Cross-National Research on School to Work Transitions: An Analytical Framework

Damian F. Hannan (ESRI), David Raffe (University of Edinburgh) and Emer Smyth (ESRI)

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1. Introduction

In this paper, we review the main comparative research papers on school to work transition processes by European researchers in recent years. Transition processes are viewed in a broad sense, covering those leaving second-level schools and third-level institutions, though we focus mainly on the former. The primary focus of the paper is on those papers presented at the workshops run by the European Science Foundation's Network 'Transitions in Youth', which took place in 1993, 1994 and 1995. However, our account also draws on other published sources, both European and international, in this area.

The objectives of this paper are as follows:

- (i) To identify the important dimensions of variation among education/training (ET) systems and their national contexts, which may be hypothesised to influence the success of transitions;
- (ii) To develop a conceptual framework which adequately represents inter-country variations in the nature of the school to work transition process;
- (iii) To analyse the approaches to the conceptualisation and measurement of 'success' in transitions taken in cross-national studies;
- (iv) To summarise the main conclusions on factors affecting 'success' in school to work transitions, with particular reference to variation according to the education/ training system and its national context;
- (v) To derive working hypotheses about the likely commonalities or differences in the transition process and in the factors influencing success or failure in such transitions;
- (vi) To identify the main conceptual, methodological and data issues raised by the cross-national studies.

The remainder of this paper is divided into four sections. Section two outlines the central elements of a conceptual framework for analysing cross-national variation in school to work transitions. Section three outlines the approaches taken by cross-national studies of transitions, focusing on the conceptualisation and measurement of 'success' used in these studies. Section four incorporates the findings of transitions research into the conceptual framework developed in section two in order to suggest a typology of ET systems and their linkages with the labour market. This typology is used to derive the working hypotheses outlined in section five.

2. Elements of a Conceptual Framework

The conceptual framework outlined below is derived from a number of sources. Firstly, our review of crossnational research on school to work transitions clearly indicates a number of important dimensions. Secondly, the groundwork for our perspective was laid by research from a 'societal' perspective (see Maurice, Sellier and Silvestre 1986; Wilkinson, 1983; Rubery, 1994). Thirdly, the framework builds upon earlier (1995) work by the authors and others undertaken as part of a proposal to the Targeted Socio-Economic Research Programme (TSER) of DGXII (see also Raffe, 1993).

There are four general dimensions of a conceptual framework for school to work transitions that need to be taken into account in cross-national studies: the national context; the nature of the education/training system in each country and its interconnection with the labour market, as well as state policies influencing these processes; the structure of the school to work transition process itself; and the outcomes of the transition process - 'success' and 'failure' in transitions, and variations among groups of young people in the outcomes achieved.

I. Context

Countries vary significantly from each other in their economic, socio-demographic and institutional characteristics. Since institutional arrangements for education and training are firmly embedded in particular national contexts, one of the most difficult tasks in comparative research is to separate out the impact of particular ET policies and systems on youth transitions from the influence of (changes in) other contextual factors. The main dimensions of national context that need to be considered are:

• *Demographic factors*: Countries differ in the age structure of their populations and the relative size of the youth cohort. These factors are likely to influence the ease of entry into the labour market and further/ higher education. In addition, the nature and resources of the family system may affect the ability of parents to support young people through more prolonged transition periods. The influence of demographic factors is partly contingent on the extent and nature of structural shifts in the economy. In countries such as Ireland, a very late 'demographic transition', coinciding with a rapid decline in traditional industries and the growth of new sectors, resulted in substantial changes in the distribution of employment and unemployment.

