Chapter 4
Apprenticeship, Pathways and Career Guidance: A Cautionary Tale

Richard Sweet

Apprenticeship: Policy Aspirations, Failures and Successes

> . . . It is important that every community in every State of this nation develop more school-to-work programmes. The best alternative is to craft an American version of European apprenticeships – not necessarily just like the German system, but one that blends vocational and academic education in high school, provides students meaningful work experience, and continues their training after graduation.
>
> Bill Clinton, Governor of Arkansas, *Vocational Education Journal*, October 1991.

Very few OECD countries have large apprenticeship systems for their youth. Only in Germany and Switzerland do more than half of all young people appear to enter adult employment through an apprenticeship. In Austria, Denmark, Norway and the Netherlands, somewhere between a quarter and a half of young people enter into arrangements that are referred to as apprenticeships,[1] although their characteristics are in many ways quite dissimilar.[2] In Ireland, the proportion of young people

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[1]This is based on estimates contained in OECD (2000). More recent estimates of the size of upper secondary vocational pathways (school-based plus apprenticeship) are given in Table 4.1, but the source used to compile Table 4.1 does not provide a separate and reliable estimate of the size of apprenticeship pathways.

[2]For example, in terms of duration; the balance, timing and sequencing of enterprise-based and institutional-based periods; the balance in the curriculum between general education and vocational skills; the breadth and specificity of the occupational families that are covered; regulatory arrangements; financing mechanisms; and wage rates.

R. Sweet (✉)
Sweet Group Pty Ltd., 11 Winslow St., Kirribilli, NSW, Australia 2061
e-mail: richard@sweetgroup.org

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who enter an apprenticeship seems to be slightly lower than in the latter group of countries. Most other countries get by largely without apprenticeships, or with quite small apprenticeship systems for youth, or by relying upon other ways of achieving the same objectives. And it does not seem to do them too much harm, as Martin Carnoy has pointed out in comparing economic growth over a 26-year period in countries with quite different types of vocational education systems (Carnoy 2009).

And yet despite this, apprenticeship has proven to be a seductive notion: the Rhein maiden of the policy world, luring the unwary – such as Bill Clinton – onto the hard rocks of institutional reality. The Clinton administration invested around a billion dollars in the School-to-Work Reform Act, the centrepiece of which was to be a revival of apprenticeship for youth in America. The proposal to revive youth apprenticeship followed a series of enthusiastic missions from the United States to Europe, almost exclusively to Germany, to look at apprenticeship arrangements during the 1980s and early 1990s. And yet almost nothing can be seen as a lasting outcome from this very large investment. The policymakers from the United States did not really understand what they were looking at when they went to Germany, and they failed to understand the institutional underpinnings of large apprenticeship systems for youth (OECD 1999a). Youth apprenticeships were resisted by many in the trade union movement, as they would have competed with traditional adult apprenticeships in sectors such as construction; regulated links between occupations and qualifications were scarce; arrangements for institutional co-operation between employers, governments and trade unions often did not exist; sectoral co-operation was weak; local quality assurance arrangements for training young people within firms and for linking firms with off-the-job educational institutions were commonly absent; mechanisms for fixing training wages in relation to adult wages were often absent; legal and regulatory arrangements were missing; and apprenticeship as a federal initiative often sat uneasily with the states that saw arrangements for education and training as their exclusive constitutional responsibility. Frankly, it was bound to fail.

Other countries have had similarly unsuccessful experiences when attempting to create or revive large apprenticeship systems for youth. In the early 1990s, Korea sought to imitate the German dual system of apprenticeship. The experiment failed partly because of the dominating role adopted by government and the minimal role allowed for other social partners. Another reason was the lack of a tradition of training within the workplace: training within the *chaebol*, the large enterprises that have been responsible for much of Korea's recent economic growth, is largely seen as the responsibility of special training departments. As a consequence, shop-floor supervisors, who play a vital role in successful apprenticeship systems, focused largely upon production problems and did not see the development of skills in apprentices as part of their normal role (Jeong 1995). Sweden in the late 1990s attempted to reintroduce apprenticeship after abolishing it in the early 1970s. This also failed; employers had an alternative model (mandatory unpaid work placements as part of upper secondary schooling) that they had become used to, and the initiative was targeted only upon the weakest students, rather than, as in Austria's

apprenticeship system, including them as a specially targeted and resourced focus within the mainstream programme (OECD 1999b).

These failures have not dampened the enthusiasm for apprenticeship of many policy analysts. In some influential quarters, apprenticeship is still being pulled out of the cupboard as an almost exclusive solution to many of young people's school-to-work transition problems (Quintini and Martin 2006).

Of course, there have also been some successes. One is Ireland, where high completion rates, growing participation since the mid 1990s, stakeholder satisfaction and high-quality training have been attributed to a combination of the adoption of a standards-based approach; strong social partnership between government, employers and unions; a responsive national training agency; and a responsive system for off-the-job training (Hartkamp and Rutjes 2001; Field and Dubchair 2001; O'Connor and Harvey 2001; O'Connor 2006). In Norway, a quite distinctive model of apprenticeship for young people was introduced in the mid 1990s as part of sweeping reforms to upper secondary education. Although not without its problems (Payne 2002), the reforms resulted in a very rapid growth in both youth participation and employer participation. The speed with which the reforms were accepted owes much to effective negotiations between well-organised employers, unions and government; a rational wage structure; and the creation of intermediary organisations at the local level to assist firms in training (OECD 1998). And in the Middle East and North Africa, quite small and fragile experimental systems in countries such as Syria and Egypt sit alongside a robust although moderately sized apprenticeship system in Turkey that is underpinned by extensive legislation and regulation, good institutional arrangements involving employer associations, trade unions and governments and mechanisms for co-operation between educational institutions and firms at the local level (Sweet 2009).

