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# **PATHWAYS FOR YOUTH IN AUSTRALIA**

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## **INTRODUCTION**

The concept of “pathways” has been a powerful organising idea in Australian education and training over the past 10 years. The imagery of the pathway, with its sense of order and structure, and linked education and training experiences that lead to employment, has had a significant impact on Australian policy.

Two related trends have been affecting young people: a rapid decline in the number of full-time jobs available to 15-19 year-olds; and increasing education participation rates among 15-24 year-olds. In this environment policy makers have used the pathways concept in pursuing two major objectives: (1) to strengthen or even create pathways that connect schooling and work for the majority of young people who neither enter university nor obtain an apprenticeship after leaving school; and, (2) to help young people navigate their way through the increasingly complex array of education and training options that are now available.

Australia has not been alone in engaging in “pathways engineering” during the 1990s. As the recent OECD comparative review of education-to-work transitions in 14 countries reported, most countries have been attempting to make the pathways by which young people move from school to work more attractive, open and flexible, and to provide more opportunities to combine vocational learning with general education (OECD, 1999). A common motivation in these policy initiatives has been the desire to better prepare young people for an increasingly uncertain economic and social future. The pace of change is so rapid that individuals need to acquire new skills and knowledge throughout their adult lives to maintain their employability and capacity to engage effectively in society – in other words, to be active lifelong learners. There is a growing recognition that a successful transition to work depends on having a sound foundation for further learning, as well as having skills that the labour market requires now.

Although many of the pathways policy initiatives adopted by OECD countries during the 1990s share similar rationales and objectives, the particular forms they have taken in each country have been greatly influenced by existing education and labour market structures and approaches to policy making. This paper attempts to provide an overview of the main features of education and training pathways in Australia and the policy challenges they give rise to.

## WHAT ARE PATHWAYS?

The term “pathways” first started to be used widely in Australia with the publication in 1991 of *Young People’s Participation in Education and Training* (the Finn Review, Australian Education Council). The report argued that the concept provided a useful mental image to explain the various combinations of education, training and employment activities which individuals may undertake over time to reach a destination such as a desired qualification or type of employment.

The imagery of the pathway had five main elements as used by Finn:

- a set of *interrelated* experiences providing for *progression*;
- education and training should have a *sense of continuity* even when individuals cross institutional and sectoral boundaries;
- young people should have access to a *range of different pathways* and should be able to move from one to another *without losing ground*;
- there is a need for effective credit transfer and articulation arrangements to provide *smooth bridges* between pathways; and
- *signposts* (information and career advice) are needed at the start of each pathway and at each junction between pathways.

Each of these elements of a coherent structure of pathways through education and training and into work has figured in various ways in the policy reforms of the 1990s. The Finn Committee’s analysis suggested that in each of the above respects the-then scope and structure of pathways in Australia was deficient. The Committee proposed wide-ranging reforms, including the greater provision of vocational learning opportunities for secondary school students, the facilitation of student movement between the school, Technical and Further Education (TAFE) and university sectors, and the establishment of national targets to help lift young people’s educational participation and attainment.

Despite the substantial reforms during the 1990s that drew in large measure on the Finn Committee’s pathways imagery, analyses and recommendations, it is perhaps fair to say that a decade later there is still considerable disquiet in Australia about the nature and functioning of the pathways open to young people. In late 1999 the federal Prime Minister established the Youth Pathways Action Plan Taskforce. The Taskforce, which is due to report in July, contains representatives of federal and state departments of education, training, social welfare and family services, employers, academics, and young people. The Taskforce is significant not only for its high-level policy origins and broad representation, but for the fact that is charged with developing a pathways action plan that encompasses not just young people’s transitions through education and into the labour market – which was the main focus of the 1991 Finn Committee – but their transition to independence, broadly defined. The final section of this paper returns to consider this broader conception of pathways, but for the moment the discussion concentrates on the concept of pathways as it is more commonly used and understood.

## ANALYSING EDUCATION AND TRAINING PATHWAYS

Although education and training pathways have become a familiar policy metaphor in most OECD countries during the 1990s, the pathways concept has proven difficult to apply and identify empirically (OECD, 1998). Most attempts have used one of two approaches:

- *By what policy makers intend.* This approach focuses on the institutional and formal opportunities that various countries have in place or are implementing. This tends to be the *forward-looking perspective* on pathways. The limitation of this approach is that the pathways may be more symbolic than real, for example the chance for an apprenticeship qualification to be recognised for university entry.
- *By what young people do.* This approach focuses on the journeys that young people make, or the itineraries they follow, which may not always coincide with the formal structures on offer. However this tends to be the *retrospective perspective* on pathways: you only know that a pathway exists once some young people have gone down it.

The need is for an approach that recognises that a “system” of pathways results from an interaction between the pathways designs and reforms of policy makers on one hand, and the decisions by young people and their families on the other. Indeed, it could be argued that the greater the emphasis of policy makers on providing flexibility and choice in education and training, the more likely it is that pathways will only become apparent after young people have made their decisions at different points.

