general* judgements about where skill formation took place. Tables 8 and 9 contain the results. Caution has to be exercised in interpreting the data on university staff attitudes because numbers were small.

Table 7: Where Skill Development Takes Place (2): Views of Students Who Have Moved from TAFE to University

General Skills	Proportion of all Survey Respondents who Stated That a <i>Major Contribution**</i> to Skill Development Occurred in:				
	<i>School</i> %	<i>TAFE</i> %	<i>Higher Education</i> %	<i>Work</i> %	<i>Home/Other</i> %
Collecting, analysing and organising ideas and information	34	43*	44*	34	9
Expressing ideas and information	33	36	41	34	24
Planning and organising activities	23	32*	23*	48	27
Working with others and in teams	25	35	29	65	16
Using mathematical ideas and techniques	60	41	39	11*	5
Solving problems	27	35*	29*	45	27
Using technology	20*	50*	41*	51	18
Cultural understanding, including civics	30	22	28	29	42
Learning and teaching on demand ('lifelong learning')	22	27	33	64	41
Understanding/designing systems	14	37*	39	39	9
Reflecting and imagining	33	13	19	17	46
Learning from experience (e.g. mature personal judgement)	16	28	23	68	54

* indicates statistically significant differences ($p < 0.05$) between university to TAFE responses, and TAFE to university responses.

** the setting which was named by the highest percentage of students is indicated in **bold**.

The workplace itself was seen as the most important single site for the learning of work related skills, although for university staff, higher education was also important. For both groups of staff, the workplace was seen as playing the leading role in the development of 'Planning and organising activities', 'Working with others and in teams', 'Using technology' and 'Understanding and designing systems'.

- For vocational education and training staff the workplace was also seen as playing the leading role in 'Collecting, analysing and organising ideas and information', 'Solving problems', 'Learning and teaching on demand', and 'Learning from experience'. University staff also considered the workplace to be important in relation to the development of these skills.
- For university staff, higher education was most often mentioned as the origin of the skills of 'Collecting, analysing and organising ideas and information', 'Expressing ideas and information', 'Solving problems', 'Learning and teaching on demand' and 'Reflecting and imagining'. Vocational education and training staff also mentioned higher education most often as the source of 'Expressing ideas and information'.
- School was mentioned most often as the source of 'Using mathematical ideas and techniques', and 'Cultural understanding, including civics'. TAFE ranked low on cultural understanding but both tertiary sectors were seen as a key source of mathematical skills.
- The home and higher education were seen as the most important sources of 'Reflecting and imagining', with TAFE playing a minor role.
- Both tertiary sectors were seen as playing important roles in 'Using technologies', especially TAFE, while school and the home setting made minor contributions.
- The home had a major effect on 'Learning from experience'.

Table 8: Where Skill Development Takes Place (3): Views of University Staff

General Skills	Proportion of all Survey Respondents who Stated That a Major Contribution* to Skill Development Occurred in:				
	<i>School</i>	<i>TAFE</i>	<i>Higher Education</i>	<i>Work</i>	<i>Home/Other</i>
	%	%	%	%	%
Collecting, analysing and organising ideas and information	64	27	100	50	18
Expressing ideas and information	68	50	95	59	41
Planning and organising activities	32	27	64	91	55
Working with others and in teams	36	27	45	91	41
Using mathematical ideas and techniques	82	55	73	27	9
Solving problems	50	50	86	82	2750
Using technology	36	64	68	86	32
Cultural understanding, including civics	82	27	68	32	55
Learning and teaching on demand ('lifelong learning')	14	27	73	68	32
Understanding/designing systems	0	36	64	77	14
Reflecting and imagining	27	9	86	41	45
Learning from experience (e.g. mature personal judgement)	23	23	50	91	95

* the setting which was named by the highest percentage of staff is indicated in **bold**.

Table 9: Where Skill Development Takes Place (4): Views of Staff in Vocational Education and Training

General Skills	Proportion of all Survey Respondents who Stated That a <i>Major Contribution*</i> to Skill Development Occurred in:				
	<i>School</i>	<i>TAFE</i>	<i>Higher Education</i>	<i>Work</i>	<i>Home/Other</i>
	%	%	%	%	%
Collecting, analysing and organising ideas and information	59	59	73	64	35
Expressing ideas and information	59	55	68	59	47
Planning and organising activities	35	48	38	80	65
Working with others and in teams	45	65	24	89	53
Using mathematical ideas and techniques	68	64	58	42	29
Solving problems	41	59	52	80	74
Using technology	33	77	39	86	33
Cultural understanding, including civics	63	27	41	52	58
Learning and teaching on demand ('lifelong learning')	18	55	35	67	62
Understanding/designing systems	11	50	53	73	17
Reflecting and imagining	38	23	61	38	65
Learning from experience (e.g. mature personal judgement)	14	36	20	88	85

* the setting which was named by the highest percentage of staff is indicated in **bold**.

Employment Related Generic Skills in Post-school Education

Existing Skill Development

Both groups of students placed a significant emphasis on higher education as a source of general skills. In the case of the students who had moved from university to TAFE, at least one-third of those students named higher education as a primary site for skill formation, in relation to 11 of the 13 general skills. In the case of the students who had moved from TAFE to higher education, at least one-third of those students named higher education as a primary site in relation to 6 of the 13 general skills. TAFE was less often seen as a source of general skills. Of those who had moved from university to TAFE, the highest proportion mentioning TAFE as a primary site was 32 per cent for 'Using technology'. Of those who had moved from TAFE to university, at least one-third of students named TAFE as a primary site in the case of 7 of the 13 skills (Tables 4 and 5).

Both groups of post-school staff were asked whether TAFE and university programs 'focus effectively on the development of general skills'. Here the questionnaire did not specify that such skills should be work related, but the answers provide some guidance as to the potential of the universities and TAFE institutions in the formation of work related generic skills. The majority of university staff agreed that university courses were effectively focused on the development of generic skills, but TAFE staff did not agree with their university colleagues about university courses. Staff in neither sector believed that TAFE courses were focused effectively on the development of general skills.

Table 10: Formation of General Skills in Higher Education and TAFE: Attitudes of Vocational Education and Training and University Staff

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean*
TAFE programs focus effectively on the development of general skills	VET	28	27	45	2.7
	Uni	5	37	58	2.1
Higher education programs focus effectively on the development of general skills	VET	27	28	45	2.6
	Uni	52	14	33	3.1

* maximum agreement = 5.0

In relation to higher education, the examination of course handbooks indicates that notions of generic skills had become part of the objectives of a significant number of generalist arts faculty courses (see Appendix 4). There was less evidence this had led to modifications in course content, assessment or pedagogy. In at least some courses there appears to be a continuing absence of group based learning, and to a lesser extent a relative weakness in training in oral communication.

Comments on the survey questionnaire indicated some commitment to the traditional belief that generic academic skills translated readily into generic workplace skills, and there was no need for any substantial modifications of curriculum and pedagogy. As Lohrey (1995, p. 41) has noted, a 'mapping and auditing exercise' does not in itself constitute changes to teaching and learning. At worst, the use of work related course objectives as identified in Appendix 4 reflects marketing strategies rather than educational goals. Further research is needed to test the substance of the courses against their stated objectives.

On the other hand, previous research had suggested that in some generalist courses in higher education there had been changes to course content or structure so as to more effectively encompass work related aspects, either within the normal program of study or as an adjunct to it. One example identified by Marginson (1993b) was that of a community development course at Victoria University. The present study turned up further examples, from the comments included on questionnaires and from other sources. The small sample of higher education respondents was not comprehensive of all generalist courses: science faculties were not covered, and not all departments in arts, humanities and social sciences returned the questionnaire. Among those that did return the questionnaire, the incorporation of work related aspects into courses appeared more widespread than in 1993. In the absence of a more detailed study, it is not possible to generalise soundly about the extent and character of the changes to practices of teaching and assessment.

The continuing scarcity of work for young people, the likely downturn in the number of school leavers seeking places in higher education and the consequent growth in competition between institutions is likely to place a greater emphasis on work related objectives and on generic skills as one part of the objectives of generalist courses. Nevertheless, it would be desirable for the Commonwealth to maintain a watching brief in this area. Like their counterparts in the vocationally specific courses which comprise the bulk of higher education, those pass students in generalist courses who are unlikely to pursue an academic career have a right to assistance in vocational matters relevant to them.

It is proposed that during the annual profiling negotiations with the Department of Employment, Education, Training and Youth Affairs, higher education institutions be required to report on measures taken to encourage and maintain a focus on work related objectives in generalist courses, including the formation of generic skills, without prejudicing the role of the generalist courses in discipline based learning. This requirement could be withdrawn once the Commonwealth was satisfied that the orientation to work related objectives was well and widely established.

In relation to vocational education and training institutions there is a more overt emphasis on generic skill formation, and many occupationally specific courses contain modules or strands in which preparation in generic skills such as communications, problem solving and teamwork have been combined with the specific occupation concerned. Unlike higher education where the generalist courses were the main ones examined, in relation to TAFE the study covered all fields and was not sufficiently large enough to pinpoint main areas of strength or weakness. There were too few returns from generalist courses in TAFE to compare these directly with generalist courses in higher education. It is suggested that generalist courses in TAFE should be specifically investigated.

Assessment of Generic Skills

In the present study, staff in vocational education and training and in higher education were asked to indicate the mode of general skill development that they preferred. Seventy-three per cent of higher education respondents and 58 per cent of vocational education and training respondents opted for 'integration into the main program and no separate assessment'. Of the remainder, 33 per cent of the vocational education and training staff opted for 'integration into the main program but separate assessment', while only 14 per cent of university respondents supported this.

It has become a truism in education that assessment systems tend to drive student motivation and to shape the content of teaching as well as learning. Whether generic skills are embedded in knowledge based strands or are taught on a standalone basis, the extent to which these skills are specifically assessed is likely to correlate with their importance within the learning program. If such skills are assessed separately from discipline based knowledge, resulting in two distinct and potentially competing systems of assessment, then a direct tradeoff between discipline based learning and competency based learning would be unavoidable. For the reasons given above this is likely to undermine both kinds of learning.

McCurry (1995i) notes in his examination of 'Approaches to assessing the key competencies' that 'it is unrealistic to envisage a key competencies assessment system as competing with or replacing subject based grades'. This suggests that if the formation of generic skills is to be assessed, those skills would be better embedded in subject based learning. For example a science course might include a strand on 'communications in science'. This approach has been used in many TAFE courses, such as those at Coffs Harbour.

Course Combinations

All jobs require both generic and specific skills, and the selection systems used by employers are often focused on both. The question is how and to what level to acquire each of these sets of skills. While at least some general skills are acquired on the way as part of any vocationally specific course, generalist courses offer more sustained attention to the development of such skills.

Data from interviews with employers and careers advisers reported in Marginson (1993b) indicated that many employers prefer applicants who have acquired *both* higher level generic skills in communication, analysis and related fields—for example, through a generalist humanities or science course that is followed by vocationally specific qualifications. The August 1995 edition of *Career*, published by the University of Melbourne's Course and Careers Unit, advises arts graduates to consider adding a vocational qualification to their degree, acquired in either higher education or TAFE.

The survey questionnaires sent to staff in each sector contained questions on general–vocational course combinations. Both vocational education and training and university staff exhibited a strong level of agreement with the statement that 'the combination of generalist course and occupationally specific course provides a strong preparation for work'. Staff were more ambivalent about the statement that employers preferred such a combined preparation, but were more in agreement than disagreement (Table 11).

As noted, some students already combine generalist and vocationally specific studies. This could be encouraged, for example, through the arrangements governing fees and the Higher Education Contribution Scheme (HECS), and by the extension of the present HECS arrangements governing combined courses to appropriate generalist course/vocational course combinations, in one or both post-school sectors. For example, higher education institutions could follow the University of Melbourne's lead and provide information to potential generalist graduates about vocational options in TAFE which might be coupled with their generalist qualifications. It would also be of assistance to students if university libraries carried copies of the relevant TAFE handbooks, as well as university handbooks.

Table 11: The Combination of a Generalist Course and an Occupationally Specific Course: Attitudes of Vocational Education and Training and University Staff

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean*
The combination of generalist course and occupationally specific course provides a strong preparation for work	VET	83	13	5	4.2
	Uni	85	10	5	4.1
Employers place higher value on a combination of generalist and occupationally specific courses, than on either course taken on its own	VET	40	40	21	3.3
	Uni	40	35	25	3.1
The combination of a generalist course and an occupationally specific course provides a strong form of preparation for life as a whole	VET	78	14	8	4.0
	Uni	91	5	5	4.1

* maximum agreement = 5.0

Generalist Courses in TAFE

Staff survey respondents were asked to comment on the role of generalist courses in TAFE, and to compare that with generalist courses in universities. There was widespread (though not universal) support for the role of generalist courses in TAFE. For the most part respondents from both sectors saw TAFE generalist courses as necessarily more elementary, less discipline based or more practically focused than generalist courses in higher education. A typical response was the following:

Question: What should be the role of generalist courses in TAFE? Should it be different to generalist courses in universities?

Answer: Definitely different. Should market to different levels. Generalist TAFE courses should be oriented towards life skills or bridging skills. University generalist courses should be high level analysis and information. High level TAFE courses should be all vocationally specific (they need not cover an entire occupation though). TAFE and universities should *not* duplicate.

(Project officer, TAFE, female, 27 years).

Nevertheless, a smaller group of respondents argued that in relation to generalist courses the role of the sectors should not necessarily differ. One respondent argued that the approach to generalist courses ought to be more demand driven than supply driven:

Generalist courses in TAFE should be encouraged and [my course reflects] demand for them. There is no reason why they should be different to universities, other than to fit with student requirements.

(Researcher, information technology and education, female, 42 years).

There was some support for the notion of general–vocational couplings within the vocational education and training sector. For example:

If we are really concerned about having a ‘thinking’ workforce, I think a general course prior to a skills course would be an excellent idea.

(TAFE Project Officer, female, 49 years, business studies).

This suggests that TAFE systems could provide a range of generalist courses. In the case of those students who wish to enrol in a generalist program beyond the basic level, there should be other options than full three year degrees in areas such as arts, science or communications. TAFE could play a role as a provider of shorter high level generic skill orientated courses, a format yet to be developed in Australia. It could also provide courses of longer duration, like the discipline based courses in many generalist courses in higher education. This process could be assisted by commissioning a study of the formation of generic skills in TAFE courses and the incidence, content and quality of generalist courses in TAFE; with a view to the identification of possible improvements in the contribution of TAFE courses to the formation of generic skills.

Associate Degrees

In Australian tertiary education, associate degrees have had a contested and unsatisfactory place. The American concept of a two year tertiary qualification has never really found favour, even during the period in which Australia had an advanced education sector and a qualification designed to round off the secondary years might have become established. On the whole, Australians have been less likely than their American counterparts to distinguish rigidly between terminal and transfer programs.

There have been isolated examples of two year terminal courses; for example, the Associate Degree in Mine and Engineering Surveying at Curtin University’s Kalgoorlie campus, and the Diploma of Music at the Melba Conservatorium which is affiliated to Victoria University. But apart from an ill-fated Victorian initiative in the late 1980s, the Diploma of Tertiary Studies (DOTS), there was no attempt to introduce a generalist associate degree

level course in higher education. The Diploma of Tertiary Studies course was designed as a discrete two year vocationally oriented tertiary course offered by the universities across both sectors. It floundered largely because those who 'joined the DOTS', as the advertising urged them to do, did so in order to proceed to university rather than terminate their education at the end of the Diploma program; and also because the availability of work placements (which were part of the course) collapsed during the recession at the beginning of the 1990s.