The institutional arrangements that help to ensure the success or failure of apprenticeship that are illustrated by the above examples are reasonably well understood: both the 'hard' factors such as legislation and regulations, training wages, financing systems and qualification and certification arrangements and the 'soft' factors such as the quality of governance arrangements and social capital at the local and sectoral levels (see, e.g. Ryan 2000). For the balance of this chapter, I will be looking at an additional set of factors that help to underpin apprenticeship: the relationship between post-compulsory pathways, including apprenticeship pathways, on the one hand, and aspirations, equity and career guidance on the other. The analysis concentrates upon countries with large or medium-sized apprenticeship systems.

Pathways: An Introduction

A pathway can be thought of as the connection between an educational programme and its destinations, mediated by a set of institutional arrangements that include qualification systems, curriculum content, labour market arrangements and information and advice systems. The concept of a pathway as an organising frame-

work for understanding young people's transitions was first elaborated by Raffe (1994) and has since been developed by the OECD (2000) and in other work by Raffe (1998, 2003). It was a central organising concept both for the OECD's work on vocational education conducted in the mid 1990s and for its thematic review of transition that was published in 2000. The concept of a pathway has been highly influential. Many OECD countries have devoted a great deal of effort in recent years to changing and attempting to improve pathways between the end of compulsory education and the work force, for example, by introducing new qualifications, reforming qualification systems and attempting to improve articulation and transfer between different pathways. An example is Switzerland's creation of the *maturité professionelle* that helps to open up a pathway from apprenticeship to tertiary education.

It is by now fairly standard to distinguish between three principal post-compulsory pathways: general education, apprenticeship type and school-based vocational (Raffe 2008). In many countries, these different pathways are associated with different institutional arrangements (e.g. gymnasia and vocational colleges) as well as with different education and training qualifications. Pathways can also be thought of in terms of the tightness of their link to later destinations (McKenzie 2002). *Tightly coupled* pathways such as Austria's general education programmes contain a relatively small share of the cohort, and nearly all graduates proceed to higher education. On the other hand, more *loosely connected* pathways such as Australia's upper secondary general education programmes contain a large share of the cohort, and graduates are more widely spread across higher education, vocational education and the labour market.

Pathways sit within wider institutional arrangements for the transition and cannot always compensate for their weaknesses. As an example, Polesel (2006) points out that while many of the features of Italy's upper secondary vocational education pathways are attractive, overall transition outcomes in that country are poor. He highlights poor quality teaching and learning and low achievement levels as significant factors. Also relevant here are unfavourable institutional arrangements in the Italian labour market, with high levels of employment protection, few opportunities for students to combine education with paid employment, few structured training opportunities and poor institutional co-operation between the social partners.

The relative size of post-compulsory pathways is a joint outcome of the aspirations and choices of young people, of the decisions of policy makers and of the differential rewards that pathways lead to as a result of wage fixation arrangements and other forms of labour market regulation. Their attractiveness and size can change over time as the result of all of these factors. Table 4.1 illustrates this by showing changes between 1998 and 2006 in the proportion of upper secondary students in vocational education (as opposed to general education) programmes in 25 OECD countries. Finland, Ireland, Norway and Spain are examples of countries in which vocational pathways have been growing. In Hungary, Korea and Poland, they have been declining sharply and have declined slightly in Denmark and Germany. Austria, the Netherlands and Switzerland are among the countries in which there has been little apparent change.

Table 4.1 Enrolments in vocational programmes as a share of all upper secondary enrolments, 1998–2006 (%)

	1998	1999	2001	2002	2003	2004	2005	2006
Austria	77.5	77.9	78.6	79.0	79.2	78.6	78.5	77.9
Belgium	69.0	65.7	69.2	69.7	70.3	68.2	69.6	69.4
Czech Rep.	80.0	80.2	80.7	80.4	79.5	79.4	79.5	79.3
Denmark	51.8	53.3	54.6	53.0	53.6	46.8	47.9	47.8
Finland	52.0	53.2	56.7	57.2	58.8	60.1	63.9	65.4
France	56.4	57.2	56.7	56.3	56.4	56.5	56.4	43.1
Germany	64.6	64.6	63.3	63.0	62.2	61.2	60.3	59.4
Greece	32.6	25.8	35.2	40.0	36.0	34.0	36.0	33.9
Hungary	67.4	65.5	50.2	49.7	49.8	23.7	24.1	23.7
Iceland	33.2	32.8	36.4	38.3	35.1	38.5	36.8	36.7
Ireland	17.3	20.6	25.8	27.3	28.3	33.5	34.3	33.4
Italy	64.8	64.7	64.3	64.8	63.8	62.8	61.5	60.5
Japan	26.8	26.4	25.9	25.7	25.5	24.6	24.7	24.6
Korea	40.0	37.9	34.1	32.1	30.7	29.5	28.5	27.8
Luxemb.	68.0	63.7	63.8	64.0	64.7	63.9	63.4	62.9
Mexico	14.4	14.0	12.2	11.4	10.9	10.5	10.2	9.8
Netherl.s	66.0	66.6	69.9	69.2	69.1	69.1	68.2	67.5
Norway	52.5	53.6	57.6	58.0	59.2	60.5	60.8	60.0
Poland	67.6	66.1	62.1	60.9	54.3	49.5	45.0	44.0
Portugal	25.4	25.0	28.3	28.8	28.5	28.5	31.0	31.5
Slovak Rep.	m	79.6	77.6	76.4	75.4	74.1	74.2	73.7
Spain	21.5	31.2	35.6	38.0	37.2	38.7	42.6	42.5
Sweden	40.6	50.1	51.7	49.6	52.9	53.4	53.6	55.1
Switzerl.	65.7	65.4	65.0	64.6	65.0	64.8	64.7	64.2
Turkey	m	48.6	39.7	39.4	38.0	37.3	42.2	36.3