This paper attempts to provide such an approach by discussing the major policy changes in Australia alongside a detailed analysis of an extensive longitudinal data base that maps the actual pathways followed by young Australians as they move through secondary school and into tertiary education and/or the labour market.

## PATHWAYS IN AUSTRALIA: AN OVERVIEW OF FEATURES AND ISSUES

The recent OECD cross-national review of education-to-work transition suggested that Member countries could be broadly classified into four main groups in terms of their dominant upper secondary pathways (OECD, 1999).

- *Apprenticeship* countries in which more than 50 per cent of young people participate in apprenticeship-type arrangements (e.g. Germany and Switzerland);
- *Quasi-apprenticeship* countries in which between 20 and 50 per cent participate in apprenticeship-type programs, and less than 50 per cent in general education programs (e.g. Austria, Denmark and Norway);
- *School-based vocational education* countries in which more than 50 per cent are in vocational programs, but less than 20 per cent in apprenticeships (e.g. the Czech Republic, France and the United Kingdom); and

- *General education* countries in which more than 50 per cent take part in general education programs (e.g. Australia, Japan and the USA).

The OECD analysis drew on 1996 data which indicated that at age 16 – the first year after compulsory schooling – 94 per cent of young Australians were enrolled in general education programs, and only 3 per cent were in apprenticeship-type programs and 2 per cent were enrolled in school-based vocational programs (OECD, 1999). By contrast the distribution of enrolments in Germany at around the same age was 24 per cent in general education, 24 per cent in school-based vocational education, and 52 per cent in apprenticeship-type programs. Although the report acknowledged that in Australia participation in apprenticeships tended to increase over the 16 to 19 year-old age range, such that by age 19 around 20 per cent of males are in an apprenticeship (but only about one-third that many females), and that school-based vocational programs have grown substantially since 1996, it is still fair to say that Australia and Germany provide markedly different pathways for their young people.

Although care is needed in the application of terms such as “general” and “vocational education” in different countries (e.g. “general” education in Australia is probably not as general as in many other countries) the OECD classification is useful as it suggests some of the ways in which education-to-work processes and outcomes differ in Australia from other countries. The classification also serves as a useful reminder that just because two countries are similar in terms of the distribution of enrolments by program type, it does not mean that they are alike in other aspects of the school-to-work transition. For example, both Japan and Australia have a high proportion of young people enrolled in general education programs in secondary schools, but the close relationship established between Japanese schools and local employers means that young Japanese usually experience a shorter and more direct transition from school to work than do young Australians.

McKenzie (1998) drew on the OECD review to argue that young people’s pathways through education and into work in Australia can be characterised more as *individually constructed* than as *institutionally based*. All students attend a comprehensive form of secondary school in which, until recently, there were few options open for young people who did not want to proceed to university. By contrast, the post-school education and training sector is extremely diverse, and becoming more so, with a wide range of institutions, program areas, qualifications levels, and different forms of enrolment (including part-time, modular, and off-campus).

A high proportion of full-time students hold part-time jobs, although generally not in the areas they are studying. Students do not specialise in particular curriculum areas until a relatively late age (sometimes not until reaching tertiary education at age 18 or 19), and the qualifications they obtain at different points in the education system often do not give them direct access to particular types of jobs or occupations. Rather, the emphasis is on signalling young people’s employability and trainability to employers via the level of education completed.

McKenzie argued that these arrangements in Australia stem from the fact that the interface between education and the labour market is relatively *loosely coupled* compared to the more *tightly-connected* interface that characterises countries such as Germany. In loosely coupled systems employers and trade unions play a relatively limited role in the education and training system. Labour markets in such countries tend to be organised around broad employability

attributes rather than specific occupational qualifications. The labour markets are relatively open and flexible, and subject to comparatively little government regulation.

Secondary education in loosely coupled systems like Australia tends to have a strong emphasis on general education oriented to university study, modularisation of curriculum provision and courses, and highly individualised pathways connecting education and work. Under the Australian approach, most young people acquire their vocationally-specific skills on-the-job, rather than prior to entering employment.

It is worth noting, though, that Australia provides substantial opportunities through the Technical and Further Education (TAFE) and university sectors for adults to obtain second-chance education and to build new skills. Australia has one of the highest enrolment ratios in tertiary education among OECD countries for people aged 25 years and over. In this sense, therefore, vocational education and training in Australia can be characterised as less focused on the young than in many other countries.

The Australian approach to education and training offers great flexibility to young people, especially in the tertiary education sector. However, on the downside Australian education perhaps offers less certainty for young people than in countries where there is a tighter connection between the education and labour market systems. Those who leave school early in Australia without any recognised qualifications can tend to struggle to find stable work. Because of the relatively strong emphasis on general education programs up to the end of secondary school, early school-leaving tends to be associated with a disadvantaged social background and difficulty in coping with school.