While TAFE has traditionally been the main provider of access and bridging programs, Adult and Community Education courses became less conspicuous in this regard during the 1980s. As a consequence, there were fewer pathways through TAFE to the generalist courses in universities. This was the setting in which Swinburne University of Technology took the radical step of offering an associate degree which was taught in three feeder secondary schools by registered teachers and moderated by university academics. This project initially received financial support from the Commonwealth. However, this source of funding was cut after a short time, and the project was turned over to the university's TAFE division, which developed much the same course into a competency based program (Swinburne University of Technology 1995).

Meanwhile, a similar course was developed at the then Western Metropolitan College of TAFE. This course was approved in December 1995 by the Victorian Office of Training and Further Education; it provides an example of the role of notions of generic skill in course design in a generalist course in TAFE. This course was aimed at providing a new pathway into arts courses at Victoria University and elsewhere (Western Metropolitan College of TAFE 1995). The development of this course was subject to a number of models and influences, including the American educator from La Guardia, Harry Heinemann (1993). Universities were critical of the development of associate degrees in TAFE (Hambly 1995) but did not seek to compete with TAFE. The consultants make no comment on associate degrees, which is outside the main project brief, but would point to the advantages of encouraging inter-sectoral cooperation rather than competition in this area.

Articulation, Credit Transfer and Recognition of Prior Learning

Existing Arrangements

This study has employed the National Board's definitions of articulation, credit transfer and recognition of prior learning (see Glossary). It has been noted by the National Board (National Board of Employment, Education and Training 1994a) and by the National Training Consultative Committee (1995, p. 13), that as the Committee puts it: 'there should be common understanding and agreement between all States and Territories on the terminology used to describe articulation, credit transfer, RPL and advanced standing'.

Most articulation has been focused on TAFE to university movement but many of the routes opened up in this manner remain unused or substantially under-used. In relation to credit transfer there are certain well established forms of upward mobility from TAFE to higher education; for example, in business studies, computing and information technologies, sub-professional to professional engineering, and in some States enrolled nursing to registered nursing courses.

Often, however, the arrangements for credit transfer perform a symbolic role as a signifier of articulation and of public accountability, rather than playing an actual function in the widespread granting of credit. In New South Wales TAFE there are more than 700 individual credit pathways covering nearly 100 TAFE courses, but in 1995 only 6000 of these students actually moved from TAFE to higher education, while 30 000 students with previous university backgrounds commenced in TAFE (Golding 1995e, p. 7). The overwhelming majority of those students involved in movement to TAFE did not have the option of formal advanced standing (National Board of Employment, Education and Training 1995a, p. xv). It is likely that those that were eligible for credit and achieved it did so through a recognition of prior learning process (National Training Consultative Committee 1995).

The study of two-way student movement confirms the complexity behind what is often assumed to be simple, one-way movement. This includes apparent and real multiple enrolment, widespread evidence of prior multiple tertiary backgrounds of students in motion, and frequent changes of field of study when crossing between sectors. Multiple enrolment and multiple prior tertiary backgrounds have obvious and important implications in relation to the recent decision to relax school leaver targets for university entry; and the

combination of multiple backgrounds, and widespread changes of field of study, tend to place limitations on standard or routine credit transfer *via* simple pathways.

The survey of students conducted as part of this project found that of those moving from TAFE to university, 63 per cent received at least some credit on the basis of their prior experience in TAFE, although 22 per cent believed that they had been required to unnecessarily repeat some of their previous studies in the new sector (Table 12). Of these students moving from TAFE to university, 35 per cent were attracted to the course by the availability of credit transfer. In contrast, of those moving from university to TAFE, only 13 per cent received credit and only 9 per cent were attracted to TAFE by the availability of credit transfer. What attracted more members of this group to their TAFE courses was the short nature of the course (47 per cent), and its relatively low cost (35 per cent).

Table 12: Students Who Have Moved between Sectors: Cases of Credit for Previous Studies in Another Sector

Students Who Moved from: (number of cases where credit was granted)	Proportion of all Students who were Awarded Credit	Mean Credit Per Case with Credit (Prop. of Course)	Mean Credit Per Total Students (Prop. of Course)
	%	%	%
University to TAFE (10 cases)	13	20	3
TAFE to university (61 cases)	63	28	16

Students moving from higher education to TAFE are handicapped in demonstrating their level of generic skills for the purposes of advanced standing not only because these generic skills are not subject to specific assessment in higher education, but also because of the difficulty of devising a test of generic skills that would enable standardised comparisons across all fields of study and in both sectors. Of course, not all former higher education students moving into short courses in TAFE want to obtain advanced standing. For many the main reason for enrolling in TAFE is to develop particular skills, and this development is maximised by enrolment in, and full experience of, the formal program.

However, the major finding with regard to the student survey was that the students enrolled in multi-sectoral institutions were almost exactly twice as likely as students enrolled in single sector standalone institutions to have received some form of advanced standing. In the single sector institutions, 21 out of 81 students (26 per cent) were awarded credit; while in the multi-sectoral institutions, 37 students out of 75 (49 per cent) were awarded credit.

This suggests that there may be some factors operating in multi-sectoral contexts which lead to a higher rate of transfer of credit levels. A comparison of the recognition systems (i.e. articulation, credit transfer and recognition of prior learning arrangements) applying in multi-sectoral institutions with those applying in single sector institutions would establish the extent to which recognition systems established in the multi-sectoral institutions could be transferred to or adapted for arrangements between standalone, single sector institutions.

Each of the three multi-sectoral institutions included in the survey had been actively involved in the TAFE Pathways development in Victoria since 1973. It is also interesting to note that in the multi-sectoral institutions, students were more likely to consider that they could have received *more* credit or exemptions than they did, if they had wanted to (15 per cent agreed with a statement along these lines), compared to only 9 per cent of the students in the single sector institutions. Similarly 21 per cent of multi-sectoral transferees considered they had unnecessarily repeated many of their previous studies on transfer, compared to 6 per cent of those in single sector institutions.

It may be that 'pathways' promotion leads not only to more credit being awarded, but also heightens expectation that studies should not be unnecessarily repeated. This again indicates that credit transfer has become more strongly normalised in the multi-sectoral institutions. However, it is important to note that not all inter-sectoral transfer was from within, or between, multi-sectoral institutions. Less than half (47 per cent) of all student transferees from multi-sectoral institutions had previously completed a course in one of the three multi-sectoral institutions, and 63 per cent had commenced but not completed a course in a multi-sectoral institution.

As part of the survey of staff in each sector, respondents were asked whether students entering the sector received course credits for 'previously acquired general skills', and also for 'general skills acquired *at work*'. Thirty-nine per cent of the vocational education and training staff and 41 per cent of the university staff stated that students received course credits for previously acquired general skills; while 38 per cent of the vocational education and training staff—but only 5 per cent of the university staff—stated credits were provided for the skills acquired at work. While there was strong support for the notion of testing general skills at the point of entry into courses for diagnostic purposes, few respondents indicated that students were being tested at an early stage (Table 13). As one academic respondent to the survey of staff put it:

An ideal system would build on the diagnostic evidence obtained as part of the selection process and target assistance at individuals with identified needs.

(University professor, education, male, 56 years).

Table 13: Testing of General Skills Early during Courses: Attitudes of Vocational Education and Training and University Staff

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean*
Students should be tested for general skills on entry into courses, for diagnostic purposes	VET	53	23	24	3.4
	Uni	65	10	25	3.4
In my institution, the general skills of all students are assessed early in their courses, in order to identify learning needs	VET	23	19	58	2.5
	Uni	25	10	65	2.4

* maximum agreement = 5.0

On the other hand, resource constraints mean that diagnostic information is not always followed up in the learning program, and at worst the commitment to general skill development becomes largely rhetorical. One of the TAFE respondents to the project survey of staff noted that:

The demands of timetables etc. do not always allow anything practical to be done for those who lack skills.

(Curriculum officer, TAFE, science, female, 40 years).

One of the vocational education and training respondents to the survey of staff emphasised that recognition of prior learning assessment should be based not only in the past experience of the student, but in the requirements of the course. Recognition of prior learning assessment should enable the two to be brought together. To ensure the accuracy of this assessment and to enable students themselves to assess their learning requirements, he suggested that:

Students should claim RPL *after* they have commenced a subject. Quite often RPL students express anxiety that they may be missing out on something other students are perceived to be getting.

(Manager, Open Learning, TAFE, social sciences, male, 46 years).

As noted by Guthrie (National Board of Employment, Education and Training 1994a, pp. 35–46), a major obstacle to the extension of recognition of prior learning arrangements in higher education is the cost of assessments and the fact that costs cannot be levied on the individual because of the prevailing Commonwealth interpretation of the prohibition on fee charging.

Credit can be a two edged sword for universities. As long as higher education institutions are funded on load there is an incentive in some institutions, especially given the downturn in school leaver demand, to encourage ex-TAFE students to enter higher education; *but* a disincentive to grant credit as that reduces the fundable load. (In some instances granting credit may also reduce an individual student's load to the point that AUSTUDY entitlements are threatened.) These considerations suggest that if institutions were funded for student completion rather than student load—perhaps in advance, as in provisional taxation—then institutions would have an incentive to provide both entry *and* credit to TAFE and workforce based applicants.

Cost considerations are also a factor in TAFE. In TAFE fees are charged rather than the HECS as for undergraduates in higher education, and there is no legal obstacle preventing the settling of the costs of recognition of prior learning assessment on the student. But it can be cheaper and less time consuming for the TAFE student to enrol in all subject/modules, not apply for recognition of prior learning (or credit transfer or exemption), and negotiate with the teacher to exempt them from part of a module. The cheaper option also suits many TAFE departments and teachers, as enrolment ensures numbers. Negotiated in class recognition is probably common in both sectors, but there is no simple method of measuring its incidence.

Possible Changes to These Arrangements

As part of this study staff in both sectors were asked whether they would support the provision of advanced standing for generic skills already acquired, in the case of students moving between the sectors. More than two-thirds of the vocational education and training staff agreed that students moving from TAFE to higher education should be granted advanced standing while higher education staff were evenly split on the matter. In the case of students moving from higher education to TAFE, vocational education and training staff were even more strongly supportive of advanced standing, while a narrow majority of higher education staff were in favour. On the important question of whether it was practical to separate out general skills for the purpose of credit transfer arrangements, TAFE staff tended to agree that it was, while university staff were, on balance, of the opposite opinion (see Table 14).

Table 14: *The Use of Generic Skills in Credit Transfer: Attitudes of Vocational Education and Training and University Staff*

Statement	Staff From	Agree %	Neutral %	Disagree %	Mean*
All students transferring from TAFE to higher education should be provided with advanced standing for the skills they have acquired	VET	69	21	10	3.9
	Uni	38	20	38	2.8
All students transferring from higher education to TAFE should be provided with advanced standing for the skills they have acquired	VET	72	20	8	3.9
	Uni	40	25	35	3.1
Recognition of general skills for credit purposes (whether skills acquired in education, work or elsewhere) should be a case by case matter	VET	77	12	12	4.0
	Uni	45	30	25	3.4
It is not practical to separate out general skills for the purposes of credit transfer	VET	34	19	47	2.8
	Uni	44	33	22	3.5

* maximum agreement = 5.0

McCurry (1995i) finds that 'it is doubtful whether a feasible or cost effective system of standardised assessment tasks for assessing key competencies could be developed to produce data that can be used for hard edged comparisons within and across systems'. Because the acquisition and use of all generic skills contains some elements of context specificity, including knowledge specificity, the consultants conclude that *specifically in relation to generic skills* it is probably not practical to run a universal credit banking arrangement. If sound judgements are to be made, it is hard to see how case by case assessment of generic skills can be avoided. On these points, the United Kingdom and Swedish systems of knowledge recognition may be worth closer investigation.

Nevertheless, universities, in particular, could do more to develop and activate recognition of prior learning systems. Further, in all tertiary institutions, assessment of generic skills at the commencement of a course could be used to identify students who might be provided with partial remission of course requirements; for example, because advanced generic skills enable them to acquire, express and synthesise information relatively rapidly. Correspondingly, assessments at the beginning of a course enable certain skill weaknesses to be identified in advance. Here it should be the generic skills of the *new* context that are assessed, not those applying in the student's previous education or work.

Recognition of prior learning is intrinsically difficult and requires proper training of staff. A full assessment is time consuming and thus relatively costly. The processes of recognition of prior learning are often not 'user friendly'. Recognition of prior learning is also resisted by some professional educators, not only because it is potentially subversive of time and qualification based approaches to the attribution of skills, but because of its potential to deconstruct the actual learning program. This indicates that recognition of prior learning is not a universal panacea and the right balances must be found. One suggestion is that the assessment of the development and evaluation of recognition of prior learning mechanisms by institutions could be introduced as part of the Commonwealth program of quality assurance to assist in achieving this balance.

One of the TAFE respondents to the survey of staff stated that:

RPL is time consuming. The balance between benefit to the student, the maintenance of course integrity and the costs is a fine one ... Part of doing a course is the induction into a discipline, acculturation, which RPL ignores.

(Manager of directorate services, humanities, female, 46 years).

Nevertheless, the growing role of recurrent education and the volume of student movement across sectors and courses, outside the conventional vertical systems of articulation, suggests more rather than less potential for the use of recognition of prior learning. Further, falling school leaver demand is likely to encourage some universities to compete with others on the basis of recognition of prior learning offerings. This provides a more favourable climate for change.

Private Providers

As noted, the present study was unable to adequately encompass private providers in the time available, although some data were collected from the private training sector. However, the concerns of this project, *viz* inter-sectoral movement, generic skills and articulation and credit transfer, are equally relevant to private providers, and the importance of the private training sector is growing (Anderson 1994). Accordingly, it is proposed that a separate study be undertaken of multi-sectoral student movement in and out of private training, including workplace based education, and of credit transfer arrangements and recognition of prior learning in that sector, incorporating consideration of the private training sector's role in forming generic work related skills.

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White, Leanne 1987, Articulation in post secondary education, mimeo, Western Institute, Melbourne.

Wilson, John Dewar & Lilly, Megan 1995, Assessment for the recognition of prior learning, unpublished paper, Office of Training and Further Education Conference, Melbourne, 12–13 October.

Survey Questionnaires Used in the Project

Two surveys were conducted specifically for the project; one of students who had moved between the post-school sectors; the other of post-school staff. Each of these surveys fell into two groups, depending on sectoral location of the respondents, and the resulting contrasts between sectoral groups provided much of the empirical material that was used in the project because of its primary emphasis on inter-sectoral relations. (Breakdowns by field of study constitute another important source of contrasts. Among the students, age also emerged as an important explanatory variable of differences in attitude).

Closely similar questionnaires were sent to each group of students. The first questionnaire (included here) was sent to former higher education students enrolled in TAFE in 1995. The second questionnaire, which is not included, was sent to former TAFE students enrolled in higher education in 1995. Some details of the results are provided in Appendix 2, and in the main report.

Again, closely similar questionnaires were sent to each group of staff. The first questionnaire (included here) was sent to staff who in 1995 worked in TAFE or in a small group of private training institutions. The second questionnaire, not included, was sent to staff who worked in universities (mostly in generalist faculties) or were spokespersons for a group of professional societies in 1995. Some details of the results are provided in Appendix 3, and in the main report.

Questionnaire to Persons who Commenced TAFE Study in 1995 with Previous University Experience

Please complete the following questionnaire and return it in the reply paid envelope before 20 November. Individual confidentiality will be strictly observed. The phone number requested at the end of the questionnaire for a possible follow-up interview is entirely voluntary.

1 Did you commence a TAFE course in 1995?

Tick one YES NO

2 Have you previously enrolled in a university course prior to 1995?

Tick one YES NO

If you ticked YES to both question 1 and 2, continue at Question 3.

If you ticked NO to either question, please do not answer any further questions, but please return the questionnaire in the reply paid envelope. Thank you.

3 Please list the TAFE course(s) you are (or were) enrolled in during 1995.

If you were enrolled at both University and TAFE, during 1995, please give details of both courses.