Source: OECD *Education at a Glance*, various issues, *m* missing

Pathways, Aspirations and Equity

Different types of pathways contain different types of students. This is a result both of students' choices and of the operation of streaming, for example, through allocation to programmes by educational attainment or achievement or as a result of advice and guidance whether from family, friends, teachers or career guidance. Almost universally, general education pathways that lead to higher education contain higher-achieving students from more privileged family backgrounds, and they lead to jobs that carry higher economic rewards. The OECD's PISA data (OECD 2008a) shows that in all countries for which this type of data is available, those young people who enter vocational pathways have on average a lower socio-economic status level and lower achievement levels than those who enter general tracks. Furthermore, it clearly shows that where countries segment these vocational education programmes into different pathways, lower level programmes on average contain more of those from lower socio-economic status backgrounds and more with lower achievement scores than do the higher level programmes. After taking

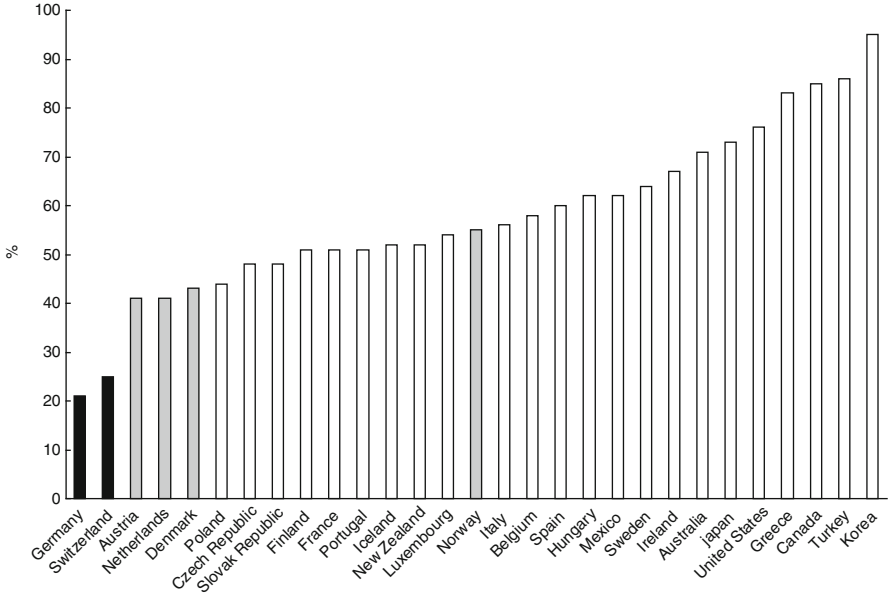

Fig. 4.1 15-year-olds aspiring to at least some form of tertiary education, 2003 (%) (Source: PISA 2003 database, special tabulation)

these factors into account, Ryan (1998), in a now classic paper on apprenticeship returns, suggests that there is not much basis for favouring apprenticeship over school-based vocational pathways when considering their outcomes, although there are some country-specific exceptions. In a later paper, he argues that there is limited evidence favouring better outcomes from vocational pathways than from general pathways (Ryan 2003).

The size and character of pathways are shaped both by policymakers' decisions and by young people and their parents' aspirations and choices. But aspirations can in turn be shaped by policy instruments such as streaming mechanisms and limitations on choice by restrictions on places and resources, as well as by the ways in which information and advice open up or constrain opportunities. Figure 4.1 shows the proportion of 15-year-olds who aspired to some form of tertiary education in OECD countries in 2003.

National differences in young people aspirations are very large indeed, and the pattern of these differences suggests that the size and nature of dominant national post-compulsory pathways has something to do with this. In Germany and Switzerland, the two OECD countries that have the largest apprenticeship systems for youth, only around one in five to one in four of all 15-year-olds expect to achieve a tertiary qualification. And in Austria, the Netherlands and Denmark, which have moderately large apprenticeship systems, the proportion of 15-year-olds aspiring to tertiary education is also relatively low. On the other hand, high levels of aspiration for tertiary study are found in countries such as Korea, Japan, Canada and the United States where upper secondary vocational pathways are quite small. In no country