There has been increasing awareness at policy level of the need to both reduce early school leaving and to have effective safety-net measures so the problems of early school leavers in the labour market do not intensify earlier disadvantages. However, as noted later in the paper, it can be difficult to gain the necessary policy co-ordination across different levels and portfolios of government in Australia to put effective safety nets in place.

The fact that labour markets in loosely-coupled systems such as Australia are relatively open and less dependent on occupationally-linked qualifications means that young people are able to try a variety of jobs as part of the career maturation process. Because much of the employment of young people is part-time and casual in nature (including many of the jobs held by students), the early work experiences of young Australians are often episodic and fragmented.

Since the tertiary education system has a great variety of institutions and programs, and access to tertiary education can be obtained in a number of ways, there is a need for up-to-date and comprehensive information and counselling services to assist young people and their families learn about and navigate through the study and work possibilities that are now available. As discussed later in the paper, one of the current major policy concerns is how best to provide such services.

## WHICH YOUNG PEOPLE TAKE WHICH PATHWAYS?

The most detailed analytical work on which types of young people follow which types of pathways, and with what effects, has been conducted by Stephen Lamb from ACER using data from the Longitudinal Surveys of Australian Youth (LSAY) program. LSAY is a program of national longitudinal studies that is jointly managed by ACER and the federal Department of Education, Training and Youth Affairs (DETYA).

The particular study reported here followed a sample of around 2200 Year 10 secondary school students from the late 1980s for seven years until the mid-1990s (Lamb & McKenzie, in press; Lamb, in press). By that time sample members ranged in age from about 23 to 25 years. The Year 10 level in Australian secondary schools is around the time that compulsory schooling concludes, and from that point onwards young people are able to choose whether to leave to seek employment, including trying to obtain an apprenticeship or traineeship that is linked to employment, or whether to continue with their studies. The Lamb analyses show that different types of young people make different types of decisions, and that they experience markedly different pathways to employment as a result.

In broad terms, 43 per cent of the sample had obtained a university degree or at least Associate Diploma qualifications from the Technical and Further Education sector, or were studying for such qualifications in the seventh year after leaving school. The majority (57 per cent) of school leavers did not obtain such relatively high-level tertiary qualifications in the seven years after leaving school. Of this particular group 13 per cent (or around 7 per cent of the cohort overall) obtained an apprenticeship-type qualification.

Table 1 records the distribution of the cohort according a range of personal and social background factors. Those without tertiary qualifications were more likely to:

- be male (62 per cent) than female (52 per cent);
- have parents from the lowest group of socio-economic status (70 per cent) than the highest group (39 per cent);
- have parents from the educationally least qualified group (67 per cent) than parents with a university degree (33 per cent);
- be from an Australian-born (58 per cent) or other English-speaking background (61 per cent) than from a non-English-speaking background (48 per cent);
- have lived in a rural (67 per cent) than an urban (52 per cent) location;
- have attended a Government secondary school (65 per cent) than a Catholic (40 per cent) or Independent (35 per cent) secondary school;
- have a disability or other health problem that limited the work they could do (63 per cent) than no such disability (56 per cent); and
- to have left school early (92 per cent) rather than having completed Year 12 (44 per cent).

The other key influence on the likelihood of entering tertiary study is achievement at school, as measured by literacy and numeracy tests at age 14. Such data were not available for the cohort analysed in this paper. However, analyses of a younger cohort who were in Year 10 in the early 1990s show that as well as the patterns described in Table 1, young people who take the university or TAFE diploma route after leaving school are generally higher achievers in school. Nearly 60 per cent of those in the highest quartile of literacy and numeracy achievement at age 14 were studying for a university degree or TAFE diploma three years after school, or had gained the qualification, compared to only 12 per cent of those in the lowest quartile of achievers.

### **Mapping Pathways to Employment**

The longitudinal data allow a detailed mapping of young people's education, training and labour market experiences over time. In the study concerned, the data were collected annually and were based on calendar data on week-by-week experiences. These data were used to identify the young person's main activity in each of the seven post-school years. Seven broad types of activities were used in the classification; these are illustrated in Figure 1 for the first two post-school years. For example, as the model shows, while the principal activity in year 1 after leaving school may be an apprenticeship or traineeship, it is possible that in year 2 the apprenticeship may be continued or the young person may leave that for full-time employment, or become unemployed and so on. In fact, as may have been expected, the particular activity in any one year is a major determinant of the activity in the next year. Young people who are in full-time employment in year 1, for example, are more likely to be in full-time employment in year 2 than someone who is unemployed in year 1, other factors equal.