Your 1995 Course(s)

Your 1995 Courses	Level <i>(e.g. Degree; Certificate; Assoc. Dip.)</i>	Name of Course <i>(e.g. Engineering; Law; Business–Accounting; Architectural Drafting;)</i>	Institution <i>(e.g. Monash University; Holmesglen TAFE)</i>
Studied at University			
Studied at TAFE			

4 The field of study of my 1995 TAFE course is...

(circle one which most applies)

- identical
 very similar
 somewhat similar
 vaguely similar
 completely different

... to the field of study of my most recent university course.

5 Please list all post-secondary courses (including TAFE, university and former College of Advanced Education–CAE courses) successfully completed prior to commencing your studies at TAFE in 1995

All Completed Courses

Course level <i>(e.g. Degree, Certificate)</i>	Course name <i>(e.g. Business–Accounting, Engineering)</i>	Institution <i>(e.g. Monash Uni, Holmesglen TAFE)</i>	Year commenced <i>(e.g. 1988)</i>	Year completed <i>(e.g. 1991)</i>

6 Please list all post-secondary courses (including TAFE, university and College of Advanced Education) attempted but not completed prior to commencing your studies at TAFE in 1995.

All Attempted but not Completed Courses

Course level <i>(e.g. Degree, Certificate)</i>	Course name <i>(e.g. Business–Accounting, Engineering)</i>	Institution <i>(e.g. Monash Uni, Holmesglen TAFE)</i>	Year commenced <i>(e.g. 1988)</i>	Year completed <i>(e.g. 1991)</i>

7 Please circle your response to each of the following statements below as they relate to your 1995 TAFE course

(1= definitely disagree, 2= disagree, 3= neutral or undecided, 4= agree, 5= definitely agree, and 6= does not apply)

Statement	Response			
	<i>Definitely Disagree</i>	<i>Neutral</i>	<i>Definitely Agree</i>	<i>Does Not Apply</i>
a I am studying at TAFE in 1995 to gain vocationally specific training	1	2 3 4	5	6
b My 1995 TAFE study has nothing to do with current or intended paid work	1	2 3 4	5	6
c I am basically studying at TAFE in 1995 to retrain.	1	2 3 4	5	6
d I was attracted to the 1995 TAFE course by the availability of credit transfer.	1	2 3 4	5	6
e I am studying at TAFE in 1995 more for the qualification than for the skills.	1	2 3 4	5	6
f I chose to do further study in the 1995 TAFE course to change vocational direction.	1	2 3 4	5	6
g My previous university study has not given me enough specific vocational skills.	1	2 3 4	5	6
h I started my first university course with the intention of eventually coming to TAFE.	1	2 3 4	5	6
i My first university course was not vocationally useful.	1	2 3 4	5	6
j My first university course was studied purely out of interest	1	2 3 4	5	6
k I am studying at TAFE in 1995 more for the skills than for the qualification	1	2 3 4	5	6

Statement	Response			
	<i>Definitely Disagree</i>	<i>Neutral</i>	<i>Definitely Agree</i>	<i>Does Not Apply</i>
l I was attracted to the 1995 TAFE course by the low cost of the course.	1	2 3 4	5	6
m I was attracted to 1995 TAFE course by the short nature of the course.	1	2 3 4	5	6
n Most of my previous study at University has been too general.	1	2 3 4	5	6
o Most of the general skills I have learnt at university have been very useful at TAFE (for a definition of general skills, see question 11).	1	2 3 4	5	6
p Most of my general skills have come from previous university studies.	1	2 3 4	5	6
q I decided to add a further set of TAFE vocational skills in 1995 to those I already have.	1	2 3 4	5	6
r I have chosen my study at TAFE in 1995 in order to keep my vocational options open.	1	2 3 4	5	6
s The location of this institution makes it more convenient for me to attend than any other.	1	2 3 4	5	6
t Most of my general skills I have learned at work.	1	2 3 4	5	6

8 Did you receive any credit or exemption towards your 1995 TAFE course on the basis of previous formal study at university?

Tick one YES NO

If you ticked YES, please give details in the table below; if NO, go to Question 9.

Credit Awarded in your 1995 Course on Basis of Previous Studies

Level <u>and</u> name of previous course for which you received credit	
Institution in which you studied the previous course	
Credit awarded on the basis of previous university studies, as a percentage of your total TAFE course%

- 9 Did you receive any **recognition of prior informal learning (RPL)** in your 1995 TAFE course on the basis of previous work or life experience?

Tick one YES NO

If you ticked YES to Question 9, please give details below on the source of the RPL; if NO, go to Question 10.

.....

- 10 Please tick any or all of the following statements which **definitely apply** to you:

a	I received some credit transfer towards my current TAFE course on the basis of a previous university course.	
b	I could have received more credit transfer or exemptions in my 1995 TAFE course if I had wanted to.	
c	I have unnecessarily repeated many of my previous studies at university in my 1995 TAFE course.	
d	I have been retrenched or made redundant in a previous job at some time since 1990.	
e	I have ceased a full-time job with a local, state or Commonwealth government department at some time since 1990.	
f	I have been unemployed and seeking work at some time in the past 12 months.	
g	My first university course wasn't the one I most wanted to get into when I left school.	
h	I studied a general course at university because I was uncertain about what I wanted to do afterwards.	
i	I have received Recognition of Prior Learning (RPL) in my 1995 TAFE course on the basis of previous study in the workplace.	
j	Most of my general skills I have learnt at work rather than from formal study.	
k	I fully intend to eventually complete the course I commenced in 1995.	
l	I have changed my mind about my chosen study / work path since I was last enrolled at university.	

- 11 This question concerns your general skills and where you acquired these skills.

By ticking in the appropriate squares below, please indicate which setting(s) contributed most to your development of each of the following general skills.

NB If more than one setting was roughly equal in its contribution, you may tick more than one square.

General Skills	School	TAFE	Uni.	Work	Home/ Other
Collecting, analysing and organising ideas and information					
Expressing ideas and information					
Planning and organising activities					
Working with others and in teams					
Using mathematical ideas and techniques					
Solving problems					
Using technology					
Cultural understanding, including civics					
Learning and teaching on demand ('lifelong learning')					
Understanding and designing systems					
Reflecting and imagining					
Learning from experience (e.g. mature personal judgement)					

- 12 Your age

- 13 Are you (*Tick one*) MALE FEMALE

- 14 If not born in Australia, please specify your country of birth

.....

- 15 What is your most recent main profession or vocation, if any?

Please specify

16 If your first, main profession or vocation was different to that in Question 15 above, what was it?

If different, please specify

17 What was your most recent full-time work, if any?

Please specify

18 Which profession or vocation, if any, will your 1995 TAFE course qualify or skill you for when completed?

Please specify

19 I *am/am not* prepared to volunteer to take part in a possible telephone interview as a follow-up to this questionnaire.

(Please delete the words which do not apply.)

20 In your own words, what are the main reasons and/or advantages to you of studying at TAFE in 1995?

.....
.....
.....

21 Please add any other comments about anything in the questionnaire and/or your experiences of transfer from university to TAFE study.

.....
.....
.....

*If you **have not** volunteered for a possible interview in Question 19, thank you for taking the time to complete the questionnaire.*

*If you **have** volunteered for a possible interview (at a time that is convenient to you as a follow-up to your responses to the questionnaire above), please add your name and contact phone number(s) below, with the appropriate area code if outside of Melbourne.*

Thank you for your cooperation.

Your Name:

Contact Phone Number(s):(work).....(home)

**PLEASE RETURN THE QUESTIONNAIRE BY 20 NOVEMBER.
THANK YOU FOR YOUR COOPERATION.**

Survey on General Skills, Credit Transfer and Recognition of Prior Learning

This survey has been sent to a group of teachers, curriculum managers and policy advisors in TAFE and private training, as part of a National Board of Employment, Education and Training (NBEET) policy related study on the two-way movement of students, and the portability of credits and prior learning, between TAFE and higher education. The project is focused on general skills, and the comparability and transfer of these skills between learning sites.

Your answers are anonymous: you cannot and will not be identified in the project report. *Most questions merely require you to tick a box or circle a number, but in some cases you will be asked to provide information or comment in more detail, in the space provided. You are welcome to comment further by attaching additional sheet(s) of paper with your answers.* (Note that people working in private training should read 'TAFE' as vocational education and training, e.g. in 1.3 below).

Final data gathering for the study is now taking place. *The prompt return of your questionnaire by Friday 24 November 1995 in the enclosed envelope will be of great assistance.*

1. Characteristics of survey respondent

1.1 Age in years

1.2 Sex (female/male)

1.3 Present position (e.g. TAFE teacher, curriculum maintenance manager)

1.4 Field of study specialisations, if applicable (e.g. engineering)

1.5 Post-school qualifications (include *all* qualifications, in order of receipt)

1.6 Previous work experience in post-school education (*please provide a summary of your professional work in higher education, TAFE and training, in order, e.g. 3 years maths teaching in TAFE, 2 years art lecturing at a CAE, 5 years managing a training centre*)

1.7 Years of work *outside* education e.g. in business/industry

2. Development and transfer of general skills

- 2.1 This question focuses on the development of *work related* general skills. Please indicate which setting(s), in your view, make a *major* contribution to the formation of each of the work related general skills listed, by ticking the squares concerned. You may tick more than one square for each skill.

General Skills	School	TAFE	Uni	Work	Home/ Other
Collecting, analysing and organising ideas and information					
Expressing ideas and information					
Planning and organising activities					
Working with others and in teams					
Using mathematical ideas and techniques					
Solving problems					
Using technology					
Cultural understanding, including civics					
Learning and teaching on demand ('lifelong learning')					
Understanding and designing systems					
Reflecting and imagining					
Learning from experience (e.g. mature personal judgement)					

- 2.2 This question asks about the *transfer* of these general skills between education and work, and between TAFE and higher education. ('Transfer' means transfer of the actual skills, not just formal recognition). Please circle your preferred response to each statement
(1 = definitely disagree, 2 = disagree, 3 = neutral or undecided, 4 = agree, 5 = definitely agree)

Statement	Response					
	<i>Definitely Disagree</i>	<i>Neutral</i>			<i>Definitely Agree</i>	<i>Does Not Apply</i>
a Communications skills required in TAFE are like those used at work.	1	2	3	4	5	6
b Communications skills required in higher education are like those used at work	1	2	3	4	5	6
c Working in teams is something that must be re-learned in each new site.	1	2	3	4	5	6
d Solving problems is fundamentally the same anywhere in work or education	1	2	3	4	5	6
e There is no such thing as a 'general' skill—all skills are specific to their different contexts.	1	2	3	4	5	6
f General skills acquired in TAFE are readily transferred to higher education.	1	2	3	4	5	6
g General skills acquired in one TAFE course are readily transferred to another TAFE course.	1	2	3	4	5	6
h General skills acquired in higher education are readily transferred to TAFE.	1	2	3	4	5	6
i TAFE programs focus effectively on the development of general skills.	1	2	3	4	5	6
j Higher education programs focus effectively on the development of general skills.	1	2	3	4	5	6

2.3 Tick the alternative or alternatives that you prefer.

General skills are best developed in TAFE courses through:

Special skills training by people other than teaching staff

'Add on' classes within the educational program, e.g. communications in engineering courses

Integration into the main program but separate assessment.

Integration into the main program and *no* separate assessment.

Other (*please specify below*):

2.4 How could the transfer of general skills *between education institutions* and *between education sectors* be improved?

.....
.....
.....

2.5 How could the transfer of general skills *between education and work* be improved?

.....
.....
.....

2.6 Is there any other comment you would like to make, concerning the formation and transfer of general skills?

.....
.....
.....

3. Credit Transfer, Recognition of Prior Learning and General Skills

3.1 The next section concerns the *recognition* given to general skills in formal systems of articulation, credit transfer and recognition of prior learning (RPL). Please circle your preferred response to each statement.

(1 = *definitely disagree*, 2 = *disagree*, 3 = *neutral or undecided*, 4 = *agree*, 5 = *definitely agree*)

Statement	Response			
	<i>Definitely Disagree</i>	<i>Neutral</i>	<i>Definitely Agree</i>	<i>Does Not Apply</i>
a In my institution, the general skills of all students are assessed early in their courses, in order to identify learning needs.	1	2 3 4	5	6
b In my institution, all students transferring from higher education receive course credits for their previously acquired general skills.	1	2 3 4	5	6
c In my institution, all students receive course credits for general skills acquired <i>at work</i> .	1	2 3 4	5	6
d All students transferring from TAFE to higher education should be provided with advanced standing for general skills they have acquired.	1	2 3 4	5	6
e All students transferring from higher education to TAFE should be provided with advanced standing for general skills they have acquired.	1	2 3 4	5	6
f Students who have completed generalist courses (e.g. humanities, science) should receive course credits, but not students who have completed occupationally specific courses.	1	2 3 4	5	6
g It is not practical to separate out general skills for the purposes of credit transfer.	1	2 3 4	5	6
h Recognition of general skills for credit purposes (whether skills acquired in education, work or elsewhere) should be a case by case matter.	1	2 3 4	5	6
i Students should be tested for general skills on entry into courses, for diagnostic purposes.	1	2 3 4	5	6

- 3.2 Do you have any further comment on the recognition of general skills at the point of entry into post-school courses?

.....

.....

.....

- 3.3 Do you have any comment on the recognition of prior learning at the point of entry into post-school courses?

.....

.....

.....

4. Generalist Courses and Occupationally Specific Courses

- 4.1 This part of the questionnaire concerns generalist courses (e.g. humanities, science etc.) and their relationship to occupationally specific courses. Please circle your preferred response to each statement

(1 = definitely disagree, 2 = disagree, 3 = neutral or undecided, 4 = agree, 5 = definitely agree)

Statement	Response				
	<i>Definitely Disagree</i>	<i>Neutral</i>	<i>Definitely Agree</i>	<i>Does Not Apply</i>	
a All post-school courses, whether generalist or occupationally specific, should provide students with preparation for work.	1	2 3 4	5	6	
b Generalist courses are a luxury that we cannot afford.	1	2 3 4	5	6	
c Generalist courses serve a number of desirable vocational and non-vocational functions.	1	2 3 4	5	6	
d Generalist courses help students to 'work out who they are' and increase their confidence.	1	2 3 4	5	6	
e Generalist courses help students to become more responsive, flexible and adaptable in future.	1	2 3 4	5	6	

Statement	Response					
	<i>Definitely Disagree</i>	<i>Neutral</i>			<i>Definitely Agree</i>	<i>Does Not Apply</i>
f The attributes formed in generalist courses help students to transfer their occupationally specific skills from education to work.	1	2	3	4	5	6
g Generalist courses are more effective than occupationally specific courses in preparing students in general skills.	1	2	3	4	5	6
h Generalist courses are more effective than occupationally specific courses in preparing students in <i>work related</i> general skills.	1	2	3	4	5	6
i The combination of a generalist course and an occupationally specific course provides a strong form of preparation for work.	1	2	3	4	5	6
j Employers place higher value on a combination of generalist and occupationally specific courses, than on either course taken on its own.	1	2	3	4	5	6
k The combination of a generalist course and an occupationally specific course provides a strong form of preparation for life as a whole.	1	2	3	4	5	6
l For people who are marginal to work/education, it is more important to learn general skills than occupationally specific skills.	1	2	3	4	5	6

Two-way Movement of Students between University and TAFE

Barry Golding

Aim

This appendix reports on the results of research during the consultancy which focussed on the experience of commencing students involved in movement between tertiary sectors in selected pairs of Victorian university and TAFE institutions in 1995. Given the necessary brevity of the overall study, a research methodology was employed which attempted to combine the aim relating to generic skill with the aim relating to credit transfer and recognition of prior learning as it applies to students moving between TAFE and university in both directions.

Focus and Terminology Used

The research focused on:

- two-way movement of persons between the TAFE and university sectors (*inter-sectoral transfer*);
- student experience and perceptions of the connectedness of sectors in a comprehensive education system (*articulation*);
- the granting of recognition for prior formal learning as well as prior informal learning (RPL); and
- the transfer of generic skills between sectors.