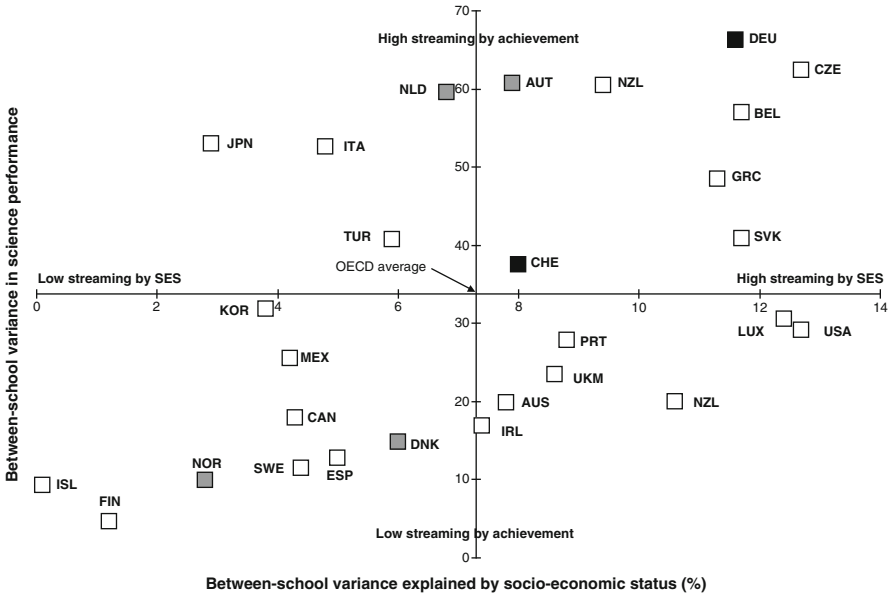

Fig. 4.2 Streaming of 15-year-olds by achievement and socio-economic status, 2006 (Annex shows the country codes used in Figs. 4.2, 4.3, and 4.4) (Source: OECD (2008b), Table 4.1a)

with a substantial apprenticeship system do more than three-quarters of all 15-year-olds aspire to enter tertiary education, and generally, this figure is half or less.

Differences in countries' characteristic post-compulsory pathways are also related to national differences in equity structures. This can be illustrated using two sets of data. Drawing upon PISA 2006 data on science achievement, Fig. 4.2 shows the extent to which 15-year-olds in OECD countries are streamed into schools by achievement level and by socio-economic status. The Y axis shows the level of between-school (as opposed to within-school) variation in science performance. This is an indication of the extent to which high and low achievers are clustered in different schools. The X axis shows the proportion of the between-school variance in performance that can be explained by an index of family socio-economic status. This is an indication of the extent to which students from wealthy and poor backgrounds are clustered in different schools.

Germany and Switzerland, both of which have large apprenticeship pathways, and Austria, which has a medium-sized apprenticeship pathway, each fall in the quadrant characterised by a school system in which streaming is high both by achievement level and by family socio-economic status. In the Netherlands, which like Austria has a medium-sized apprenticeship system, streaming is high by achievement, but not as strong by socio-economic status. On the other hand in Norway and Denmark, which have medium-sized apprenticeship systems, streaming is low both by achievement and by socio-economic status.

Figures 4.3 and 4.4 show a more direct relationship between equity and the size of post-compulsory pathways. Figure 4.3 shows the relationship between the

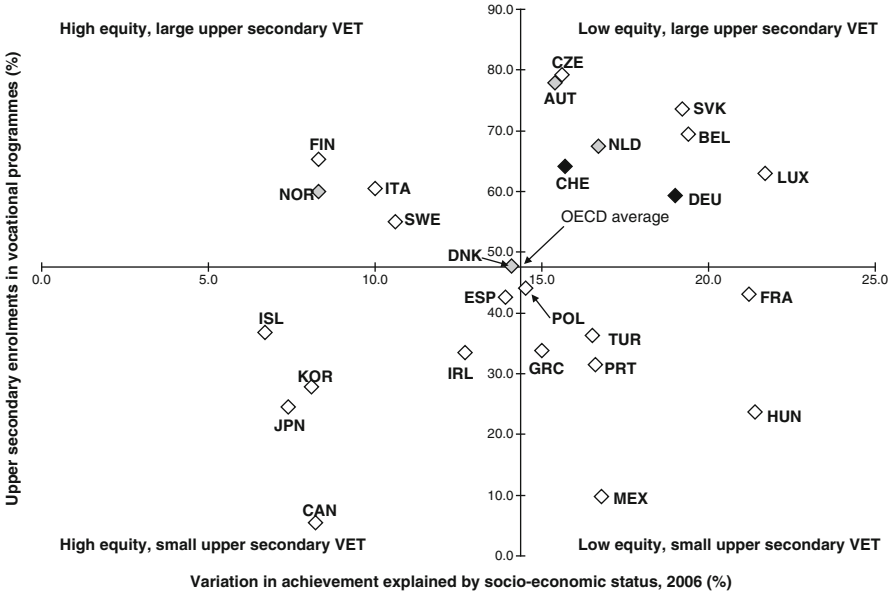

Fig. 4.3 Equity and the size of upper secondary vocational pathways, 2006 (Annex shows the country codes used in Figs. 4.1 and 4.2) (Sources: OECD PISA 2006 database and *Education at a Glance* 2008)