• *The production system*: Countries vary in the structure and organisation of their production systems. Soskice (1993a, 1993b) argues that in liberal-market economies, such as the US, the UK and parts of southern Europe, the institutional arrangements do not support the long-term relationships necessary for company-based initial vocational training. Such arrangements are present in industry-coordinated economies such as Germany and much of northern Europe. They are also present in group-coordinated economies such as Japan, although in this case the skills generated are not transferable across enterprises. The implication of this analysis is that the effect of company-based transition measures, such as work experience or training schemes, will vary according to the type of economy. All aspects of a country's production, consumption and social reproduction systems are interrelated (Rubery, 1994), which limits the extent to which 'successful solutions' in one system can be transferred to another system. In addition, the nature of the production system varies over time. It is particularly important, for instance, to take account of a country's stage of economic development and the timing of its integration into a changing world economy. 'Peripheral' countries, with late and dependent industrialisation, will differ significantly from 'core', mature industrialised countries in the nature of the economy and its linkages with other institutions.

• Labour market structures: Countries differ from each other in the segmentation of the labour market, in particular, the extent to which there is a separate youth labour market, and the relative importance of occupational and internal labour markets. Occupational labour markets (OLMs) refer to labour market sectors where jobs are clearly defined in terms of content and have high levels of consistency across firms and/or industries. Workers in OLMs have educational qualifications or skills that are transferable from one employer to another (see Edwards, 1979). In contrast, in internal labour markets (ILMs) only lower grade jobs are filled from outside the firm with mobility into most higher grade positions taking place after a period of training. Higher grade workers are thus largely protected from external competition. Training tends to be firm-specific, taking place on-the-job, and consequently skills are generally not transferable to other firms (see Doeringer and Piore, 1971). Occupational and internal labour markets may co-exist within the same national system but the relative balance between the two forms varies between countries. Other influences on labour market structuration include: the importance of the family economy; the relative size of public sector employment; and the significance of local as opposed to national, or international, labour markets.

• *Wage-setting mechanisms*: Countries vary in the mechanisms for dealing with pay determination and other industrial relations issues. In some countries, wages are negotiated at a national level involving corporate interests, trade unions and government, while in other cases, pay is negotiated at the level of industrial sectors or individual firms. The form of these mechanisms is shaped by the nature of labour

market structuration and by the national political framework. Countries also differ in the relativities between the wages of young people and those of adults.

◆ *The economic cycle*: Youth and adult unemployment rates change over the economic cycle. However, the nature of production systems and labour market structures are also responsive to secular changes.

◆ *Policy-making framework*: a number of aspects of the policy-making process vary widely between countries: whether the State is unitary or federal; the role of employers and trade unions in national policy-making; the degree of autonomy and the relative power of the State in intervening in education, training and labour market institutions. Thus, the nature, extent and effectiveness of State policy interventions in ET systems and in the transition process are cross-nationally variable.

II. Education/ Training Systems and Policies, and Their Relationship to Labour Markets

A good deal of research has been carried out on differences in national education/ training systems, though no comprehensive conceptualisation of these systemic differences appears to exist. This section outlines the main dimensions to be considered in analysing cross-national differences. A later section will attempt to develop a typology of systems on the basis of these dimensions. Education/ training systems differ along the following dimensions:

• The extent and nature of national *standardisation* of curricula, assessment and certification within the educational system.

◆ The degree of *differentiation*, *and associated stratification*, between academic and vocational 'tracks', courses or routes (see Allmendinger, 1989); and the relationship between track differentiation and student characteristics. Differentiated systems may vary from each other in relation to: the timing of selection into different school types or curricular tracks; the rigidity, or degree, of movement between tracks; the extent of institutional support for different routes or tracks; and status differences between the curricular tracks.

• The degree of *flexibility* in the educational/ training system: the ease of mobility between different tracks; the possibility of 'second-chance' education/ training; the extent to which the system is 'one-way', with young people moving through different stages at clearly defined points in time, as opposed to allowing for flexible choices.

• The extent to which the delivery of education/training is *school- or work-based*; the extent and nature of co-operative relationships between educational institutions and employers in ET provision (through apprenticeships, alternance arrangements etc.).

◆ The nature of *governance* of the ET system: the degree of autonomy of the school system in the management and delivery of courses; the relative importance of private and public provision; institutional arrangements for co-ordination and co-operation among different levels of the ET system; the extent to which policy-making on education/training and employment is formally integrated (e.g. through ministries or state agencies that combine education and employment functions).