In some places university to TAFE movement is abbreviated as *UT* and TAFE to university movement is abbreviated as *TU*. The main form of recognition under analysis in the current study was granting of advanced standing in a course (*credit transfer*). Other forms of recognition include eligibility to apply or to be admitted to a course. The general term *movement* is used throughout the main report and Appendix as a noun to refer to persons with experience in one sector commencing study in another sector.

The term is used in preference to more specific terms the term movement is seen to subsume, such as articulation (which implies transfer within a designed context) and transfer (which may have implications of immediacy

and/or intent on the part on the person transferring). Much movement of persons with previous tertiary backgrounds (sometimes described as transferees for want of a better term) is neither pre-planned, immediate nor is it necessarily on known articulation routes. Where the term *transfer* is used it relates specifically to the credit transfer or to the transfer of skills.

Context

Golding (1995b) used aggregated commencing data from university and TAFE from selected states to suggest that the level of intra-sectoral movement is likely to be higher than either form of intra-sectoral movement. Of the tertiary inter-sectoral movement, university to TAFE movement fluctuated in the period 1990 to 1994 but has consistently been several times larger in numbers moving than conventionally recognised TAFE to university movement. The numbers moving appeared to be elevated by increasing educational retention, retraining of older workers and levels of graduate unemployment. Golding (1995f) directly compared movement between TAFE and university in both directions in Victoria. Movement of students into TAFE with previous higher education backgrounds has been studied in Queensland by Millican (1995).

Aggregated data are now available on a number of aspects of such movement for all Australian states (National Training Consultative Committee 1995). Such data, although incomplete and subject to different definitions between states, indicate common trends to 1994. It was therefore decided to limit the current detailed study to two-way movement in Victoria in 1995. The paucity of reliable or comparable aggregated data on multiple education backgrounds of students from either the TAFE or higher education sectors led to the decision to collect detailed data from commencing transferees by questionnaire, focusing on prior tertiary study, credit awarded, vocational profile and motivation of transferees, for students moving in both directions. The method enables a direct and unique comparison of similarities and differences of movement in both directions.

Golding (1995f) summarised survey data from a total of approximately 1800 persons involved in movement in both directions between university and TAFE in Victoria in 1994. The data were derived from enrolment information supplied about prior tertiary study backgrounds by commencing students in 1994 at four representative university and TAFE sectoral pairs in Victoria (response rate 50 per cent). The sample included both sectors of one multi-sectoral institution (Royal Melbourne Institute of Technology), three universities (Monash University, University of Ballarat and La Trobe University, Bendigo) and three colleges of TAFE (Holmesglen College of TAFE, School of Mines and Industries—Ballarat and Sunraysia College of TAFE).

Data extracted from that study show that one in five (175) of the 823 persons moving from university to TAFE had first completed a generalist university degree in arts and science, 71 per cent of whom were female. Over half of this group agreed that a generalist degree was insufficient to get a job and saw themselves as changing vocational direction; 37 per cent strongly agreed. Another 17 per cent in the same study (142 persons) had an incomplete generalist (arts or science) degree as their first incomplete tertiary course, 61 per cent of whom were female and half of whom were aged less than 24. Forty per cent discontinued their course because they considered it not practical enough, and 37 per cent because they did not consider it vocationally useful. A brief consideration of the disproportionate number of females with generalist backgrounds involved in inter-sectoral movement from university to TAFE is included in the current study.

Methodology

Sample and Data Sources

The initial sample design involved selecting 800 persons commencing study in one sector (TAFE or university) in 1995 with experience of prior study in the opposite sector (university or TAFE). In the case of university commencers, sample selection criteria for current and prior TAFE study was restricted to persons with current or prior TAFE experience at certificate level or above. Eighty persons fitting these criteria were randomly selected by institutions from 1995 commencers in both TAFE and university sectors of the three multi-sectoral institutions, as well as from the large city university and large city TAFE. Forty persons were randomly selected from the two regional universities and from the two regional Colleges of TAFE, although one regional university was able to identify only 14 commencers who fitted the selection criteria. The effective sample for the 1995 questionnaire (also taking account of those returned to sender) was 746 persons. All were involved in inter-sectoral movement in either direction in 1995. Institutions selected for study in 1995 included those in the 1994 study outlined above, plus two other multi-sectoral institutions: Swinburne University of Technology and Victoria University.

Target Groups and Response Rates for the Inter-sectoral Survey

In order to preserve confidentiality and satisfy research ethics, the sample selection, mailing of the questionnaire and of reminder letters to non-respondents was undertaken by the universities and TAFE Colleges. The criteria for sample selection (commencing a course at or above certificate

level in one sector in 1995 **and** previously enrolled in a course above certificate level in an opposite sector prior to 1995) are difficult to accurately select. Accurate targeting depends not only on accurate extraction and accurate institutional records but also on accuracy of data supplied at the time of enrolment. The information on previous study on which the selection is based is routinely collected from students at the time of enrolment, and is, therefore, subject to a range of possible errors by students and administrators.

It was apparent that some sectors and some institutions produced a more targeted sample. Responses from non-targeted individuals ranged from 7 per cent in the case of the university sector of one multi-sectoral institution (2 out of 27 non-targeted responses) to 52 per cent (13 out of 25 non-targeted responses) for the TAFE sector of the same institution. Attempts to create 'seamless systems' in such institutions was likely to make sectoral distinctions more difficult and problematic for students and administrators as well as for inter-sectoral research. The 50 per cent response to the 1994 survey (Golding 1995f) and the initial response of 38 per cent in the current survey are not ideal, but are in part outcomes of the difficulties described. It is also likely that the low response rates are related to questionnaire fatigue from a six page questionnaire at exam/assessment time.

It is clear that some students, particularly those in TAFE sectors of multi-sectoral universities (which comprised 64 per cent of the effective sample), were confused by the sectoral status not only of their current course, but also of their previous course. That is they were sometimes confused as to whether they were studying in a TAFE or university, particularly since two of the TAFE sectors of the multi-sectoral institutions have titles which include 'University'. This confusion is exacerbated by prior enrolment of some respondents in previous Colleges of Advanced Education (CAE), TAFE accredited courses in private providers, TAFE Tertiary Orientation Programs (TOP) and education or training outside of these sectors. Given the current focus on tertiary inter-sectoral movement, only respondents with experience of TAFE, university or overseas equivalent courses are included or considered (apart from prior CAE experience, which is treated as university).

Students with recent enrolments in courses in different sectors and/or those students with multiple backgrounds were sometimes unsure as to which course, sector or institution had been targeted. The letters with the questionnaires gave no clue since they did not identify which institution mailed them. Twenty-three per cent of respondents (66 persons) proved to be outside the target cohort: two per cent (6 persons) considered that they did not fit either criteria, seven per cent (20 persons) considered they were not studying in 1995 in either of the target groups and ten per cent

considered they did not fully meet all the selection criteria. Another five per cent (13 persons) were excluded from the study, as the information they provided on the completed questionnaire did not fully meet the selection criteria. A further four per cent of initial returns (11 questionnaires) arrived too late to include in the statistical analysis.

The Effective Questionnaire Sample and Data Available

The analysis below includes only those timely questionnaire responses for respondents who fully fitted all the selection criteria; that is those whose previous or current TAFE study was at or above certificate level and who commenced a course in 1995 in one sector with prior enrolment in a previous course in another sector. Findings outlined below are restricted to data derived from 281 initial returns (initial response rate 38 per cent), backed up by data from 50 structured, follow-up, phone interviews.

The current survey was designed to closely explore vocational and skills backgrounds as well as motivations of groups of transferees identified in the more extensive 1994 study, but focussed particularly on aspects related to generic skills recognition and transfer. The survey was completed within a three month period and is necessarily limited in its scope, sample size and analysis. The questionnaire was mailed in October/November 1995 to home addresses during a busy end of year assessment period and at a time when many students change address; 28 responses (4 per cent of those posted) were returned to sender. Analysis of student responses is therefore restricted to valid and timely questionnaire responses received from 176 persons: 79 persons (45 per cent) moving from university to TAFE and 97 (55 per cent) persons moving from TAFE to university. Ninety-three (53 per cent of) respondents were enrolled in multi-sectoral institutions in 1995, and 83 (47 per cent) were enrolled in single sector institutions.

Research by Golding (1995f) on two-way movement prior to the current project had been based exclusively on quantitative analysis of 1994 questionnaire responses and of aggregated commencing data supplied by the Office of Training and Further Education in Victoria for the period 1990 to 1994. Structured phone interviews were undertaken in the current study with a stratified sample of respondents in predetermined groups who volunteered to be interviewed and who supplied a phone contact number. Analysis of returns from the 1994 study for the current study identified five groups of transferees who shared somewhat similar motivations and backgrounds, regardless of direction of movement. The number and proportion of each group represented and interviewed in the current study are outlined in Table 1. Forty per cent of all respondents volunteered for interview. Those actually interviewed represented 28 per cent of all respondents.

Table 1: Groups Represented in the Current Study by Direction of Movement

Group number	Group characteristic	Proportion of students with this group characteristic		Number of telephone interviews
		<i>Uni to TAFE (UT)</i>	<i>TAFE to uni (TU)</i>	
1	One complete tertiary award; no other prior tertiary study	15%	39%	18
2	One incomplete tertiary enrolment; no other prior tertiary study	22%	8%	6
3	Multiple prior tertiary experience, with credit	5%	21%	6
4	Multiple prior tertiary experience, without credit	46%	27%	14
5	1995 enrolment in more than one tertiary course	12%	5%	6

Research Instruments

(1) Questionnaire

The primary research instrument for both the 1994 and current study was a mailed questionnaire with common and mirrored questions for commencers with prior tertiary study backgrounds in TAFE and university. A copy of the 1995 university to TAFE questionnaire is included at Appendix 1. The questionnaire sought information from students on prior tertiary study records, perceptions on movement, motivations for movement and credit transfer outcomes, prior work roles, perceptions about the origins of skills in different settings as well as attitudes to vocational and general education and training.

(2) Interviews

The voluntary, follow-up phone interviews used a structured approach based on categorisation of volunteer respondents into the groups identified in Table 1. Questions were designed and structured for each group to elicit the experiences of persons in each group and to determine common themes, if any, in terms of motivation to cross sectors and experience on crossing.

All interviews commenced with an open, introductory question about positive and negative perceptions of previous and current tertiary study in both sectors. This was followed by a series of group-specific questions designed to examine themes for individuals in each group, which focussed on perceptions of generic skills development. Most interviews also allowed time for interviewees to raise items for discussion on other themes raised in the questionnaire and during the interviews. All interviews were written up as they were conducted.

Results

Multiple Backgrounds

Twelve per cent of 1995 TAFE students surveyed had also been enrolled in a university course in 1995. Six per cent of university students surveyed had also been enrolled in TAFE at some time in the same year. Those enrolled at both university and TAFE in the same year did so for a range of reasons, not necessarily simultaneously nor in a manner related to complementary skill development.

The examples below are indicative of the range of situations which produced real and apparent simultaneous enrolment. 'I couldn't get Austudy after dropping out and was advised to go on the dole and study part-time. I did it to finish the year off and to keep me studying' (246). After having discontinued two different vocational degrees at two different universities, most recently in 1995, the female student was now enrolled in an Advanced Certificate in Horticulture, and had turned her back on university. 'I find TAFE more flexible. I would now go straight to TAFE. Not much is advertised about it. They push you to go on to uni' (246).

A second female student had recently discontinued an Associate Diploma of Public Relations, commenced because 'It provided niche vocational subjects in TAFE' (184), but was now doing a Graduate Diploma in arts-communication course because 'If I want a job I need a degree'. The same student had found that 'The level they teach at in TAFE was appropriate for kids straight out of school or new to a field, but they don't cater for adults' (184).

A third female student with concurrent enrolment in a Bachelor of Business and a TAFE Computing Certificate noted that 'I didn't realise that the *type* of study (at university) would be based more on the *understanding* of each learning area. At TAFE it's more of a 'memorising' system of learning' (729).

A fourth female student concurrently enrolled in an Advanced Certificate in Information Technology and who was recommencing a Bachelor of Applied Science–Mathematics course explained that ‘I found myself eager to get back into full-time study at university and enjoyed the TAFE course so much that I am continuing it part-time at nights while going to RMIT full-time during the day’ (633).

Another student was ‘doing a (Horticulture) course at TAFE purely as a hobby to assist my leisure interest in gardening’ (389). Others recognised that the advantage of studying two courses in combination (an Associate Diploma in Physics and a Bachelor of Applied Science–Medical Radiations would be ‘more beneficial on a resume: it indicates a range of educational backgrounds’ (632). In another instance, a student in danger of not completing a degree in Business was studying parts of an Associate Diploma in Business–Accounting which meshed with completed degree subjects and which would allow him to operate as a tax consultant if he failed the degree. In summary, some multiple enrolments are truly concurrent; others are only apparently so. The course in one sector appears to either be a replacement for, as a backstop or complementary to a course in the other sector.

Levels and Fields of Study

Table 2 summarises the level of award and field of study by direction of movement between sectors.

Table 2: Level of Award and Field of Study by Direction of Movement

	Level of award	% of respondents	Main fields of study	% of respondents
University to TAFE	Associate Diploma	47	Business	25
	Advanced Certificate	18	Computing and IT	20
	Certificate	35	Engineering	12
			Art and Design	8
			Social and Community Studies	8
TAFE to university	Undergraduate Degree	80	Business	40
	Graduate Diploma	9	Applied Science	13
			Arts	10

Most university to TAFE movement in the targeted respondent group (all into TAFE courses at or above certificate level) was to TAFE associate diploma (47 per cent), certificate (35 per cent) or advanced certificate (18 per cent) level. The main fields of study included business (25 per cent), computing and information technology (22 per cent), engineering (12 per cent), art and design (8 per cent) and social and community studies (8 per cent).

cent). Most were in fields of considerable sectoral, vocational and professional overlap, but at a lower Australian Qualifications Framework (AQF) level. Persons with incomplete awards tended towards full-time associate diplomas as an initial vocational award; graduates tended to study at lower levels for specific skills in shorter courses. The majority of movement was considerably delayed after university.

Most TAFE to university movement (80 per cent) in the targeted respondent group (all with prior TAFE backgrounds above certificate level) was into undergraduate degrees. Main fields of studies (all levels combined) were business (40 per cent), applied science (13 per cent) and arts (10 per cent), but relatively little engineering compared to previous surveys. Nine per cent of movement was into graduate diplomas, not necessarily with completed degrees, with most of the balance to higher degrees.

First and Most Recent Tertiary Sector

Those moving between sectors in this study were not necessarily ‘transferring’ as simply or as literally as implied by the terms ‘university to TAFE’ or ‘TAFE to university’ as demonstrated in Table 3.

Table 3: Comparison of Two-way Transfer

University to TAFE	TAFE to University
12% also enrolled in a university course in 1995	6% also enrolled in a university course in 1995
91% went first to university 9% went first to TAFE	19% went first to university 81% went first to TAFE
82% were last at university 18% were last at TAFE	10% were last at university 90% were last at TAFE
28% had previously crossed sectors	29% had previously crossed sectors

Of the TAFE commencers with university backgrounds, 91 per cent had first studied in a tertiary sector at a university with nine per cent first studying at TAFE. On the obverse 19 per cent of the ‘TAFE to university’ group had in fact commenced tertiary study at university, with 81 per cent going first to TAFE. Neither can it be assumed that the most recent prior tertiary enrolment was in an opposite sector; 18 per cent of persons most easily labelled ‘university to TAFE transferees’ were most recently enrolled at TAFE, and ten per cent of apparent ‘TAFE to university transferees’ were

most recently enrolled at university. These findings have obvious implications for implementation of the recent decision to relax school leaver targets for university entry and to encourage persons ‘new to university’.