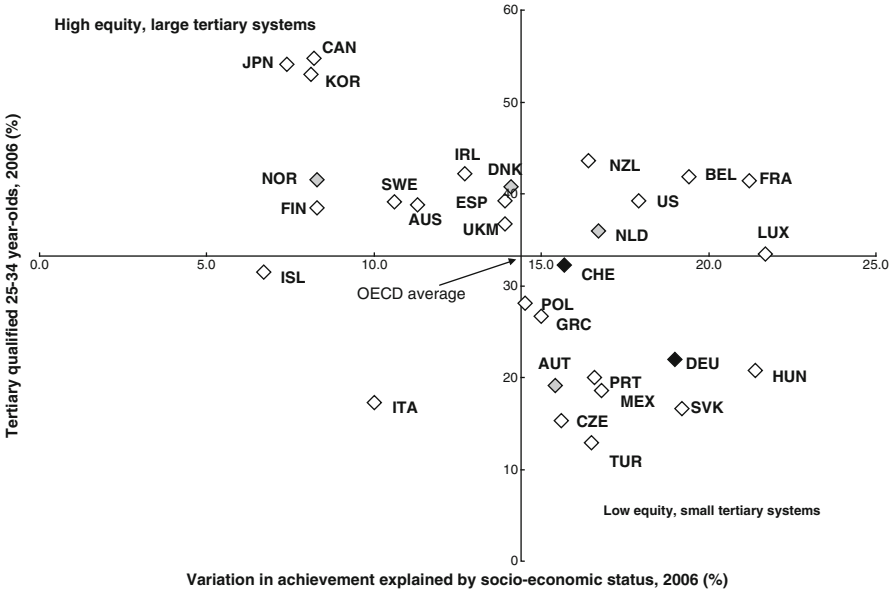

Fig. 4.4 Equity and the size of tertiary pathways, 2006 (Sources: OECD PISA 2006 database and *Education at a Glance* 2008)

proportion of upper secondary students who are in vocational programmes and the proportion of the variance in student achievement on the PISA 2006 science scale that can be explained by an index of family socio-economic status. The top right-hand quadrant shows a group of countries in which equity is low, with family economic resources having a high impact upon performance and where vocational pathways are large. This group includes Germany, Switzerland, Austria and the Netherlands. The countries in this quadrant also tend to be characterised by quite early streaming within the education system.

The top left-hand quadrant contains a group of countries such as Finland, Norway and Sweden in which vocational pathways are also relatively large but in which the impact of family background or socio-economic status upon achievement is much lower. All are countries in which the first point of tracking within the school system occurs at a later age – generally 16 – than is generally the case in countries in the top right quadrant. In the countries in the bottom left-hand quadrant, family background has a low impact upon achievement, and vocational pathways include relatively few youth. Among them are Canada, Japan, Korea and Iceland.

Figure 4.4 relates the same equity indicator used in Figs. 4.2 and 4.3 to the proportion of 25–34-year-olds who have attained a tertiary qualification. It gives a similar message: countries with small tertiary education systems tend to be those where vocational pathways, including both apprenticeship pathways and school-based vocational pathways, are large, where early class- and ability-based differentiation occurs within the school system and where equity is low. The largest tertiary systems tend to be found in countries where equity is high.

Career Guidance and Pathways

The OECD (2000) has identified career guidance as one of the key features of effective transition systems. As implied in the above discussion, it is one of the institutional factors that can help to determine the character, quality and effectiveness of post-compulsory pathways. International interest in the link between career guidance and public policy objectives – particularly those that relate to lifelong learning, active labour market policies and equity – has been growing rapidly in recent years, largely as an outcome of major reviews of national career guidance policies conducted by the OECD, agencies of the European Union and the World Bank (OECD 2004; Sultana 2004; Watts and Fretwell 2004). One consequence of this rising interest by policy makers has been an improvement in the evidence base that can help us to understand how career guidance relates to public policy objectives. Much of this evidence has been qualitative and descriptive in nature. However, quantitative data is increasingly becoming available, and it is available in data sets that allow career guidance questions to be related to variables such as student achievement and socio-economic status that are important for policy purposes. In my own country, for example, items relating to career guidance have been included in the surveys developed for the major Australian longitudinal

studies of youth in transition (Rothman and Hillman 2008). At the international level, the inclusion of items referring to career guidance in the PISA 2006 school questionnaire has provided an opportunity to gain a comparative perspective on career guidance issues.[3]

The data on career guidance provided by PISA 2006 does have limitations, and it is important to be realistic about these. Career guidance was not defined in the school questionnaire and so could encompass widely different programmes and activities; it was gathered from school principals rather than from students themselves and therefore cannot say anything about variation in access and provision within schools,[4] and it has been gathered from 15-year-olds and thus cannot say anything about career guidance provision in the post-compulsory years.[5] Nevertheless it is a substantial improvement on the quality and availability of comparative career guidance data that had existed previously, and it has the potential to greatly increase our understanding of comparative issues in career guidance provision.

Here, the main question of interest is whether the existence of a large or medium-sized national apprenticeship pathway seems to be related to:

- Whether or not career guidance is provided
- Who is more likely to be provided with career guidance
- How career guidance is provided

Provision Levels

Figure 4.5 shows the proportion of schools in which career guidance is formally scheduled into students' time rather than being voluntary. There does not appear to be a systematic relationship between this and the existence of substantial apprenticeship systems. Nor does it seem to be systematically related to the size of countries' post-compulsory vocational education pathway. In Austria and Germany, only around half of all schools formally schedule career guidance, which is relatively low compared to other OECD countries. On the other hand in Denmark, Norway and the Netherlands, 80% or more of schools make career guidance compulsory, as do around 70% of schools in Switzerland.

[3]Question 23 asks about participation in job fairs, lectures by business representatives and visits to local businesses; Question 28 asks who is responsible for career guidance in the school (e.g. all teachers or specific career guidance counsellors); and Question 29 asks whether career guidance is voluntary or formally scheduled into students' time at school.