In looking at the combinations of activities across the whole seven years it is possible to identify around 500 different patterns of activity in the transition from school experienced by the 1229 sample members who did not obtain a tertiary qualification (or around 2.5 persons for each pattern of activity). Among the group of 939 sample members who did obtain a tertiary qualification, around 300 different patterns of activity were evident over the seven post-school years (or about 3 persons per pattern of activity on average). The largest number of these patterns were experienced by just one person, and many other patterns by fewer than 10 people. Only 20 per cent of the group who did not obtain tertiary qualifications (or 11 per cent of the cohort overall) were in full-time employment in each of the seven post-school years. The diverse patterns of activities evident from these data reinforce the point that young people's post-school pathways in Australia are highly individualised.

### **Those without Tertiary Qualifications**

To abstract from the mass of detailed individualised data the analysis grouped similar patterns of activity that can be viewed as pathways. For the group that did not obtain tertiary qualifications eight pathways were defined:

- (1) Those who obtained a full-time job on leaving school and remained in full-time work across the seven years.
- (2) Those who gained an apprenticeship or traineeship followed by full-time work.
- (3) School leavers who participated in full-time further study before entering full-time employment.



- (4) Young people who experienced a brief period (no more than 24 months) of unemployment, part-time work or not in the labour force, but were in full-time work for the remainder of the seven years.
- (5) Young people who experienced an extended period or periods (3 to 4 years) unemployed, in part-time work or not in the labour force, but were in full-time employment for the rest of the time.
- (6) Those who worked mainly part-time for the seven years (four years or more).
- (7) Those who were unemployed for the majority of the time (four years or more).
- (8) Young people who were mainly not in the labour force.

In terms of achieving the goal of stable employment, the first four pathways can be viewed as relatively successful transitions from school to work. They are relatively successful in that full-time employment is achieved mostly without lengthy periods of unemployment, or periods not in the labour force. The last four pathways represent less successful transitions. While one of these involves a considerable period of full-time employment (the fifth pattern), it is achieved only after an extended period of time spent unemployed, in part-time work or not in the labour force. Entry to the labour market for those who experience this pathway is marked by an extended settling-in period. The final three pathways involve even more difficulty in securing full-time work. One of these includes young people who are mainly not in the labour force for the whole period.

Figure 2 records the proportions of the whole cohort who followed these eight main pathways after leaving school. Separate charts are provided for males and females because they have different levels of educational attainment, and also because females were more likely to enter full-time work without further training, but they were also more likely to spend time neither working nor in study.

Figure 2 suggests that around three-quarters of the male school leavers without qualifications (or 46 per cent of males overall) do not experience a problematic transition to employment in that they can be classified into one of the first four pathways. The proportion of females who do not experience a problematic transition to work is lower than that for males: about 62 per cent of females who do not obtain tertiary qualifications, or 32 per cent of females overall. There are two main reasons for these marked gender differences. First, a much higher proportion of young men than young women obtain an apprenticeship are leaving school, and apprenticeship qualifications are strongly linked to employment. Second, a much higher proportion of young women spend most of the seven year period after leaving school not being in the labour force, presumably for child-rearing purposes.

In addition to the role of gender in shaping school-to-work pathways, multivariate analyses suggest that the young people whose transition from school is more problematic are disproportionately drawn from those who have low levels of achievement in school, who have left school before completing Year 12, who come from relatively low socio-economic backgrounds, or who have a disability. The concern about these findings is that difficulties in the transition from school to work appear to be compounding other disadvantages.

A particularly important finding is that the nature of the first year's experience after leaving school seems to play a key role in determining the likelihood of making a successful transition to employment (see Table 2). The longitudinal analyses showed that young people whose principal activity in the first year after leaving school was either an apprenticeship,

full-time employment, full-time study, or part-time work and study, were much more likely to experience a successful pathway over the first seven post-school years (defined as spending the majority of that time in full-time employment), than were young people whose principal activity in the first post-school year was either part-time work, being unemployed, or outside the labour force. A good early start – in the sense of being in full-time education, training or employment – seemed to be particularly important for female school leavers.

### **Those with Tertiary Qualifications**

As noted earlier, some 43 per cent of the Year 10 class from the late 1980s had either obtained a tertiary qualification (university degree or TAFE Associate Diploma and above) in the seven years after leaving school or were studying for such a qualification in their seventh year. In mapping the post-school activities of this group, and in classifying them into pathways of similar activities, a slightly different classification system was used compared to the group that had not obtained tertiary qualifications. In this instance, six main pathways were identified based on their main activity each year, which reflected the fact that few among this group experienced extended periods of unemployment or time outside the labour force over the first seven post-school years:

- (1) Those who entered tertiary study straight from school (normally after Year 12) and then went straight onto full-time employment.
- (2) Those who worked for one or two years before entering tertiary study and then full-time work.
- (3) Those who were currently studying in their seventh post-school year.
- (4) Those who combined work and part-time tertiary study.
- (5) Those who went straight from school to tertiary study and who then experienced a brief interruption (up to a year) before obtaining work.
- (6) Those who went straight from school to tertiary study and who then experienced an extended interruption (more than a year) before obtaining work.