Previous Multi-sectoral Movement

Much research on credit transfer, such as that by Lewis (1991), has focussed on academic success after movement. Such research commonly assumes first time movement across sectors, and transition during sectoral movement affects academic outcomes. In the current study 28 per cent of apparent first time university to TAFE movement was by persons who had previously crossed sectors in either direction on at least one other occasion. Nineteen per cent of persons apparently moving for the first time from TAFE to university had crossed sectors before. Such high levels of prior sectoral movement have implications for similar studies unless they anticipate and accommodate for prior sectoral movement.

Categorisation of Multiple Backgrounds

Table 4 summarises the previous tertiary study backgrounds (complete and incomplete) of persons in the current study. It should be noted that more than one half of transferees had combinations of both complete and/or incomplete tertiary backgrounds.

Table 4: Previous Tertiary Studies, Complete and Incomplete

Tertiary Courses	University to TAFE	TAFE to University
	%	%
none complete	34	4
one complete	32	50
two complete	23	27
three complete	11	10
none incomplete	40	61
one incomplete	46	33
two incomplete	1	6
three incomplete	0	0

Golding (1995e) has outlined some implications of previous tertiary enrolment on categorisation and measurement of inter-sectoral movement. It is possible to categorise prior tertiary enrolments by sector and by completion status. In the current study, the 84 possible enrolment sequences and combinations of up to three prior complete or incomplete enrolments were individually recorded for each respondent, with another category for sequences over three prior tertiary enrolments. The most frequent prior study sequences in university to TAFE movement was a single incomplete university attempt (23 per cent of all cases), two completed university awards (19 per cent), one complete university award (17 per cent) and more than three prior tertiary enrolments (10 per cent). To illustrate the complexity, fifteen of the other 84 possible categories of up to three prior course enrolments were recorded comprising the other 31 per cent of respondents.

Using a similar technique to that outlined above, TAFE to university movement was commonest amongst respondents with one prior completed TAFE award (40 per cent), two completed TAFE awards (11 per cent), one incomplete TAFE award (8 per cent) and one complete then one incomplete TAFE award (5 per cent). Nineteen of the other 84 possible categories of up to three prior course enrolments were recorded comprising 32 per cent of respondents. Categorisation of persons moving either way as either ‘completers’ or non ‘completers’, whilst indicative, is clearly simplistic. The diversity and complexity of multiple backgrounds poses likely limitations on the use of standard articulation routes and of routine credit transfer on simple pathways.

Correspondence between TAFE and University Fields of Study

Table 5 below summarises the match between study in the current sector and study in the previous sector.

Table 5: Match between Study in Current Sector and Study in Previous Sector

	Identical	Very Similar	Somewhat Similar	Vaguely Similar	Totally Different
Uni to TAFE	0	9	15	13	67
TAFE to uni	14	24	31	10	22

Two-thirds of university to TAFE movement (67 per cent) was into what respondents categorised as ‘completely different’ fields of study, with only nine percent moving to identical or very similar fields. By contrast only 22 per cent of TAFE to university movement was into completely different field of study and 38 per cent into an identical or very similar field of study. The considerable change in field of study of many respondents, particularly those involved in university to TAFE movement, places likely limitations on the potential transfer of credit, by whatever recognition mechanism. It is also important to recall that neither sector looks like the other in terms of the spread of fields of study. This is another important sense in which movement and credit transfer between fields of study such as university medicine and TAFE hairdressing, for example, can never be congruent.

Attitudes to Transfer

Responses to statements about shared attitudes to movement across sectors are summarised in Table 6.

Table 6: Shared Attitudes to Movement across Sectors

Statement	Direction	Disagree	Neutral	Agree
<i>Positive UT and TU</i>		%	%	%
I am studying my present course to gain vocationally specific training	UT	10	5	85
	TU	8	16	77
I decided to add a further set of (TAFE/university) vocational skills in 1995 to those I already have	UT	38	14	48
	TU	15	18	67
I have chosen my study in my present course in order to keep my vocational options open	UT	19	19	62
	TU	20	21	59
The location of this institution makes it more convenient for me to attend than any other	UT	21	21	57
	TU	43	9	59
Most of the skills I have learnt in my previous course have been very useful at my present course	UT	17	22	60
	TU	16	22	62

Table 6: Shared Attitudes to Movement across Sectors (continued)

Statement	Direction	Disagree	Neutral	Agree
<i>Negative UT and TU</i>		%	%	%
I was attracted to my present course by the availability of credit transfer	UT	72	19	9
	TU	45	20	35
My present course of study has nothing to do with current or intended paid work	UT	73	10	15
	TU	80	9	11
Most of my previous study has been too general	UT	63	22	15
	TU	67	16	17
My previous course was not vocationally useful	UT	64	15	22
	TU	74	13	14
I chose to do further study in my present course to change vocational direction	UT	48	17	35
	TU	58	12	30
My previous course of study has not given me enough specific vocational skills	UT	39	31	30
	TU	46	15	38
My first course was studied purely out of interest	UT	61	11	28
	TU	65	15	20

UT = university to TAFE; TU = TAFE to university

Bold numbers = biggest percentage response

Responses to a number of statements in the tables indicates that regardless of sector, most respondents were positive that vocationally specific training outcomes associated with paid work were anticipated from their courses. Most saw themselves as keeping their vocational options open. Both university and TAFE persons were equally positive that most of the skills they had learned in a course in the opposite sector had been very useful in their current sector. Attitudes to movement across sectors that are not shared are shown in Table 7.

Table 7: Attitudes to Movement which are not Shared across Sectors

Statement	Direction	Disagree	Neutral	Agree
<i>Positive TU, Negative UT</i>		%	%	%
I started my first course with the intention of eventually coming to my present course.	UT	100	0	0
	TU	32	16	53
I am studying at my present course more for the qualification than for the skills.	UT	58	20	22
	TU	28	31	40
Statement	Direction	Disagree	Neutral	Agree
<i>Positive UT, Negative TU</i>		%	%	%
I am studying my present course in 1995 more for the skills than for the qualification.	UT	12	23	65
	TU	36	21	33
I was attracted to my present course by the low cost of the course.	UT	36	29	35
	TU	83	14	3
I was attracted to my present course by the short nature of the course.	UT	29	25	47
	TU	84	9	8
Most of my general skills have come from my previous studies.	UT	28	36	37
	TU	40	20	40
I am basically studying in my present course to retrain.	UT	39	15	46
	TU	67	22	14
Most of my general skills I have learned at work.	UT	25	33	42
	TU	37	27	36

UT = university to TAFE; TU = TAFE to university

Bold numbers = biggest percentage response

Areas of difference between sectors include the perceived importance of the availability of credit to over one-third of TAFE to university transferees and the totally unanticipated nature of movement by university to TAFE transferees. Transferees to TAFE were attracted mainly by the skills; most of those moving to university wanted the qualification. The high (HECS) cost and relatively long university courses were particularly unattractive factors to persons moving to university.

The skills previously acquired in the opposite sector were seen as very useful in a new context. The previous studies in an opposite sector were not seen as too general but vocationally useful in most instances. The movement was primarily related to current or intended paid work. However in the case of some persons moving to TAFE, they were

...not at TAFE by choice in the real sense. It is purely that my (university course) gave me no skills at all—employable skills ... and paved the way for a hard life; it gave me absolutely nothing. I still have anger at how little skills we were given. It was the same with the (teaching diploma). It was in my mind poorly taught. I feel TAFE is more in tune with changing job patterns; ie technology, hospitality, tourism, info tech ... The experience of TAFE has been empowering in a practical sense.

(354; last at university in 1987)

Attitudes to Credit

Relatively few transferees were attracted by credit transfer, particularly those moving to TAFE, perhaps because approximately one-third of all such transferees were changing vocational direction. For university to TAFE transferees, credit was essentially a non issue. The main attraction was the skills in TAFE rather than the qualification. The other attractions for many were the short nature of the course and the relatively low cost. For only a quarter of TAFE to university transferees was credit an attraction. There is a widespread perception that credit is the 'honey pot' that attracts students to follow articulation arrangements and credit transfer pathways. There is no doubt that minimum credit levels are important and attractive to many students, and important in symbolically establishing notional parity between courses offered in both sectors. However in other instances, if credit is routinely imposed without consideration of individual circumstances, it may inject students into difficult educational and social situations, limit their specialisation and stream options within courses, and in the worst situations, increase their chances of discontinuation or failure.

Anticipation of Movement

Those moving from university to TAFE were moving in a way totally unanticipated when they started their first university course. Nearly half considered their TAFE study as part of their retraining, although many had acquired most of their general skills in a work context. By contrast TAFE to university transferees, being younger, had less workplace experience and most did not regard their current study as retraining. The 1994 survey (Golding 1995f) clearly showed that TAFE to university movement was primarily about anticipation of a better or higher level job rather than about retraining.

Credit Awarded

Table 8 summarises the percentage of respondents being awarded as well as levels of credit awarded.

Table 8: Credit for Previous Studies in Another Sector

Direction of movement (number of cases with credit)	Persons awarded some credit	Mean credit per person if awarded	Mean credit per person overall
	%	%	%
University to TAFE 10 cases (124 cases)	13 (19)	20	3 (4)
TAFE to university 61 cases (323 cases)	63 (40)	28	16 (8)

The figures in brackets are from the more extensive study in 1994.

(UT number = 823; TU number = 924).

Only 13 per cent of TAFE respondents (10 cases) received any credit on the basis of university experience on movement to TAFE. By contrast 63 per cent (61 cases) of university respondents received credit on the basis of TAFE experience. The levels of credit on entry to TAFE and university are somewhat lower and higher respectively than the 20 per cent and 40 per cent in the 1994 survey (Golding 1995c), which may partly reflect sample size. Two-thirds (67 per cent) of the credit awarded on entry to university was on the basis of prior TAFE study at associate diploma level.

The main field of study in which credit was granted on movement to university from TAFE was business (64 per cent), followed by computing and information technology (8 per cent), social and community studies (8 per cent) and engineering (5 per cent). There were too few cases (10) of credit transfer from university to TAFE to make field of study comparisons. In the larger 1994 study (based on 124 cases), credit primarily derived from the generalist university courses in arts and humanities (29 per cent), business (20 per cent), and science (9 per cent) as well as engineering (14 per cent) and education (9 per cent).

Recognition of prior informal learning (RPL) was awarded to eight per cent of TAFE respondents and six per cent of university respondents. However, not all recognition of prior learning could be measured as credit: some was as a basis for tertiary admission.

Mean credit level awarded on entry to university for those respondents who received some credit on the basis of previous TAFE study was 28 per cent of the university course. Taking account of persons who received no credit, this represents a mean credit per respondent of 16 per cent (1994 study: mean 22 per cent credit if awarded; overall mean credit 8 per cent). By contrast, mean credit levels awarded on entry to TAFE (for ten respondents who received some credit) on the basis of previous university study was 20 per cent of the TAFE course. Taking account of persons who received no credit, this represents a mean credit per respondent of only three per cent (1994 study: mean 28 per cent credit if awarded; overall mean credit 4 per cent).

A very small proportion of TAFE commencers (5 per cent) definitely agreed with the statement that 'I have unnecessarily repeated many of my previous studies in my 1995 TAFE course'. Relatively few students raised the issue of university to TAFE credit. However 13 per cent definitely agreed that 'I could have received more credit transfer or exemptions in my 1995 course if I had wanted to'. A female student moving from a degree in arts to an Associate Diploma of Public Relations noted that 'TAFE departments are just as hostile in terms of giving credit for previous study as are university to TAFE credits' (194 of 1994).

Existing articulation arrangements from TAFE to university provide some necessary predicability and a 'safety net' to the vagaries of movement into particularly credit-unfriendly individual institutions or faculties. The arrangements standardise minimum credit levels on many standard 'pathways' between particular course combinations across sectors. However they sometimes lead to dissatisfaction where expectation does not match with the experience of the process or the outcome. Twenty-two per cent of university respondents considered that they had definitely and unnecessarily repeated many of their previous studies at TAFE in their 1995 university course, although only nine per cent definitely considered that they could have received more credit transfer or exemptions. 'Credit transfer between course or institutions is not always easy because of red tape, apathy and losing documents' (1011 of 1994). A student moving between a TAFE Music Performance Associate Diploma and a Bachelor of Music noted that 'At the end of my TAFE course I was told I would receive credit but (Uni) changed its mind ... I have not been given a reason why' (1034 of 1994). Students were acutely aware of any inconsistencies. 'Exemption procedures are not made easy; it's up to you to get your own exemptions and even then, people with identical qualifications may get one, another may not' (1732 of 1994). A 21 year old male crossing sectors in Business–Accounting

...was led to believe I would receive eight credits/exemptions, so I structured my course on the assumption that I would receive these exemptions. Then half way through my first semester I was told that I could only have four exemptions. I am not very happy about this ... I had to repeat a lot of work already learnt in TAFE.

(1318 of 1994)

Finally a plea from a student moving across sectors and states. ‘Although some of the TAFE subjects are similar to the subjects for my (Uni) course I still cannot get the credit. Please consider your policy of students who finished their course in other states’ (1904 of 1994).

The raft of transitional problems experienced in practice on apparently standard articulation routes by some students is neatly summarised by the experience of a 21 year old moving from TAFE Associate Diploma in Business–Accounting to a Bachelor of Business, who observed that:

It was difficult coming to TAFE where the course was much more practical to Uni where the course is much more theory based ... The teachers expect much more and screw their noses up to TAFE students. In some of the subjects we were credited from we have not necessarily learnt some of the things and the teachers are reluctant to teach us these things when completing another subject in which you need to know this information.

(1688 of 1994)

Most students moving across sectors in business courses are purposely using TAFE as a bridge to university. One such 19 year old student remarked that ‘I found that a few of my lecturers treated me as if I was stupid because I wasn’t accepted as soon as I had finished high school and that I had to complete a TAFE course to gain acceptance to university’. Another student on a business pathway noted that:

Staff members granting exemptions should be familiar with the subject outline of the degree course. I was granted an exemption on the grounds that it was similar in content with the degree subject. However, as this was not the case, the subject requiring this subject (which was not exempted) as a prerequisite was very difficult for me to handle, nearly causing me to fail.

(1714 of 1994)

The basic problem is that standard articulation and credit transfer arrangements are not able to account for individual circumstance, for learning acquired outside of formal study or for the motivation or level of confidence of persons involved in transition across what is, from the accounts of many students, a difficult educational and cultural shock.

Vocational Circumstances

One in ten (11 per cent) of those moving in both directions had been retrenched or made redundant in their previous job at some time since 1990. One quarter (25 per cent) of the TAFE respondents with university backgrounds had been unemployed at some time in the past 12 months. Seventeen per cent of the university respondents with TAFE backgrounds had been unemployed at some time in the past 12 months. Many respondents elaborated on the link between being unemployed and needing to retrain, often in a new field in the opposite sector.

A female student now in an Associate Diploma (Visual Arts), having previously completed a Bachelor of Arts remarked that 'The only reason I am now studying in TAFE is because there is no jobs in my usual line of work; I have had to diversify into another area' (392). Another student with a Bachelor of Arts and Graduate Diploma of Health Science had been '... unemployed for two years since leaving uni. I studied at TAFE to keep my mind alert and to enhance my job prospects. I am now employed as a direct result from work placement which was part of the TAFE course'. TAFE to university respondents in particular emphasised the importance of getting credit transfer right, and where appropriate, to award recognition of prior learning in this already difficult educational transition.

Change of Direction

For a range of reasons, many students are unsure of what they want to do after they leave school. Twenty per cent of university to TAFE respondents and thirty-one per cent of TAFE to university respondents agreed that their first tertiary course was not the one they most wanted to get into when they left school. Given that most respondents had more than one prior tertiary enrolment, the question was asked about change of mind about a chosen study/work path since *last* enrolled in the opposite sector. University to TAFE transferees (37 per cent) were more likely to definitely agree that they had changed their mind than TAFE to university transferees.