[4]This is likely to be a greater limitation in countries such as Denmark where between-school variation in achievement is small than in countries such as Germany where between-school variation in performance is large.

[5]This will be a greater limitation in countries where schooling does not start to become differentiated until the age of 16 or later than in countries such as Germany and Austria where differentiation begins at an early age.

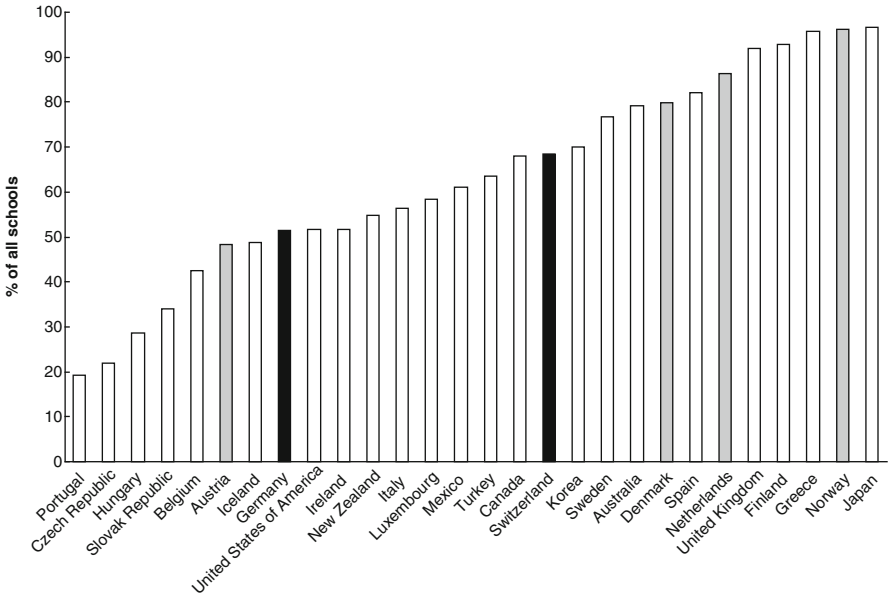

Fig. 4.5 Schools in which career guidance is compulsory, 2006 (%) (Source: PISA 2006 database)

Who Is More Likely to Be Provided with Career Guidance?

Although it is not possible to use PISA data to look at levels of career guidance provision within schools, it is possible to look at some of the characteristics of schools in which career guidance is compulsory rather than voluntary. Given the previous discussion of pathways, two key school characteristics that are assessed in PISA are relevant. These are the average achievement level of a school's students and the extent to which teachers in the school concentrate upon developing in students the knowledge and skills that will help them in tertiary education. Schools in which the average achievement level of students is low are likely to be those in which students who enter vocational pathways are concentrated; schools in which teachers see tertiary-related knowledge and skills as focal to their work rather than incidental are likely to be those in which students in or headed for general education pathways are concentrated.

Both sets of data suggest that in countries with large apprenticeship systems, career guidance for 15-year-olds is more heavily focused upon low achievers likely to enter vocational pathways than it is upon high achievers likely to enter general education tracks. In Switzerland, Germany and Austria, the average achievement level of students in schools where career guidance is compulsory is substantially lower than in schools where it is voluntary (Fig. 4.6). In Switzerland, Austria and Germany, career guidance is more likely to be provided when teachers' focus upon tertiary knowledge and skills is incidental and less likely to be provided when these are a central focus of their work (Fig. 4.7). In Denmark and Norway, however, career

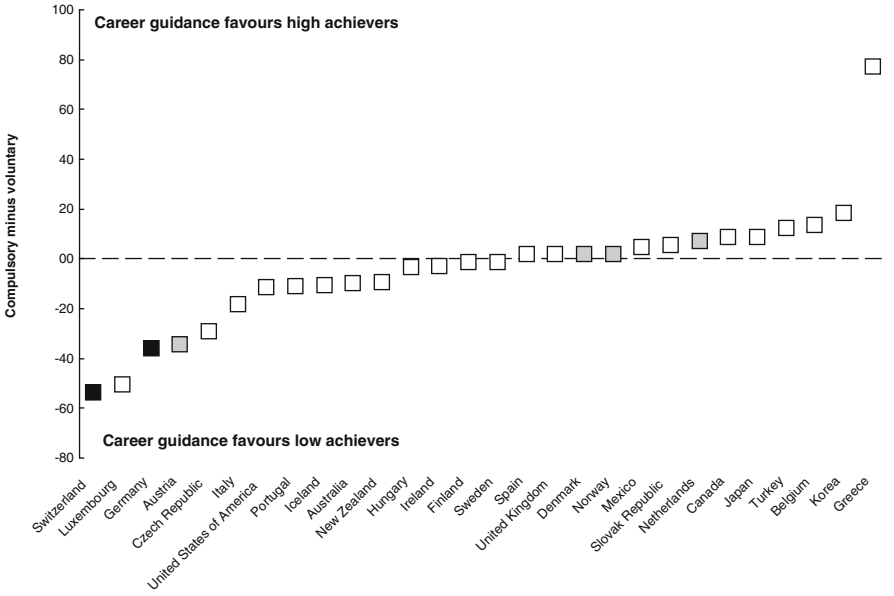

Fig. 4.6 Difference between mean science achievement scores in schools where career guidance is compulsory and schools where it is voluntary (Source: PISA 2006 database)