It is noteworthy that among this group who had obtained tertiary qualifications, it is really only the last of these pathways that stands out as highly likely to have been “problematic”. This is not to say that the other pathways have necessarily led to the types of jobs that young people have wanted, but at least they are in full-time employment or studying and therefore fall outside conventional notions of young people at risk. In very general terms, tertiary qualifications serve to protect young people from labour market difficulties in Australia, and despite a very rapid growth in the number of tertiary graduates over the past 15 years, the demand for workers with those qualifications appears to have at least kept up with the increased supply.

Figure 3 records the percentages of male and female school leavers who moved along the various tertiary qualifications pathways. Overall, a higher proportion of females (48 per cent) than males (38 per cent) obtained a tertiary qualification in the seven post-school years or were studying for such a qualification in the seventh post-school year. A higher proportion of females than males also took the “classical” transition path of moving straight from school to tertiary study and then to full-time work (23 per cent and 15 per cent, respectively). In the case of both males and females, however, fewer than one-half of those with tertiary qualifications could be classified as being on this particular pathway. These proportions serve to reinforce the point that even for those with tertiary qualifications the pathways connecting

school, work and tertiary study are becoming more differentiated and probably also more complex.

Only some 2 per cent of males and 3 per cent of females from the original Year 10 cohort experienced a post-school pathway that involved tertiary qualifications and an extended period of interruption before taking up work after their studies. These proportions represented respectively 6 per cent and 7 per cent of the males and females with tertiary qualifications. Multivariate analyses indicated that those young people with a disability or those with a TAFE qualification (rather than a university degree) were more likely to experience these circumstances, other factors equal.

## **CURRENT POLICY CHALLENGES**

Over the last decade Australia has taken many significant steps to improve the education-to-work transition process in Australia. Included among these have been the development of a national framework for education and employment policy within a federal political structure, curriculum and financing changes that have helped lift education participation rates, the attempts to strengthen linkages between the education sector and enterprises, and the emphasis on providing young people with multiple pathways, including more vocationally oriented options in secondary school, and flexible delivery of education and training.

However, substantial policy challenges remain including:

- how to continue reforming upper secondary education so that it is relevant and inclusive for the whole age group, and not just those oriented to higher education;
- how to strengthen education-industry partnerships where there is limited tradition of this type of relationship;
- how to better meet the needs of the 15-20 per cent young people who are at greatest risk of not finding stable employment;
- the need to clarify the respective responsibilities of the Commonwealth, the States, and public and private institutions for policy development and program delivery; and
- how to generate employment growth – answers to transition problems have to be also found on the demand side of the youth labour market, and not just on the supply side where most of the attention seems to have been directed.

In April 1999 the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) identified a new set of national goals for schooling in Australia. Included among the goals was that:

Schooling should be socially just so that:

all students have access to the high quality education necessary to enable the completion of school education to Year 12 or its vocational equivalent and that provides clear and recognised pathways to employment and further education and training. (MCEETYA, 1999)

This statement has four significant implications for the current debate on pathways in Australia:

- that completion of Year 12 or its vocational equivalent is the minimum acceptable level for all young Australians;
- a recognition that high quality initial schooling is critical in determining the proportion of young people who reach this minimum;
- that pathways should lead to *both* employment and further education and training; and
- the pathways should be *clear* (i.e. recognisable in advance, and known about) and *recognised* (ie by those in the labour market or further education and training).

Consideration of how to respond to such challenges has recently received an impetus through the Prime Minister's establishment of the Youth Pathways Action Taskforce in late 1999. The Taskforce is attempting to develop a set of policy directions that will provide a more coherent notion of pathways for all young people, with particular attention to those for whom secondary schooling is least attractive, and who may lack access to other social support services. Interestingly, the Taskforce's terms of reference are concerned with young people's transition to independence, broadly defined, and not just to work. This orientation presumably reflects a view that, at any one time, transitions are underway in a variety of aspects of young people's lives, and that the rate and direction of transition on any one of these aspects can affect the likelihood of successful transitions on the others.

Nevertheless, it is clear that the transition to work is a central part of the Taskforce's agenda. For example, problems in finding a job can make it difficult to leave the family home, establish relationships, or participate actively in the wider society. Potential disjunctions between the transitions occurring in different parts of young people's lives reinforce the need for policies aimed at improving transition to be broadly based and comprehensive in scope.

As the analyses in this paper have shown, those who leave school early find it harder to overcome any initial poor start in the labour market, and face greater risks of exclusion in a society that requires active learning over the lifespan. Particularly important in this regard, therefore, are policies to reduce the incidence of early school leaving, improve the information and counselling available to young people and their families, to track the experiences of school leavers, and early intervention to assist those at risk in the transition process. It will be a very substantial achievement if Australia is able to develop the broad, comprehensive and integrated policies and programs that are now needed.