Movement across sectors for some transferees is about making amends for inappropriate and/or subsequently changed course and vocational choices. One of the strongest responses from transferees in the 1994 survey who had discontinued university was that they were relatively immature or uncertain of what they wanted to do when they left school. In the current study 11 per cent of university to TAFE and 17 per cent of TAFE to university respondents agreed that they initially studied a generalist course because they were uncertain about what to do afterwards. The amount of credit

transferable from such general courses after such realignments is largely dependent on how much of the course was successfully completed before discontinuation and on the match between prior and current learning at a unit/module level.

One-third of respondents (32 per cent university to TAFE and 29 per cent TAFE to university) agreed that most of their general skills had been learnt at work rather than from formal study. However, very few respondents (5 per cent university to TAFE, 3 per cent TAFE to university) received recognition of prior learning on the basis of previous study in the workplace.

Intention to Complete

One unanswered question, and one not able to be resolved by the current study, is what proportion of persons moving across sectors successfully finish their courses. The question of relative academic success once completed has been studied by Lewis (1991). Equally important is the proportion of commencers who finish, which requires long term, longitudinal studies.

What can be said on the basis of the data from the current brief study is that intended completion rates to the end of first year appear to be higher for TAFE to university movement: 63 per cent of the university to TAFE transferees and 89 per cent of TAFE to university transferees definitely agreed that they fully intended to eventually complete the course they commenced in 1995. Since there was no 'does not apply' option to this question, it is possible that some university to TAFE respondents had already finished their one year courses. Given that most transferees were studying in TAFE primarily for the skill rather than for the qualification, formal completion in TAFE may have been less of an ultimate goal than a completed university degree, and in the absence of HECS in TAFE there was less financial disincentive to discontinue.

Origin of Generic Skills

The important question of which settings contributed to the development of the twelve selected generic skills was approached by asking respondents to indicate which settings contributed most to the development of each skill. If more than one setting was roughly equal in its contribution, respondents were encouraged to tick more than one square. Responses are summarised in Table 9 below.

Table 9: Settings which Contributed most to the Development of General Skills on Inter-sectoral Tertiary Movement

General Skills with Main Source	Direction	School		TAFE		Uni		Work		Home/Other	
<i>Mainly from School:</i>											
Using mathematical ideas and techniques	UT	56	25	14	3*	51	23	28	7*	10	0
	TU	60	30	41	17	39	18	11	1	5	1
<i>Mainly from Tertiary Study and Work:</i>											
Collecting, analysing and organising information	UT	24	4	19	4*	63	31*	41	14	19	3
	TU	34	17	43	10	44	15	34	12	9	1
Understanding and designing systems	UT	10	6	17	4*	51	25	49	20	20	9
	TU	14	6	37	21	39	21	39	23	9	2
Expressing ideas and information	UT	32	10	21	5	52	19	45	17	27	3
	TU	33	14	36	11	41	15	34	15	24	6
<i>Mainly from Work:</i>											
Planning and organising activities	UT	19	3	12	3*	47	15*	64	29	31	9
	TU	23	13	32	13	23	4	48	27	27	11
Working with others and in teams	UT	11	5	20	4	33	7	75	36	23	4
	TU	25	7	35	11	29	5	65	34	16	2
Learning from experience (e.g. mature professional judgement)	UT	13	3	17	1	23	1	72	26	65	17
	TU	16	3	28	4	23	2	68	23	54	15
Solving problems	UT	27	8	11	1*	45	13	60	22	42	8
	TU	27	11	35	11	29	7	45	20	27	9
Using technology	UT	7	4*	32	8*	45	18*	54	22	22	5
	TU	20	5	50	17	41	9	51	25	18	1
Learning and teaching on demand ('lifelong learning')	UT	17	4	22	4	43	12	58	25	40	11
	TU	22	8	27	8	33	13	64	17	41	19
<i>Mainly from Home:</i>											
Reflecting and imagining	UT	23	8	19	8	34	10	22	7	62	30
	TU	33	19	13	3	19	16	17	5	46	27
<i>Mainly from Home, but also from University:</i>											
Cultural understanding, including civics	UT	22	7	12	6	41	22	30	7	44	23
	TU	30	12	22	11	28	15	29	11	42	17

Numbers in Table 9 are percentages of all respondents who ticked this option for this skill, followed by percentages who ticked solely this option for this skill. Figures in bold are the largest totals for that skill. Asterisks(*) indicate significant differences ($p < 0.05$) between UT and TU, for that setting and skill.

Justification of the method used and assumptions embedded in the Table are similar to those outlined in National Board of Employment, Education and Training (1995b) that is

... whether an improvement occurred or not was dependent on the respondent reporting such an improvement. In this respect, their opinion may differ from tests designed to measure improvements. However this does not detract from the findings; the perceptions of respondents are important as they suggest the belief in an improvement of their abilities, as well as greater confidence in using these skills.

Table 10: Aggregate of Settings which Contributed Most to the Development of all General Skills by Direction of Inter-sectoral Tertiary Movement

General Skills with Main Source	Direction	School	TAFE	Uni	Work	Home/Other
		%	%	%	%	%
% of all skills contribution	UT	12	11	26	30	20
	TU	17	20	19	28	16
% contributed by one setting only	UT	13	7	29	34	18
	TU	19	20	19	28	15
% of all skills contribution	ALL	12	15	23	29	18
% contributed by sole setting	SOLE	16	14	23	30	15

UT = University to TAFE; TU= TAFE to university

The Table suggests that skills in collecting, analysing and organising information, understanding and designing systems and expressing ideas and information derived primarily from university as well as from the workplace, and in the case of TAFE to university transferees, also from TAFE. Mathematical skills for transferees derived mainly from school or university, and in the case of TAFE to university transferees, also from TAFE. The work place was the primary site for the development of skills associated with planning and organising activities, working with others and in teams, learning from experience, solving problems, using technology and learning and teaching on demand. TAFE played a significant role in relation to using technology, and the home setting contributed significantly to the skill of learning from experience. Reflecting and imagining are skills respondents associated primarily with home, Cultural understanding was a skill associated primarily with school and university.

Overall, the workplace setting contributed most in terms of the aggregated opinion of the respondents. Differences are noted in terms of the perception of work, school and home. University to TAFE transferees, being older, placed less emphasis on the role of school and more on home: presumably in many cases they were alluding to their current family home rather than to their original one. The initial tertiary setting was seen as more important than the current one: that is university to TAFE transferees sourced many general skills from university, and TAFE to university transferees sourced TAFE for most skills.

Examination of the skills/setting table above (Table 10) indicates that there was little overall difference between the sole site and the aggregated site for both groups of transferees. The workplace contributed most for both groups, followed by university. Overall TAFE, school and home contributed in a similar way.

Characteristics of Transferees by Direction of Movement

In summary, it is possible from the current and 1994 study to briefly identify some key differences between university to TAFE (UT) transferees and TAFE to university (TU) transferees on a number of criteria. UT respondents had a median age 33: TU transferees had a median age ten years younger (23). TU transferees get much more credit, partly because they are more likely studying in similar fields, and are particularly attracted to the more prestigious nature of the university qualification, motivated by better job prospects. UT transferees are more commonly changing vocational direction by seeking out short and relatively inexpensive, vocationally specific training.

Gender ratios for both groups (54 per cent female, 46 per male for both UT and TU) corresponds closely to the 1994 study (Golding 1995f). The high proportion of females in some sub-groups is of interest. A number of females interviewed remarked that women are required to have either formal qualifications or skills well above those required by males to achieve the same jobs. In particular, they stressed that high level computer skills were required by prospective employers. One woman with the equivalent of six years of successful university study in four courses remarked that her university education had given her 'the philosophy rather than the skills. It was therefore a broader education, but it made it more difficult to use ... I didn't fit in anywhere. I don't have a vocational pigeonhole. The office jobs I went for wanted excellent skills in computing. They were prepared to take on and train younger people without them, but expected it of an older person'. Approximately one in five in both groups were born overseas (78 per cent UT; 80 per cent TU born in Australia). A number of students born overseas were studying in either sector to reskill in an Australian context to achieve vocational credibility not possible without that study.

The most recent, main professional or vocational role of all UT respondents was as a teacher (15 per cent), technician (10 per cent) or salesperson (8 per cent). The main industry sectors included education (18 per cent), health and community services (16 per cent), business (13 per cent) and retail (8 per cent). The most recent, main professional or vocational role of all UT respondents was as a manager (9 per cent) technician (8 per cent) and in another para-professional role (7 per cent). The main industry sectors included business (14 per cent), health and community services (10 per cent), banking (5 per cent) and food industries (5 per cent).

The most recent, full-time work of UT respondents was as teachers (14 per cent), labourers (11 per cent), managers (7 per cent) and in other para professional roles (8 per cent), mainly in education and business sectors (15 per cent and 10 per cent). Most recent full-time work of TU transferees was as managers (11 per cent), clerk/receptionists (11 per cent) and administrators, mainly in the business sector.

The intended university to TAFE professions or vocations were very diverse, but included managers, other para professionals, author/artists and welfare/community workers. The intended TAFE to university professions include accountants (19 per cent), managers (18 per cent), computer programmers (11 per cent) and other professionals (11 per cent), primarily in the business (36 per cent), computing (13 per cent) and health and community services (13 per cent) sectors.

Credit Transfer Comparisons between Multi-sectoral and Single Sector Institutions

Fewer respondents in single sector institutions received credit (21/81 with credit: 26 per cent) than respondents in multi-sectoral institutions (37/75 with credit: 49 per cent). Average credit levels *if awarded* in single sector institutions comprised 22 per cent of the subsequent course, compared to 25 per cent in multi-sectorals. Average credit per respondent in single sector institutions was therefore less than half that in multi-sectorals.

Ironically, nine per cent of respondents in single sector institutions considered that they could have received more credit transfer or exemptions in their 1995 tertiary course if they had wanted to, compared to 15 per cent in multi-sectorals. Six per cent in single sector institutions considered they had unnecessarily repeated many of their previous studies in their 1995 course, compared to 21 per cent in the multi-sectorals. Those attempting to cross sectors in the multi-sectoral institutions sometimes found it difficult to do so. 'I studied at TAFE (in multi-sectoral A). (Multi-sectoral) university B is 'very' far away from home.'(402). A Hong Kong born student remarked

that ‘If they want to help students they should give preference to (multi-sectoral A) students. When we go through the pathways process we should get in. It’s not fair’. The same student remarked in the follow up interview in relation to lack of correspondence between curriculum that ‘All TAFE has to do is standardise subjects by the same name as university. That way people who are caught in between would not be disadvantaged’. There appears to be some factors operating in multi-sectoral institutional contexts which lead to the transfer of higher credit levels.

Twelve per cent of respondents in single sector institutions had previously completed an award in one of the three multi-sectorals. Fifteen per cent had previously enrolled in but not completed an award in one of the three multi-sectorals. Forty-seven per cent of those in a multi-sectoral institution had previously completed an award in one of the three multi-sectorals. More (63 per cent) had previously enrolled in but not completed an award in one of the three multi-sectorals. There is clearly movement within but also between sectors and institutions. It is not possible on the evidence available to conclude that higher credit levels necessarily result from inter-institutional, multi-sectoral movement.

Overall Categorisation of Tertiary Inter-sectoral Movement by Group

If no distinction is made by direction of movement, the previously defined five groups in Table 1 take on the following characteristics summarised below. The first number in brackets is a mean score which indicates the level of agreement or disagreement with the statement in italics, where 5 = strongest possible agreement. The second number is the mean for all valid cases in the total respondent population (N=176).

Group 1

One completed background only: 28 per cent of transferees

Usually moving in a related field of study, partly intended, adding another vocational qualification, and likely to get credit; median age 25; equally likely to be male or female. Most likely to disagree that *previous study has not given me enough specific vocational skills* (2.3 / 2.8). Most likely to have *started (their previous course) with the intention of eventually coming to (a course in the other sector)* (2.8 / 2.4). Least likely to have found their *first course not vocationally useful* (1.6 / 2.1). Most likely to be *adding a further set of vocational skills to those I already have* (3.8 / 3.5).

Group 2

One incomplete background only: 14 per cent of transferees

Usually changing vocational direction after an unsuccessful tertiary attempt, without many transferable tertiary skills and half as likely to achieve credit; median age 22. Most likely to agree that *previous study has not given me enough specific vocational skills* (3.4 / 2.8). Most likely to have found their *first course not vocationally useful* (2.6 / 2.0) and have been *attracted by the low cost of the course* (2.4 / 2.1). Least likely to have *found the general skills I learnt in (the course in one sector) very useful (in the next sector)* (3.3 / 3.6). Least likely that *most of my general skills have come from another sector* (2.5 / 3.0). Least likely to be *adding a further set of vocational skills to those I already have* (2.7 / 3.5).

Group 3

Not in Group 1 or 2, with multiple backgrounds but awarded some credit: 14 per cent of transferees

Median age 24; 71 per cent female, generally not changing vocational direction. Most likely to be *attracted to the course by the availability credit transfer* (3.3 / 2.4) and be *studying more for the qualification than for the skill* (3.5 / 2.8). Most likely to disagree that *My 1995 study has nothing to do with current or intended or paid work* (1.4 / 1.8) and agree that they are *basically studying to retrain* (2.9 / 2.6). Least likely to be *attracted by the short nature of the course* (1.8 / 2.3) or *by the low cost of the course* (1.5 / 2.1). Most likely to have *chosen to study to keep my vocational options open* (3.8 / 3.6).

Group 4

Not in Group 1 or 2, with multiple backgrounds but not awarded credit: 35 per cent of transferees

Largely unplanned movement across fields of study and completely without credit; median age 36, 53 per cent male. Least likely to be *attracted to the course by the availability of credit transfer* (1.7 / 2.4) and most likely to be *doing further study to change vocational direction* (2.9 / 2.7). Least likely to have *started (my previous course with the intention of eventually coming to (a course in the other sector)* (1.8 / 2.4). Most likely to be *studying more for the skills than for the qualification* (3.6 / 3.4) and be *attracted by the short nature of the course* (2.6 / 2.3).

Group 5

Multiple sector enrolment: 8 per cent of transferees

A range of circumstances and backgrounds as outlined in Paragraph 14, but most likely of all groups to be *studying to gain vocationally specific training* (4.4 / 4.2). Most likely not to have *found my previous study too general* (1.8 / 2.2) and to have *found the general skills I learnt in (the course in one sector) very useful (in the next sector)* (4.2 / 3.6).

Limitations

The current study is limited in its scope and analysis largely because of the limited (three month) period during which it was conducted and by initial response rates of 38 per cent. The survey results are indicative of the nature of two-way transfer for the respondent group rather than accurate measures for the total group surveyed. It was necessary to analyse the data prior to the final return of questionnaires, and to include only some of the interview material. The student samples are restricted to what are seen to be representative single sector and multi-sectoral institutions in Victoria in 1995. Given that the sample includes students from three multi-sectoral institutions in Victoria, and that most states have no equivalent institutional types, findings are not necessarily representative of Australian universities generally. For example the relatively high average levels of credit in the current study compared to those in Golding (1995f) appear to be related to sectoral type. It is also important to note that perceptions, attitudes and recollections of prior study and of transfer of skills as recorded by respondents to the questionnaire is influenced by the current perceptions of students. The results are also likely to be influenced by factors such as the likely higher response rates to the questionnaire by females (Millican 1995).

TAFE and University Staff on Generic Skills, Credit Transfer and Recognition of Prior Learning

Robert Pascoe

Method

The questionnaire for vocational education and training and university staff was designed to investigate attitudes to, and ideas about, the three interrelated aspects of this study: the development and transfer of general skills; credit transfer, recognition of prior learning and general skills; and generalist courses versus occupationally specific courses. Two selected groups were surveyed: teaching staff, curriculum designers, managers and policy advisors in TAFE and a small number of private training institutions; and a smaller group of academic staff in universities, most of whom worked in arts, humanities or social sciences, together with spokespersons for professional societies.