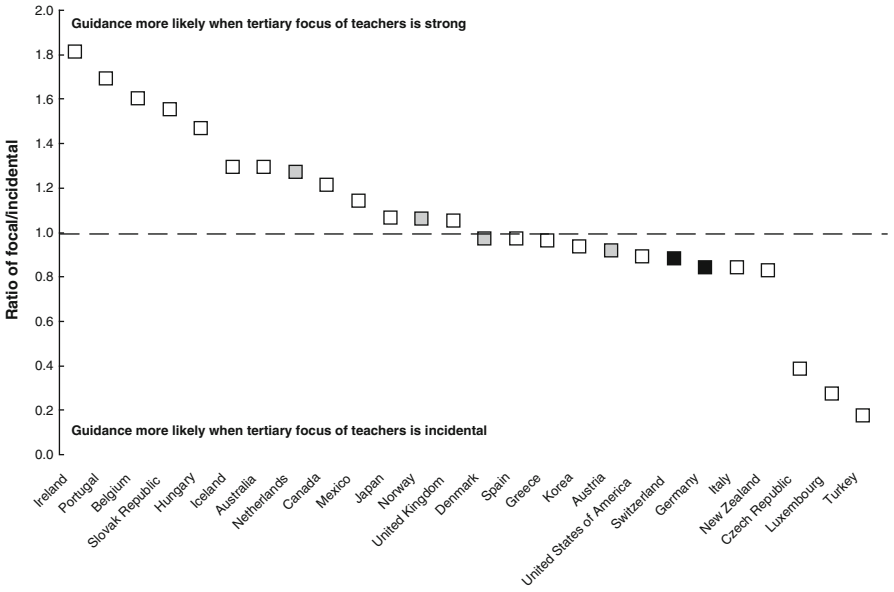

Fig. 4.7 Teachers' tertiary focus and career guidance provision (Source: PISA 2006 database)

guidance provision is more likely to be neutral with respect to both the average achievement level of students or teachers' concentration upon tertiary knowledge and skills.

How Is Career Guidance Provided?

International reviews (see, e.g. OECD 2004) indicate that where career guidance is infused throughout the curriculum and made the responsibility of all teachers rather than being provided by specialist staff, whether teachers or career guidance counsellors, provision can be patchy, that at times this model can be adopted to suit teachers rather than student needs (as in Austria) and that it requires strong leadership and coordination if it is to work. The provision of career guidance by external specialist career counsellors can risk guidance being disconnected from the curriculum but brings as a strength an increased connection to the realities of the labour market. External services also have the advantage of being more likely to be impartial and independent of the self-interest of the school. International reviews also indicate that best practice in career guidance for youth is characterised by the involvement of people external to the school such as employers and by the provision of opportunities for experiential learning, either inside or outside of the school. Each of these aspects of career guidance provision can be examined using PISA 2006 data.

Table 4.2 shows the proportion of schools that report that career guidance is either not provided or provided by all teachers, provided by specific teachers or specific career guidance counsellors employed by the school or provided by visiting career guidance counsellors. It shows that in Austria and Switzerland, career guidance is more likely than in many other OECD countries either not to be provided or to be provided by all teachers, but that this is not the case in other countries with large or reasonably large apprenticeship systems. In both Switzerland and Germany, specific teachers or counsellors are less likely to be employed to provide career guidance, and in Denmark and Austria somewhat less so. In Switzerland, Germany and Denmark, career guidance is substantially more likely than in most other countries to be provided by an external service.

The PISA 2006 school questionnaire contains three items that examine the extent to which people external to the school and experiential learning are part of schools' careers work. These are the frequency[6] of student participation as a normal part of schooling in job fairs, lectures at school by business or industry representatives and visits to local businesses or industries. Using these items, a composite index has been constructed with a range from zero (which would represent no external or experiential involvement) to 100 (which would represent all students participating

[6]On a scale of Never, Once a year and More than once a year.

Table 4.2 Responsibility for providing guidance (per cent of all schools), 2006

	No guidance is provided or all teachers are responsible	Specific school teachers or counselors are employed	Visiting counselors provide it
Australia	2.8	92.5	0.8
Austria	35.8	57.2	a
Belgium	65.4	19.1	9.5
Canada	8.1	80.5	2.4
Czech Rep.	5.7	88.8	2.3
Denmark	1.0	51.5	45.7
Finland	0.0	97.8	m
Germany	8.0	43.7	27.2
Greece	47.6	46.0	3.4
Hungary	50.2	43.5	1.8
Iceland	9.5	81.6	4.4
Ireland	3.6	91.4	a
Italy	43.3	51.0	0.8
Japan	37.7	61.5	m
Korea	70.9	22.6	3.8
Luxembourg	15.6	77.7	a
Mexico	45.6	45.0	1.2
Netherlands	9.1	73.4	8.9
New Zealand	3.1	90.4	m
Norway	3.6	92.9	0.2
Portugal	9.7	80.1	7.8
Slovak Rep.	15.1	84.4	a
Spain	4.6	90.4	0.4
Sweden	1.3	88.8	8.4
Switzerland	32.9	35.4	15.3
United Kingdom	1.3	50.1	40.7
United States	17.1	76.4	1.3

Source: PISA 2006 database *m* missing, *a* values contained in another cell

in each type of activity more than once a year). This index is shown in Fig. 4.8. Although a strong external and experiential focus in school careers guidance programmes is not exclusive to countries that have strong apprenticeship pathways, it does seem as if this is characteristic of nearly all such countries.