• *Curriculum design and content*: the extent to which the system emphasises general education rather than academic specialisation or training in specific skills; the role of different institutional actors (such as government, school management, teachers, employers) in curricular design; the effectiveness of procedures for curriculum review in the light of changing technologies and student and employer needs.

• *Curriculum delivery*: the extent of institutional differentiation in curricular delivery; the pedagogical approaches adopted in different sectors/levels of the system; the extent of age grading in instructional arrangements; the degree of subject/area choice, and the age at which such choices are made; the relative priority given to full-time and part-time study; the extent of modularisation and use of credits; the provision of 'distance learning' and other innovative approaches.

• The nature of *training 'schemes'* established by the state: the level of provision of training/employment schemes; the integration of these schemes into the core education/training system; the balance between the provision of training and employment experience; the target groups for such provision.

• The nature and structure of ET *qualifications and certification*: their role in access to further/higher education; their currency with employers; the extent to which qualifications provide for clearly defined routes through the ET system; the extent to which qualifications from particular ET institutions are recognised by other ET institutions.

• *Educational 'output'*: what employers are 'buying' from the educational system, e.g. the relative importance of certification, course content, and social and work skills (such as punctuality, the ability to concentrate, to work with others etc.); the relative significance of 'screening' or 'queuing' of job applicants in different economies and in different segments of the labour market.

It should be noted that different elements of the education/training system within the same country may vary along these dimensions. For example, primary education in a particular country may be relatively unstandardised and undifferentiated while second-level education may be highly standardised and differentiated. On the other hand, while the second-level system may be relatively comprehensive but unstandardised, the third-level system may be highly differentiated and standardised.

Education/training systems change over time in relation to the different dimensions outlined above. These changes may result from the (intended or unintended) consequences of education/training policies or from other changes in the national context (e.g. the economic cycle, demographic shifts). Thus, many dimensions of the ET system are open to manipulation in policy terms, although the results of such interventions will differ according to the national systems concerned.

In developing a typology of education/training systems in Section 3, we will focus on two main aspects: the degree of standardisation, and the degree of differentiation/ stratification. Other dimensions of ET systems (such as certification, governance and so on) will be linked with these aspects in our discussion.

III. The Transition Process

The transition process itself differs along a number of dimensions:

• The extent and nature of *regulation* of the school to work transition process: rules governing compulsory attendance; institutional 'overlap' between education and work statuses; the role of compulsory military service in the transition from school to work.

• The *structuring* of the transition process: the length of transition; the number and type of stages involved; the range and nature of options available on leaving school; the extent to which the education/training system facilitates flexibility in movement between statuses; the degree of demarcation between different statuses.

• The extent to which pathways are *individualised or highly structured*; the role of institutional arrangements in facilitating individualisation.

• The relationship of school to work transitions to *other transitions*, such as leaving the parental home, new household formation, marriage, parenthood, and migration; the relationship to social-psychological changes, such as the development of identity and independence.

IV. 'Outcomes' of the Transition Process

The outcomes of school to work transitions can be examined in both macro and micro terms. At the macro level, the concern has been with the relationship between educational 'outputs' and aggregate economic performance, in particular with the role of education/training systems in promoting economic growth, improving income levels, and meeting skill needs.

At the micro level, outcomes of the transition process have been viewed mainly in economic terms, including:

- ♦ labour force participation;
- employment versus unemployment;
- ♦ occupational status;
- matching between ET characteristics and occupational status;
- wages and wage growth;
- security of employment;
- ♦ access to on-the-job or employer-sponsored training;
- ♦ job and career mobility;
- ♦ job satisfaction.

Other transition outcomes include : establishing an independent household; family formation; and migration.

The achievement of these outcomes, and the way in which different outcomes relate to each other, varies across countries. In addition, there is variation within countries, for example, by gender, social class background, ethnicity and region. These inequalities can vary significantly in their extent and nature across countries, partly as a consequence of the structuring of education/training and labour market systems, but also as a result of state policies which may be specifically designed to reduce such inequalities.