This was not a random sample. The people surveyed, selected from lists of people holding positions of responsibility, plus a complete list of the attendees at two vocational education and training conferences, were presumed to be working in roles which required them to be knowledgeable about the issues raised in what was a complex and difficult questionnaire. The questionnaires were mailed to their addresses in November 1995, with a two-week turnaround.

Of the 178 questionnaires sent to the vocational education and training sample, 66 timely responses were received (37 per cent). Of the 90 questionnaires sent to the higher education and professional societies sample, 22 were returned in time (24 per cent). The approximately 20 late responses could not be included in the quantitative data. In the circumstances, the overall response rate of 33 per cent was more than satisfactory. There were more than enough returns to enable a thorough exploration of the issues, which was the purpose of the survey.

The questionnaire used is included in Appendix 1. Respondents were not required to provide their names and were asked to comment as individuals rather than as representatives of the views of any institution or organisation.

They were required to specify themselves by age, gender, present position, field of study, post-school qualifications, work history in university, TAFE and industry, including years engaged outside education.

They were then asked three groups of questions. The first group concerned the development and transfer of general (generic) skills. Respondents were asked to choose in which sectors and sites general skills were developed, to respond on a five point scale to various statements about the transfer and transferability of these skills, and to offer qualitative comments. The second and third groups of questions concerned credit transfer and recognition of prior learning as well as the role of generalist courses, and there was a similar mix of scaled responses and space for qualitative answers. There were slight differences in the questionnaires sent to each group.

Responses were data-processed using SPSS-x. Cross-tabulations were also run.

Findings

The data are reported here in three stages: first from the vocational education and training sample, secondly from the higher education sample, third as an aggregate sample.

Vocational Education and Training Sample

Fifty-three per cent of the vocational education and training respondents were female, and 42 per cent were aged between 45 and 49. Eighteen per cent were curriculum managers, 17 per cent were heads of department and 15 per cent were teachers. The core groups were in arts, humanities and social sciences (29 per cent) or in business, administration or economics (20 per cent). Most had a Graduate Diploma (58 per cent), a Masters degree (12 per cent) or a PhD (11 per cent). Most had never worked in a university (71 per cent) and had been working in TAFE for more than 5 years (79 per cent). Fifty-six per cent had more than five years' experience of working in industry. The questionnaire did not specifically ask for years in unpaid work, such as domestic duties or volunteer work, but numerical calculation showed there were very few years 'missing' from people's biographies.

Many of the respondents thought that the communication skills required in TAFE are like those used at work (44 per cent), but a smaller group (27 per cent) could agree or definitely agree that the same was true of communication skills required in higher education. The skill of teamwork could be readily transferred, according to 59 per cent of respondents, but problem-solving was

a freely transferable skill only in the minds of 48 per cent of people (against 38 per cent who had the opposite view). Only 12 per cent of respondents insisted that all skills are so specific to context that there is no such thing as a general skill. The real concern with these skills was their transferability from education to work, because there was little anxiety about their transferability within education: a clear majority were prepared to see the skills as transferable between TAFE and university (62 per cent), from one TAFE course to another (73 per cent), or from higher education to TAFE (64 per cent). It was noticeable that most of the vocational education and training respondents were either negative or neutral on the issue of whether general skills were being effectively developed in TAFE (70 per cent) or university (71 per cent).

In developing general skills in TAFE courses, the overwhelming majority (86 per cent) thought they should be integrated into the main program, and 53 per cent believed that no separate assessment of general skills should be made.

Credit transfer elicited more divided responses. Only 21 per cent believed that new students in their TAFE colleges were assessed for general skills, whereas 50 per cent thought the students' general skills *should* be so diagnosed. Thirty-nine per cent believed that transferees from higher education should be eligible for credit, roughly the same minority number who believed that work experience should count for credit purposes (38 per cent). A much larger proportion (65 per cent) wanted credit transfer entitlement for TAFE students transferring to higher education. A large minority believed it practical to separate out general skills for the purpose of credit transfer (44 per cent). Almost everyone (89 per cent) was neutral or negative about the proposition that only graduates from generalist courses should receive such credits.

The discussion of generalist and occupationally specific courses proved illuminating. A clear majority of vocational education and training people (65 per cent) agreed or strongly agreed with the statement that all post-school courses, whether generalist or occupationally specific, should provide students with preparation for work. Only 3 per cent, however, agreed with the provocative suggestion that generalist courses are a luxury that we cannot afford.

A surprisingly large number (61 per cent) entertained the suggestion that generalist courses help students 'work out who they are', and almost as many (59 per cent) agreed or strongly agreed that generalist courses helped students become more responsive, flexible and adaptable. Such courses helped students transfer their occupationally specific skills from education to work, according to 67 per cent of respondents, although only 27 per cent would agree that generalist courses are more effective than occupationally

specific courses in preparing students in general skills, and only 12 per cent would go so far as to say that generalist courses prepare students better in work-related general skills; 48 per cent of people rejected that idea, while 33 per cent remained neutral.

Consistent with this, overwhelmingly most vocational education and training people (79 per cent) favoured a combination of a generalist and a specific course, although only 38 per cent thought employers had the same attitude. Opinion was evenly divided on whether general skills would help those who were marginal to work and education, such as the long-term unemployed.

Universities and Professional Societies Sample

There were significant differences in several areas between the views of vocational education and training people and their counterparts in universities and professional societies. The latter resisted the proposition that vocational education and training courses were more likely than higher education courses to require communication skills that were similar to those used at work. The university respondents agreed about the transferability of teamwork as a skill, but were less inclined to see problem-solving as a transferable skill. They were just as unlikely as their vocational education and training peers to resist the proposition that there was no such thing as a general skill.

University academics and professional society leaders were less persuaded by the view that general skills acquired in TAFE programs were readily transferable to higher education: only 14 per cent (i.e. 3 out of 22) agreed with this proposition, and none strongly agreed. University people were even less inclined than their vocational education and training counterparts to think that TAFE courses focused effectively on the development of general skills, with only one respondent agreeing that this was the case. They were a good deal more positive about the value of university courses developing general skills.

In the area of credit transfer, the recognition of work experience and of TAFE credit were points of difference. Only one academic thought that her/his institution presently granted course credit for general skills acquired at work. Only 38 per cent believed that TAFE transferees should receive advanced standing in universities for general skills they have acquired, although another 20 per cent were neutral on the matter.

There was broad agreement on many aspects of the generalist/occupational debate. In many cases the two sub-samples shared the same views. But in response to the statement that generalist courses are more effective than occupationally specific courses in preparing students in general skills, only

14 per cent of academics took a negative view. On the question of whether it is more important for people who are marginal to learn general rather than occupationally specific skills, almost half the academics had a positive answer.

All Respondents

Of the total group of respondents, incorporating both sub-groups, 53 per cent were aged from 45 to 52 years and overall, 45 per cent were female. Forty-eight per cent were in recognisable management positions, including professors, TAFE directors, deans, heads of TAFE departments and TAFE curriculum managers. Thirty-nine per cent of them were in arts and related fields, 18 per cent in business, and 11 per cent in education. A total of 83 per cent held a Graduate Diploma or better, and 24 per cent had PhDs. Typically they had not worked in the other sector. Only one of the university respondents had ever worked in a TAFE college. Forty-one per cent of the university people had never worked outside education.

Overall, the issue of how general skills are developed and may be transferred produced strong responses among our sample of educators. As noted, nearly all wanted to accept the existence of at least some element of transferability in 'general' skills, and most had no serious reservations about the ready transfer of skills from one tertiary course to another in the same sector. With credit transfer, the points of agreement were greater than those of disagreement. Higher education transferees received credit for their general skills, according to most respondents, and TAFE transferees were entitled to credit. There was strong agreement that generalist graduates should not be privileged in the granting of general skills credit. Opinion was more divided on the issue of whether it was practical or not to separate out general skills for the purposes of credit transfer: of all statements about transfer, this one most clearly divided the respondents on sectoral lines.

In considering generalist in relation to vocational courses, there were broad areas of agreement. Even the assertion that all post-school courses should prepare students for work was supported by both vocational education and training and university staff.

There was also general agreement in both sectors that the best way of teaching general skills in both TAFE and university courses was through integration into the main program, with no separate assessment.

Discussion

The culture of the sector in which people work was on the whole a stronger differentiating force than the culture of their discipline. Similarities of worldview among arts and business academics in university, for example, were stronger than differences. To the extent that these two sub-samples represent the teaching population at large, people's careers have been concentrated in one sector or the other, and their views on the issues of general skills, transfer and generalist/occupational courses divide most strongly on these lines. Field of study had little correlation with opinions on the transferability of skills such as teamwork and problem-solving. Similarly the cross-tabulations run for all respondents on the question of credit transfer revealed insignificant differences across fields of study. Gender was also not significant.

The question of where general skills had their origin reflected the work experiences of the respondents fairly closely. The answers concerning the standing and transferability of such skills from one sector to another also reflected different sectoral cultures. For example some academics disagreed that there ought to be better linkages between TAFE and Higher Education:

I think different sectors have different objectives philosophically. I don't believe that we should harmonise the education system to ensure maximal 'transfer of general skills' merely to allow economic rationalism and thus move to a competency-based culture with limited diversity!

(University senior lecturer, physiology, female, 34, years).

This person was consistent in her other answers: she did not want university students to receive advanced standing for their generic skills, either. A similar view was put more gently by another informant:

[It is] perhaps inappropriate to improve transfer between sectors. Sectors should concentrate on different levels of skills [and] stress differences rather than similarities. 'General skills' is a misnomer. What should be of concern is not recognition of various skills (for purpose of transfer) but recognition of the levels achieved in the various skills.

(University associate professor, history, male, 47 years).

A middle position urged that a 'focus on general skills should not conflict with [the] core academic program', revealing a conception of such skills as far less determinant of learning success than many theorists would suppose. These middle-of-the-roaders were nonetheless reasonably relaxed about the possibility of credit transfer for generic skills across the sectors. A former

dean who is now a deputy vice-chancellor observed that the definition of general skills used in this survey was extremely ‘instrumentalist’ and that although many students wanted to regard education as work-related, many academics were rather more ‘idealistic’.

Many respondents suggested that the transfer of generic skills could be improved by work placements, ‘sandwich courses’, internships, co-op schemes and a pedagogy which one professor of education described as ‘teaching for transfer’. One dean of arts from a mono-sectoral university made the interesting suggestion of ‘larger modules in TAFE’ counterbalanced by ‘smaller subjects in Higher Education’. He also thought that ‘the TAFE structure is not comparable with generalist courses’. An associate dean from a multi-sectoral university believed that TAFE should indeed offer generalist courses, which ‘should provide cultural, analytical, historical, economic [and] ethical understanding. There may be a difference in conceptual complexity between TAFE and universities’.

One university academic who had served on a TAFE College Council added:

I suspect that teachers and academics need to reflect more systematically on the details of their practice, tracing possible connections (or lack thereof) between what they are doing and pertinent general skills. For example, on a given reading or study guide, what skills are involved in each question—analysis, synthesis, summary through higher-order conceptualisation, location of point-of-view, and so on.

(University senior lecturer, literature and cultural history, male, 50 years).

He makes the point also:

Arts degrees have always been partially pre-vocational, for instance as a generalist foundation for theological study. But they’ve never been wholly so. Perhaps this hybrid nature has been their especial strength.

Vocational education and training respondents were not always convinced of the value of general skills, wondering in one case whether Patrick White could write magnificently about the world of astronomy and nuclear physics. More work on cognition and on measurement was sorely needed, according to one curriculum developer with an engineering background. Many remarked on the importance of not treating general skills outside of a context, especially a real-life context. Some respondents wanted general skills addressed in schools and to be better recognised in educational discussions: ‘these general skills are the ones lacking and needing lots of attention before the ‘real’ learning takes place’.

Generalist courses were seen as a useful addition to the suite of TAFE programs, especially as they contribute to some personal skills such as ‘building self-esteem, public speaking, assertiveness’, according to one TAFE curriculum officer. One respondent thought generalist courses should be ‘mainly for marginalised groups and for pre-initial vocational courses’. One TAFE teacher, a 51-year-old male with a doctorate, singled out the new generalist Swinburne Associate Degree course for particular notice. But some senior TAFE people were not enthusiastic about generalist courses in TAFE. According to a 52-year-old deputy director:

Generalist courses alone have no strong role—generalist and vocational streams or courses must be integrated. All skills, whether generalist or vocationally-specific, should be learned in context, through application, problem-solving, etc. [In the same way,] you don’t differentiate intellectual, perceptual and physical (gross/fine) skills].

(TAFE deputy director, male, 52 years).

One private provider thought that not only were general skills and generalist courses problematic in themselves, but so were ‘surveys which ask respondents to generalise about generic skills in generic courses!’

A 46-year-old with secondary school teaching experience disagreed. She argued that any graduate from a two-year TAFE program ‘should be able to participate intelligently in society ... understand the social, political and economic implications of their work, and understand the dynamics of the organisation within which they work’.

One curriculum manager saw the issue as deeply political:

TAFE as a sector is encouraged to remain separate and stick to its mission—which is perceived to be responding to industry needs and government directions. This is inimical to any recognition of the value of general skills in curriculum, but it does have a powerful effect in maintaining the existing class and power relationships.

(TAFE curriculum manager, humanities, female, 53 years).

In a similar vein, another TAFE leader, a campus manager, criticised the ‘leave your brain at the door’ approach. By all means have generalist courses, wrote one research officer, but ‘Stay close to the real world’.

As far as the question of transfer is concerned, some vocational education and training staff were quick to point out that ‘no one institution or sector has “ownership” over where, when, how people acquire skills’. Several commented that they wished to see universities brought into a national system. ‘At one level it appears the universities are reluctant to take on the

whole notion of competency-based education. Until they come to the party, 'transferability' will remain problematic'. 'Higher Ed had to stop using inaccessible language', according to one TAFE industry consultant. One TAFE teacher put it bluntly:

'Higher education' needs to come down off its high horse. They're no better (in fact, their modelling is atrocious) at things than others. TAFE teachers are more sensitive to practical needs and look at the whole picture of people's work, study, etc.

(TAFE teacher, literacy and languages to adults, female, 48 years)

Others stated, for example, that recognition of prior learning is '... not happening quickly enough in Higher Ed. Higher Ed give the impression they are better than TAFE. They should understand they are just doing a different job. That doesn't make them better. People are not better people because they have had access to education; they are just better educated'. Another respondent emphasised the sense of being 'empowered' that students seeking recognition of prior learning and credit transfer needed to develop, precisely because the transferability of general skills was difficult to prove. 'In general', he went on, 'it would appear that the Higher Ed sector is much more reluctant to recognise prior skills through RPL than TAFE'. But another vocational education and training person noted that the problem of recognition of prior learning was more general: 'the RPL process is too difficult on both assessor and assessed: unless the process is improved it will fail'. Surprisingly, articulated pathways were mentioned by perhaps only a dozen of the respondents. One TAFE teacher stated that an argument around the interests of students was the only way to bring the sectors together.

Work Related Objectives in Arts Faculty Courses in Universities

Robert Pascoe

Introduction

This appendix draws the first part of its substance from the handbooks and promotional materials used for generalist courses in Australian higher education in 1995. It quotes from instances where generic skill descriptors were used, either as part of listed course objectives, or in summaries of course activities. The second part is drawn from a more detailed analysis of materials used by the Faculty of Arts, Victoria University.

As the quotes indicate, some—but not all—of the references to generic skills refer to *work related* generic skills. The descriptors of generic skills used here are the same as in the project surveys and the main report: a 12-item classification which includes the skills devised by the Mayer Committee, two further skills developed in the New Standards Project in the United States, and two additional skills devised by the researchers. Earlier work by Marginson (1993b) indicated that employers, educators and others seek two skills that do not appear to be adequately covered by the other skill descriptors: these are here labelled as ‘Reflecting and imagining’, and ‘Learning from experience’.