Discussion

Part of the rationale for career guidance as a publicly funded activity rests upon the role that impartial information and advice can play in helping to ensure that people make decisions that maximise the ways in which talent is allocated in society. It also

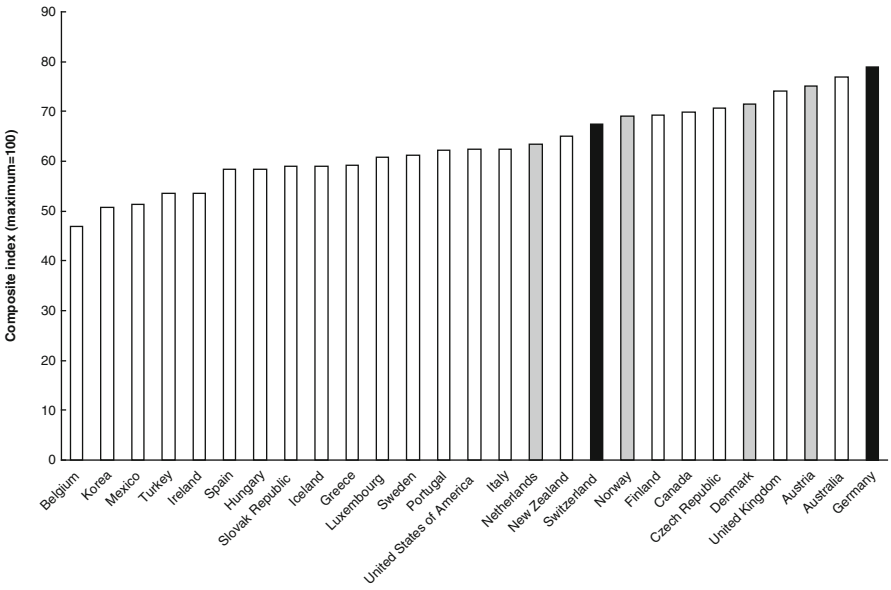

Fig. 4.8 External and experiential focus of schools' careers programme (Source: PISA 2006 database)

rests upon the importance on equity grounds of ensuring that the disadvantaged, those who are information poor and those who lack social capital in the form of networks and contacts, can receive advice, information and guidance that will open up opportunities that otherwise might be constrained by social background (OECD 2004). The dominant ideologies of career guidance practitioners also support practices based upon self-actualisation and the maximisation of potential rather than social control and support for existing inequalities (Watts 1996). On both grounds, career guidance which is relatively neutral with respect to post-compulsory pathways would be expected.

The large apprenticeship systems of Germany and Switzerland are underpinned by streaming at an early age into tracks that lead to large vocational education pathways and small tertiary education pathways. This streaming is strongly based upon achievement and social class and results in a very small proportion of young people, compared to other OECD countries, aspiring to tertiary study by the age of 15. On the other hand, the somewhat smaller apprenticeship systems of Denmark and Norway are built upon school systems that remain relatively undifferentiated, whether by achievement, social class or eventual pathway, until the age of 16. They are associated with somewhat higher tertiary aspirations by young people, somewhat smaller post-compulsory vocational pathways and somewhat larger tertiary pathways. These differences can be shown to be associated with higher rates of intergenerational mobility in Denmark and Norway than in Germany

(Blanden et al. 2005). Austria and the Netherlands, whose apprenticeship systems are roughly comparable in size to that of Denmark, tend to fall somewhere between these extremes.

There appears to be no systematic relationship between the size either of national post-compulsory pathways or the size of apprenticeship pathways on the one hand and the extent to which 15-year-olds receive career guidance on the other. However, the character of career guidance does seem somewhat different in countries that have large or medium-sized apprenticeship systems, with a somewhat stronger emphasis upon external support, experiential learning and labour market relevance.

Furthermore, career guidance provision does seem to differ in its targeting and in its character as a function of the relationship between equity and post-compulsory pathways, although the extent of these differences should not be exaggerated. In Switzerland, Germany and Austria, career guidance at the age of 15 appears to be far more heavily focused upon low achievers than is the case in other OECD countries. This can also be observed in Luxembourg and the Czech Republic, which are also characterised by large vocational education systems, early differentiation within the school system and strong inverse relationships between equity and vocational pathways. On the other hand in Denmark and Norway, differences in career guidance provision at the age of 15 as a function of the achievement level or tertiary orientation of the school are not apparent.[7]

These differences raise questions about whether career guidance is a necessary or simply an incidental underpinning of the relationship that exists in these countries between pathways and equity and of the role that it might play in shaping rather than widening aspirations.

Annex: Country Codes Used in Figures

Code	Country	Code	Country	Code	Country
AUS	Australia	FRA	France	NLD	Netherlands
AUT	Austria	GRC	Greece	NOR	Norway
BEL	Belgium	HUN	Hungary	NZL	New Zealand
CAN	Canada	IRE	Ireland	POL	Poland
CHE	Switzerland	ISL	Iceland	PRT	Portugal
CZE	Czech Rep.	ITA	Italy	SVK	Slovak Rep.
DEU	Germany	JPN	Japan	SWE	Sweden
DNK	Denmark	KOR	Korea	TUR	Turkey
ESP	Spain	LUX	Luxembourg	UKM	United Kingdom
FIN	Finland	MEX	Mexico		

[7] This does not, of course, preclude differences in provision existing within schools.

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