From an educational policy perspective, the strongest thrust needs to be preventative: improving young people's foundation skills for lifelong learning, and providing learning environments that are attractive and relevant to the great majority of the young. Experience in Australia and elsewhere shows that there is no inevitability about the number of early school leavers, and that chances for successful intervention are higher while young people are still in school. Offering a range of pathways suited to differing interests and needs at the end of compulsory education encourages a higher proportion of young people to remain in education and training. Intensive measures to help early leavers in the labour market can be all the more effective if resources are freed up by keeping their numbers low in the first place.

## REFERENCES

- Finn, B. (Chair). *Young People's Participation in Education and Training*. Melbourne: Australian Education Council.
- Lamb, S. & McKenzie, P. (in press). *Patterns of Success and Failure in the Transition from School to Work in Australia*. Melbourne: ACER.
- Lamb, S. (in press). *Pathways from 16 to 25*. Melbourne: ACER.
- McKenzie, P. (1998). *The Transition from Education to Work in Australia Compared to Selected OECD Countries*. Paper presented to the Sixth International Conference on Post-compulsory Education and Training, Griffith University, Gold Coast, Queensland.
- Ministerial Council on Education, Employment, Training and Youth Affairs. (1999). *National Goals for Australian Schooling in the Twenty-First Century*. Melbourne: MCEETYA.
- OECD. (1998). *Pathways and Participation in Vocational Education and Training*. Paris: OECD.
- OECD. (1999). *Thematic Review of the Transition from Initial Education to Working Life. Final Comparative Report*. DEELSA/ED 99(11). Paris: OECD.

**Table 1 Percentage distribution of Year 10 students in the late 1980s by whether they obtained tertiary qualifications over the seven post-school years to the mid-1990s, by selected background characteristics**

Characteristic	<u>Original sample of Year 10 students</u>			N
	No tertiary qualification or current study	Tertiary qualified or still in study	Total	
	%	%	%	
<b>Gender</b>				
Males	62	38	100	1062
Females	52	48	100	1106
<b>Socio-economic status</b>				
Lowest	70	30	100	456
Lower middle	60	40	100	658
Upper middle	47	53	100	494
Highest	39	61	100	352
<b>Parent's education</b>				
Secondary school or less	67	33	100	1234
Some postsecondary	53	47	100	362
University	33	67	100	517
<b>Ethnicity</b>				
Australian-born	58	42	100	1682
Other-English	61	40	100	157
Non-English-speaking	48	52	100	329
<b>Residence</b>				
Urban	52	48	100	1491
Rural	67	34	100	677
<b>School type</b>				
Government	65	35	100	1487
Catholic	40	60	100	439
Independent	35	65	100	242
<b>Disability</b>				
No disability	56	44	100	1979
Disability	63	37	100	189
<b>School attainment</b>				
Early school leaver	92	8	100	564
Year 12	44	56	100	1587
<b>Total</b>	<b>1229</b>	<b>939</b>		<b>2168</b>

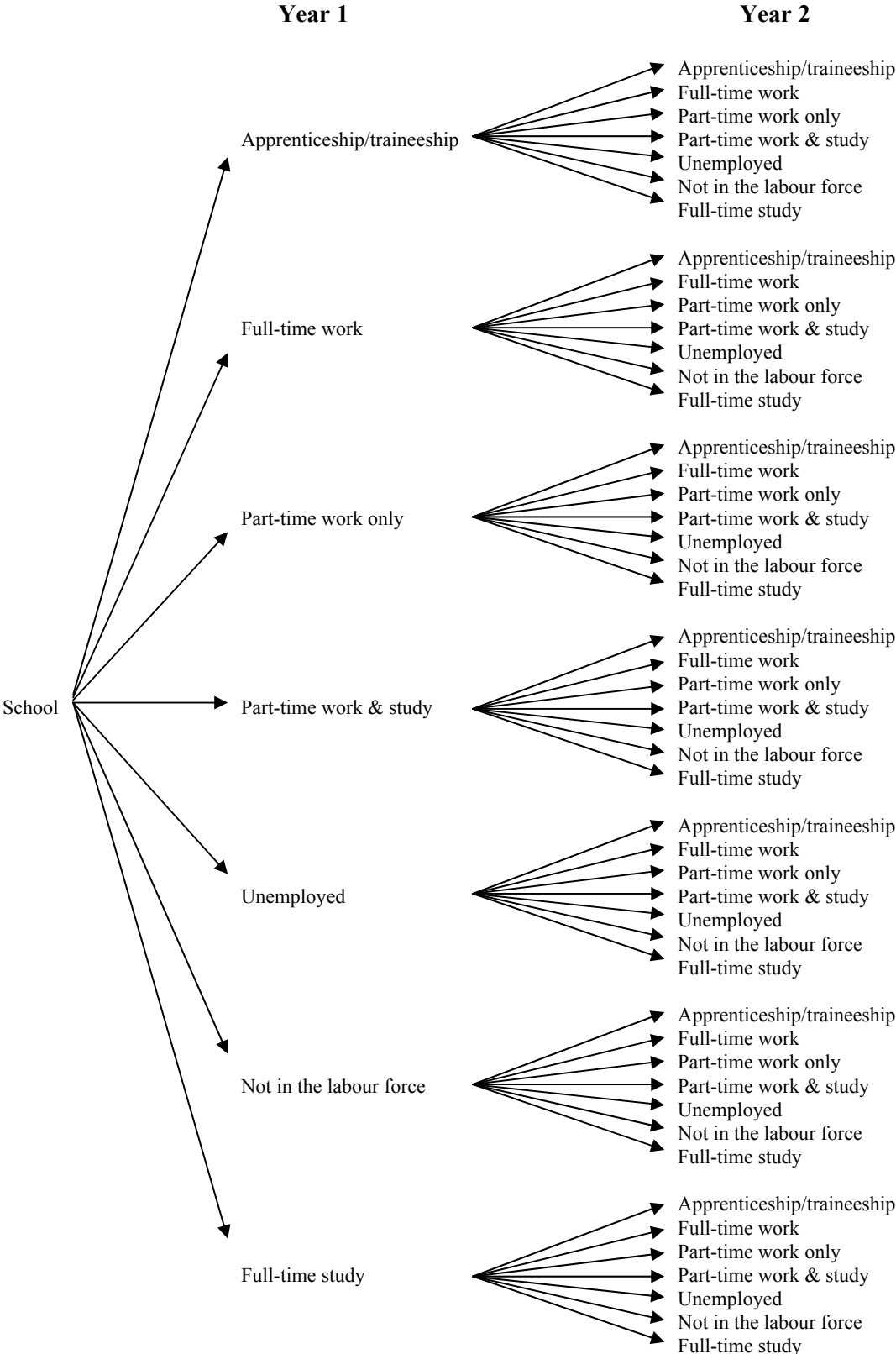
Source: Lamb & McKenzie, in press.