Conceptualising the 'outcomes' of the transition process is not unproblematic, however. Countries vary in the structure and pace of the transition process. Consequently, transition outcomes may appear quite different when young people from different countries are compared one year after leaving school, but may become quite similar five years after leaving school. This highlights the necessity of adopting a more dynamic view of transition trajectories over time.

3. Cross-National Studies on School to Work Transitions

I. Context

The review of studies in this paper focuses on papers prepared for the ESF-funded Network on Transitions in Youth workshops over the period 1993 to 1995. These papers provide a useful starting-point for the discussion of issues in transitions research for a number of reasons. In particular, the Network aims to 'advance the theoretical understanding of transitions in youth ... through the comparative analysis of regular and longitudinal surveys of transitions'. The emphasis is on the promotion of comparative rather than collaborative studies and, to this end, the Network has drawn together researchers from a range of

disciplines and countries with varying ET and labour market systems. The explicit concern of these papers with the conceptual and methodological issues involved in cross-national research provides a basis for examining the direction of comparative studies. The Network is primarily composed of researchers working on regular and longitudinal transition surveys so our review is biased towards quantitative and survey-based research. However, apart from descriptive accounts of systems, we are aware of little rigorous comparative research that is based on primary qualitative data (an important but rare exception is Evans and Heinz, 1994). Discussion of the Network papers is supplemented by a selective consideration of significant comparative studies from other sources. The main features of the various studies are summarised in the Appendix to this paper. This overview is not all inclusive but is intended to highlight commonalities in approaches to cross-national research on youth transitions. For the purposes of this paper, it is not intended to draw substantially on the more extensive array of studies of education/training and labour market systems within individual countries.

II. Choice of comparisons

In general, there has been a tendency for cross-national studies to focus on a small number of 'core' European countries, that is, countries which are large, located near to the economic 'heart-land' of Europe and at a similar advanced stage of economic development and integration into the world economy. Thus, researchers have compared France and Germany (Maurice, Sellier and Silvestre, 1986; Brauns, Steinmann et al., 1995), Germany and Britain (Marsden and Ryan, 1995; Evans and Heinz, 1994), and Britain and France (Marsden and Germe, 1991). Other studies have considered the non-European industrial powers, making comparisons between the United States and Japan (Rosenbaum and Kariya, 1991), for instance, or comparing them to the European 'core' countries (see Schupp et al., 1995, on the US and Germany; Nakijima, 1990 on Japan, the US and Britain). While such studies yield very important insights into the nature of school to work transitions, focusing on a relatively narrow range of countries runs the risk of generalising to other, very different, national contexts, including countries who have experienced dependent industrialisation, geographically 'peripheral' nations, and those with (formerly) different political economic systems (such as in Eastern Europe). To date, there has been no attempt at systematic comparisons between 'core' and 'peripheral' countries in their education/training systems and linkages with the labour market. Perhaps more remarkable, in view of the enormous interest in the German dual system, is the almost total neglect of the dual systems of Austria, Switzerland and Denmark. Despite the willingness of many researchers to advocate the introduction of the dual system to other countries, this opportunity to study its operation in different national contexts has been missed.

Furthermore, few comparative studies address the issues of internal heterogeneity within States. In many cases, States do not have uniform education and training systems and labour market conditions may be strongly differentiated by region. For example, many studies have compared school to work transitions in 'the United Kingdom' (or 'Britain') to those in other European countries, despite the fact that Scotland and Northern Ireland have very different ET systems to that in England. A greater awareness of the diversity of national contexts, and their potential implications for youth transitions, would help to provide a more adequate framework for analysis.

Most cross-national studies compare two, or at most three, countries. A smaller number of studies use official statistics to examine EU-wide differences (e.g. Bouder, Mansuy and Werquin, 1995). The rationale for comparing particular countries is not always explicit in reported research, but can be loosely grouped into the following categories:

1. Countries are selected on the basis of marked contrasts in their education/training systems. Most of the studies which compare the 'dual system' in Germany with other systems fall into this category (e.g. Schupp, Buchtemann, Soloff, 1994).