Analysis of Arts Faculty Course Material Describing Job Skills, Australia 1995

Methodology

Each Faculty of Arts general office across Australia was asked to provide a copy of whatever current promotional material for their courses was available for students wanting to know what the use of doing an arts course might be. The question is so commonly heard these days that most faculties (and some departments) have such material readily available. The explanations in this material are open-ended and may be readily decomposed and restructured in new frameworks. (In the process of collecting this promotional material, it was evident that the older universities could afford

more lavish productions and had devoted more resources to the construction of these brochures. These older universities were therefore far more likely to stress the vocational relevance of their programs. A catch-up process is clearly in place, however, with the newer/poorer universities flattering their older counterparts by imitation) We received material from all Faculties of Arts throughout Australia, and have selected for this purpose promotional descriptions taken verbatim from 20 diverse courses, as listed below. The numbers in brackets are used extensively in the material which follows:

- (1) BE/BA (Monash) 1995
- (2) English (ANU) 1993
- (3) Sociology (ANU) 1993
- (4) BA (ANU) 1993
- (5) BA (ACU) 1996
- (6) BA (Monash) 1995
- (7) BA (Melbourne) 1995
- (8) Applied Women's Studies (Edith Cowan) 1993
- (9) Photomedia (Edith Cowan) 1994
- (10) Public Relations (Edith Cowan) 1994
- (11) Arts Management (Edith Cowan) 1994
- (12) Social Studies of Science (Deakin) 1995
- (13) Religious Studies (Deakin) 1995
- (14) Philosophy (Charles Sturt) 1995
- (15) BSS (Community Development) Flinders 1995
- (16) Politics (Adelaide) 1995 [by telephone]
- (17) Communication Studies (Victoria University) 1995
- (18) BA (Flinders) 1995
- (19) History (Melbourne) 1995
- (20) Humanities (Macquarie) 1994

Findings

Examples could be found of most of the generic skills (though not all) throughout this course promotional material. The language used to describe each skill varied considerably, depending mostly upon the imputed readership, and often the skill was not described singly, but as intertwined with another skill.

Collecting, Analysing and Organising Ideas and Information

The in-depth study of subject areas you will undertake as part of the BA will give you a sophisticated knowledge not just of fact and subject content, but also of the theories which shape that knowledge; the ways in which a study of the knowledge area contributes to our understanding of the world we live in, and the ways in which you can seek out facts, balance arguments and test theories.(7)

Studying the humanities does not necessarily guarantee you genius status but it will certainly help equip you for a world of often overwhelming ambiguities. Employers today are not always seeking the very explicit range of knowledge such as needed in the sciences, engineering or accounting. They look for people who have mastered the processes by which knowledge is acquired, those who have general analytical skills. A graduate who has studied texts, learned to distinguish fact from assertion, and is then able to express these facts lucidly, is well trained for the business world. Philosophy, for example, examines the nature of decision making, logical analysis and problem solving. It encourages you to look beyond the immediate task and think creatively.(20)

Expressing Ideas and Information

Engineering employers are calling for graduates who are competent technologically, but are able to think clearly about non-quantifiable aspects of their work and express themselves in good, unambiguous English. Even engineers working in the design office spend most of their time communicating: talking, writing, organising, and negotiating with other engineers, clients, architects, contractors, etc. Engineers supervising construction must relate to the contractor's engineers, and to tradesmen, union representatives, etc. Of course, engineers often communicate about technical matters, and must sometimes perform calculations! However, the humanistic side of engineering is a stumbling block for many narrowly-educated technologists and its importance would appear to be a well-kept secret.(1)

Much of the English Department's work is done in seminars, where staff and students have the opportunity to test and challenge one another's judgements. Learning to talk in this way, confidently, logically and patiently, is a necessary part of English studies, and although great importance is attached to written work at all levels, the Department stresses that its aim is to extend students' oral as well as their written skills.(2)

Australia has been described as a country which is going through an information and communication revolution. Experts calculate that 40 per cent of people working today are engaged in information-related occupations, and that this is growing. The past fifteen years have seen the rapid expansion of communication- and information-related occupations: journalists, information and public relations officers, librarians, social researchers, professional writers, community workers, primary and secondary teachers, market researchers, administrators, management consultants. Today, more people than ever have to use communication skills as part of their jobs in more traditional occupations.(17)

Using a theoretical base, students develop practical skills and apply them to professional work situations which involve them in dealing with real clients and their communication problems.(10)

Planning and Organising Activities

Arts students are also able to meet deadlines, work independently, think creatively and successfully juggle competing demands and priorities.(7)

The course provides a solid foundation in the theory and practice of business, administration, and management as they relate to the arts industry. The central focus of the course is the provision of knowledge and skills required to manage theatre companies, venues, dance companies, exhibitions, community arts centres, galleries, concerts, festivals and other segments of the entertainment and arts industries.(11)

Working with Others and in Teams

This course will enable students to develop interpersonal and group skills necessary for facilitating the personal and social development of women.(8)

A system of internships gives 33 politics students each year the opportunity of working with South Australian parliamentarians. Each then writes a 5000-word essay on the experience.(16)

Using Mathematical Ideas and Techniques

No examples were found.

Solving Problems

Sociology has contributed to the understanding and development of Australian society in many ways. It has been used in studying social problems such as crime, delinquency, alcoholism, HIV/AIDS, drug use and poverty. It has been employed in policy-making, especially in the field of immigration and cultural pluralism. Sociology has played a part in the development of all levels of the education system; it has aided contemporary urban planning; it has influenced health policy and practice; and its methods are employed in a variety of practical settings such as market research, opinion polls and the conduct of surveys and inquiries.(3)

A BA allows you to widen your intellectual and personal interests, to question and challenge and to creatively solve problems. These skills are directly translatable to the job market.(7)

Philosophy deals with a range of fundamental questions, including the nature of human knowledge, the existence of God, the relationship between thought and language, and a host of concrete ethical issues that arise in personal and professional life.(14)

Using Technology

The course will encourage students to produce photographic based imagery of the highest possible standard in an advanced speculative manner.(9)

Managers and civil servants are now required to be scientifically and technologically literate. This kind of literacy cannot be achieved by studying molecules and equations; what is needed is an increased understanding of how science and technology function in a socio-economic context. Furthermore, all jobs in the future can be expected to change rapidly with new technology.(12)

Cultural Understanding, including Civics

Your general knowledge will be expanded and your outlook on the world broadened through a wide variety of courses.(6)

Religious studies is of great benefit to anyone wishing to work in a cross-cultural context, whether in transnational corporations, or in other areas of private industry, the public service, education, law, health care, social work, journalism, policing and so forth. Religious studies also helps us understand our own cultures and societies as it lays bare much of the thinking and the bases of convictions that make our society what it is.(13)

Learning and Teaching on Demand

The era when you qualified for a lifetime career is past. Even if you remain within a given field of employment, you will need to renew your skills, acquire new knowledges. For this reason a capacity to learn and adapt is vital.(19)

The course will provide opportunities to study theories and strategies appropriate to working with and empowering specific populations, e.g. the aged, youth, Aborigines, and interest groups.(15)

Understanding and Designing Systems

No examples were found.

Reflecting and Imagining

Studies are designed to produce graduates skilled in the application of ethical principles to decision-making.(5)

Learning from Experience

An arts education is a personal investment in self-development, in intellectual training, in learning to live and work independently in an organised way and in the development of communication skills; at its best, it facilitates some insights into, and involvement in the 'subtle intellectual systems, profound concepts, stirring visions and great emotions' represented by our history, politics, philosophy, art and literature.

The advantage of undertaking a BA is that it doesn't prepare you for just one career, it provides you with skills which can be transferred across many sectors and occupations.(7)

Generalist skills are of increasing value in the changing dynamic job market. The generalist skills promoted by the Bachelor of Arts includes motivation: that is, self-reliance and achievement.(18)

Arts Faculty, Victoria University

Introduction

In April 1994 the Student Services area at Victoria University prepared a summary of discussions from the Preparation of Students for Employment Working Party, which had been meeting since December 1993. This summary relied largely on the brochures and official handbooks produced by each

faculty and the TAFE division of the University. While understandable, this methodology produced unusual results. The impression from its printed materials was that the Faculty of Arts, for example, mostly concentrated on cognitive attributes (such as critical and lateral thinking, logic), to the exclusion of communication skills, knowledge-centred skills, interpersonal skills, work-context negotiating skills, and meta attributes (such as initiative, maturity, judgement). The Dean's Advisory Committee subsequently recommended that a short survey be conducted, of (mostly third-year) lecturers across the faculty, in order to identify the kinds of work-related activities that were taking place in their courses. The results of this survey are summarised here, using the same 12 skill descriptors.

Collecting, Analysing and Organising Ideas and Information

Questionnaires and surveys are a common instrument, for example in Asian studies where students are required to conduct a survey of investment opportunities in Asia as understood by private companies in Australia. Similarly, in town planning, the final-year undergraduate individual research project normally includes collection and analysis of social survey data.

Textual analysis is a major part of media studies courses which help students analyse and script material for television, radio, video documentaries, and multimedia.

Expressing Ideas and Information

Communication studies students prepare a folio of 11 documents to demonstrate that they appreciate and are able to reproduce a variety of writing styles and formats commonly used in work and other organisational settings in Australia.

A moot (practice court-room) is used in town planning to give students experience of appearing before a Planning Appeal Hearing. Languages students practise their interpreting and translation skills using real-life formats, including role-playing and action-research situations.

Literary studies students are trained in the skills necessary to analyse texts and present the results in technically correct English and in coherent form.

Planning and Organising Activities

In town planning courses, students are taught to evaluate what is and what should be in a consultant's brief, how it is drawn up and how it is best responded to. The final-year individual research project provides important training in planning, organising and implementing a research strategy.

Working with Others and in Teams

The subject interpersonal and group organisation uses an interaction laboratory to make video and other recordings of the group of staff and students during the semester.

Social work and community development students undertake fieldwork in community organisations.

Groups of students in professional writing undertake a field placement in one of several specified community organisations throughout Melbourne's West, and are engaged in editing reports, newsletters, and leaflets.

The subject scripting and editing the non-fiction video requires students to develop team skills. In second-year town planning, students are required to undertake a work experience placement of one week as a requirement of the subject statutory planning.

Counselling skills are developed in the psychology program.

Using Mathematical Ideas and Techniques

Urban studies, sociology and geography students learn SPSS-X and other data packages through the study of applied problems.

Psychology students acquire a wide range of quantitative research techniques, and are also expected to integrate these methods with qualitative research skills.

Town planning students learn how to use GIS and C-Data packages as part of the practical work for Town Planning 2A.

Solving Problems

All arts courses require students to write essays which describe and analyse social and human problems.

Geography students are given practical examples of town planning problems at local government level.

Using Technology

Word-processing is now assumed in all arts courses; data-analysis is common; radio, video and multimedia production courses are available; sleep-measurement and other technologies are also available. Computing laboratories are available on every campus; Internet facilities are presently under development.

Languages are learnt through various technologies, including language laboratories, the 'talking book' (using bar-codes and light-pens), and interactive CD-ROMs (often developed by local staff).

Cultural Understanding, including Civics

Asian studies students take part in a day-long workshop in which graduate students describe their work and careers.

The study of history offers challenges of understanding, and endless fascination as we move beyond our own lives, to those of people in other times and places.

The communication studies course treats issues related to cross-cultural communication in the workplace, using Bafa` Bafa` and other simulation exercises.

Learning and Teaching on Demand

Firms and bureaucracies alike are increasingly using the learning organisation model, which requires employees to accept the learning-for-life principle and to mentor workmates as needed. Group projects in many courses include cross-skilling, combining students from a range of backgrounds who bring particular skills and work experiences to the task at hand (for example, Vietnamese and Spanish immigrants with professional skills).

Understanding and Designing Systems

Employees are asked more and more to adopt a quality-circle approach to their work, seeing how it relates to the work of others. This approach subverts attitudinal and structural barriers in the workplace. Women's studies' students undertake research which addresses the structural barriers to women's participation in organisations.

Reflecting and Imagining

Most Arts courses foster the capacity of students to reflect critically on issues presented to them. In particular, professional writing includes a Creative Writing stream.

Learning from Experience

The mature-age students who make up a sizeable proportion of arts students bring life and work experiences to the class-room. In literary studies, students are taught to understand the relationships between personal experience, abstract theory and symbolic representation. This fits them to live and work in a multicultural society, in the post-industrial environment of modern business, and in a global economy.

Glossary

The glossary and list of abbreviations explains some of the terms used in the present report. It does not claim to be definitive. It is recognised that in the case of some of these terms (e.g. recognition of prior learning) there is more than one definition in use. It is for this reason that a glossary was felt to be necessary.

academic generic skills: those general skills which are developed and used in an academic setting, such as the capacity to write essays or set out and solve computational problems. Note that these skills may overlap with, but are not identical with, work related generic skills (see ‘generic skills’, and ‘transfer’, below).

articulation: the design of education and training programs, and links between them, so as to facilitate and maximise both student movement between programs and sectors, and the provision of opportunities for course credits.

credit transfer: the granting of advanced standing (i.e. course credits) on the basis of a student’s previous *formal* study or learning.

generalist courses: those courses in education and training that are not tailored to preparation for any particular occupation or profession; for example arts, humanities, social science or natural sciences courses in universities. (This use of ‘generalist’ is similar to some uses of the term ‘general education’ in other documents, but ‘general education’ carries other meanings and is little used here). Most courses in schools, and basic literacy courses in TAFE, are types of generalist courses. In this report ‘generalist’ usually refers to arts, humanities or social sciences courses.

generic skills (‘general skills’), or generic competencies: skills that are general to more than one site, e.g. communications skills used in the different sites at work and in education. ‘Generic skills’ are never universal in character, in that they are both acquired and used in specific contexts: while transfer of those skills can take place, it is never absolute or completely automatic. Note that in other documents the terms ‘generic skills’ or ‘generic competencies’ may refer to particular descriptors of generic skills, such as the key competencies developed by the Mayer Committee. In this report the seven Mayer competencies; cultural understanding, developed in the wake of Mayer; and four further descriptors of generic skills are all used (see Tables 6ff.)

movement, or student movement: enrolment in an education and training sector that is different to the *last* education and training sector or course studied in, e.g. school to TAFE movement, TAFE to university movement. This does not necessarily mean an immediate passage from one sector to another; e.g. there may be a gap of several years between the different courses.

multi-sectoral institutions: educational institutions comprising at least two of TAFE, schooling and higher education.

recognition of prior learning (RPL): a process whereby previous learning *outside* formal education is assessed for the purposes of entry into a course and/or the provision of advanced standing. (Note that in the National Framework for the Recognition of Training (NFROT) and TAFE the usage is similar to this glossary, except that RPL refers to the recognition of *all* prior learning, whether formal or informal in nature. There, recognition of prior learning takes the over-arching role assumed by the term ‘recognition systems’ in this report).

recognition systems: the systems used in the organisation of all forms of formal recognition of prior learning. Recognition systems incorporate articulation and alignment of courses and credentials, credit transfer and recognition of prior learning, partial or total exemption from a course, module or unit. Recognition systems are seen as broader than recognition of prior learning which is seen as referring specifically to prior *informal* learning.

transfer: refers here to transfer of skills and knowledge, not transfer of people. ‘When we use the term *transfer* in relation to knowledge, skills and attitudes we generally mean that what is learned in a previous context is either repeated in a similar context or adapted in some way to a new context’ (Misko 1995, p. 2). Note that skill and knowledge transfer are *not* automatic, and the commonly used term ‘transferable skills’ is problematic.

vocational courses: courses tailored to preparation for a particular occupation or profession.

work related generic skills: those general skills which are developed and used in a work or vocational setting. These skills may overlap with, but are not identical to, work related generic skills (see ‘generic skills’, and ‘transfer’, above).