**Table 2** Percentage distribution into “successful” and “problematic” pathways over the first seven post-school years, for Year 10 students from the late 1980s who did not obtain tertiary qualifications, by main first year activity and gender

Main activity in first year	<u>Successful pathways</u>		<u>Problematic pathways</u>	
	Males	Females	Males	Females
Apprenticeship/traineeship	95	74	5	26
Full-time work	83	81	17	19
Full-time study	74	72	26	28
Part-time work & study	67	63	33	37
Part-time work	34	33	66	67
Unemployed	39	20	61	80
Not in the labour force	38	9	62	91
Total	75	62	25	38

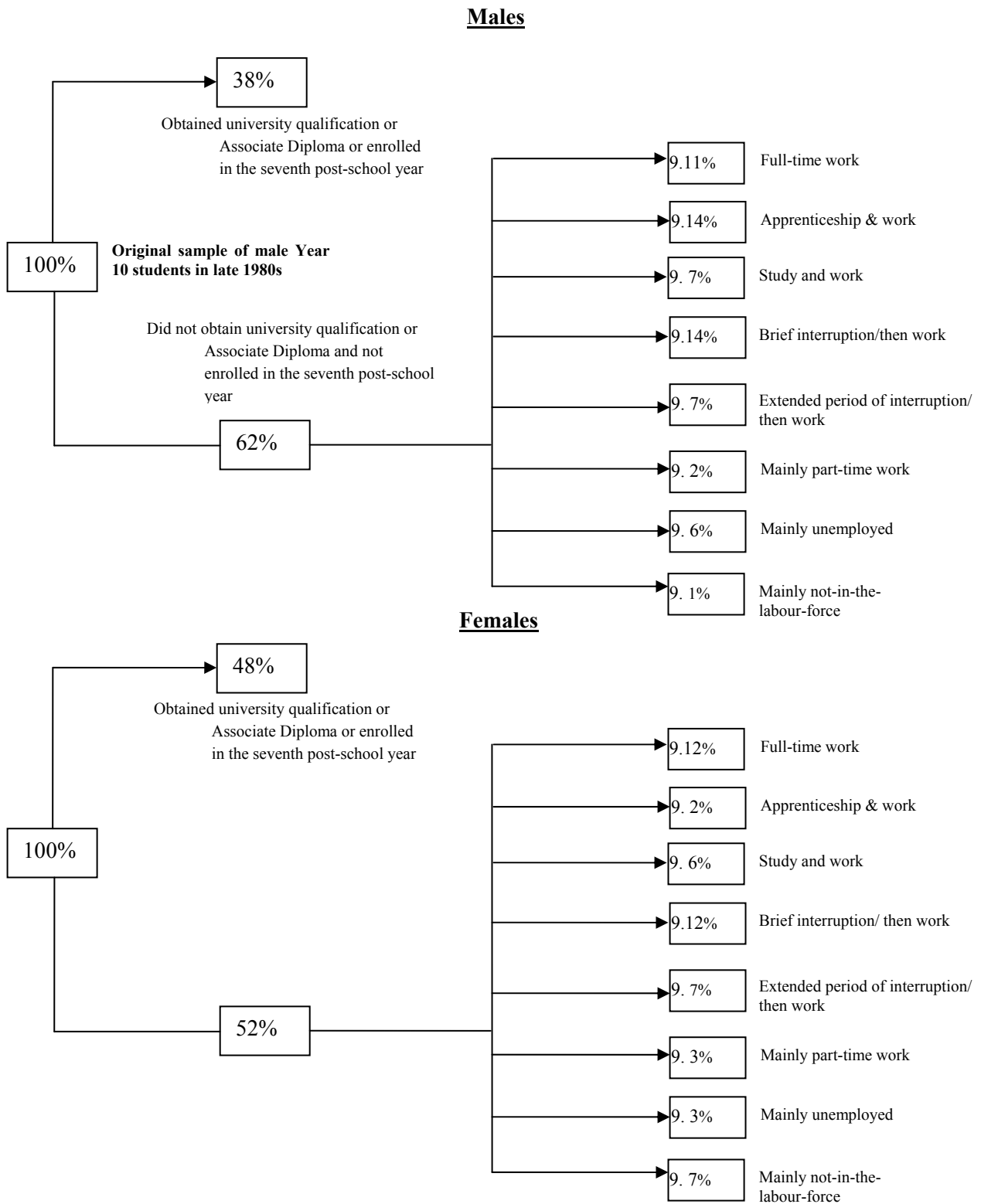
**Source:** Lamb & McKenzie, in press.

**Figure 1 Illustrative model of the possible patterns of combined activities over the first two post-school years**



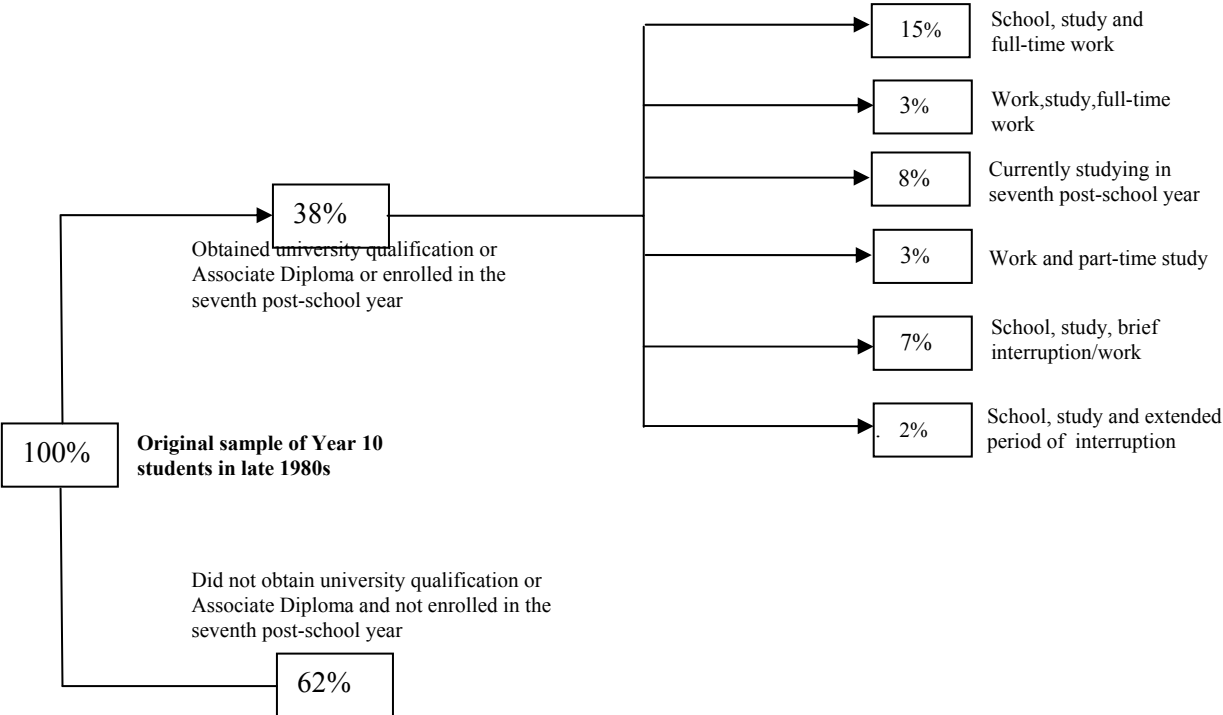


**Figure 2 Pathways of Year 10 students from the late 1980s who did not obtain tertiary qualifications over the first seven years after leaving school, by gender**



**Figure 3 Pathways of Year 10 students from the late 1980s who obtain tertiary qualifications over the first seven years after leaving school, by gender**

**Males**



**Females**