- 2. Countries are selected on the basis of marked contrasts in some aspect(s) of their contexts; for example, Eastern and Western European comparisons emphasise differences in state regulation of the economy (e.g. Koklyagina, 1995).
- 3. Countries are selected on the basis of some similarities in their education/training systems in order to investigate whether institutional differences have an impact on transition outcomes. For example, Rosenbaum and Kariya (1991) select the United States and Japan as examples of comprehensive educational systems and then investigate whether differences in linkages between the ET system and the labour market are apparent. The Smyth, Surridge (1995) paper stresses similarities in the Irish and Scottish education systems (an emphasis on general education with differentiation by exam performance) and examines differences in post-school destination; this paper also discusses similarities in the national context (peripherality and the decline of youth employment) between the two countries.
- 4. Countries are selected on the basis of some similarities in their context; for example, Konietzka and Solga (1995) discuss the similarities between East and West Germany in socio-cultural and institutional terms, and then analyse the impact of differing forms of labour market regulation on employment outcomes.

However, in practice, data availability and comparability are major factors in the choice of comparison. For instance, the relative dearth of studies on Northern/Southern European comparisons, or on South East Asian countries, may reflect the lack of comparable school leavers' surveys. In general, data availability (and the availability of researchers knowledgeable about the systems) has often been more influential than theoretical or policy considerations in selecting countries for comparison.

III. Conceptualisation and measurement of 'success' in transitions

The concept of 'success' or 'failure' in transitions is rarely explicitly elaborated in cross-national studies. There is a general tendency to focus on employment-related outcomes:

◆ In particular, studies contrast *access to employment* and *chances of unemployment* (e.g. Beduwe et al., 1994; Hannan et al., 1994; Schober-Brinkmann and Wadensjö, 1991; Smyth and Surridge, 1995). In some instances, all of the non-employed are grouped together which may obscure gender-specific differences in labour force participation (for an exception to this, see Brauns, Steinmann, Kieffer and Marry, 1995).

• Many studies consider *occupational attainment*; in general, there is a tendency to focus on the social class of the job rather than the type of job per se (e.g.Brauns et al., 1995; Konietzka and Solga, 1995; Shavit et al., 1994).

Other aspects of employment are sometimes considered, including:

• *Skills matching*, i.e., whether the content of education/training matches the skills required on the job (e.g. Konietzska and Solga, 1995; Schupp et al., 1994).

• *Wages/ wage growth* (e.g. Marsden and Ryan, 1991; Schober-Brinkmann and Wadensjö, 1991; Schupp et al., 1994).

However, the more subjective aspects of employment experience, such as job satisfaction, are rarely considered (for an exception, see Nakajima, 1990). Consequently, `success' tends to be seen in terms of getting a job, getting a `good' job (though what this amounts to is rarely specified) or getting a job appropriate to one's education/skills.

In contrast to the emphasis on employment-related outcomes in transitions, there has been a relative neglect of other outcomes of the transition process, such as *leaving the parental home, parenthood* (for an exception, see Evans and Heinz, 1994) and *migration*. This neglect partly reflects the lack of available data. The neglect of migration trends in youth transitions may also reflect the tendency to study 'core' countries, where out-migration levels are lower. The extent to which young people enter local, national or international labour markets will vary across countries with a consequent impact on the currency of educational/training qualifications. One study of Irish emigrants, for example, indicated the significance of portable educational qualifications for successful integration into the British labour market (Sexton et al., 1991).

Attention to variation in 'success' of outcomes has tended to focus on the relationship between educational failure (however conceptualised) and subsequent unemployment or exclusion from the labour market. Many studies examine differences in outcomes by gender, although social class background receives less attention in general (for an exception, see Furlong and Hammer, 1995). However, there has been little discussion of what would constitute 'optimal' outcomes across sub-groups of young people; presumably, there will necessarily be jobs in the labour market which are not as 'good' as others.

IV. Factors influencing 'success' in transitions

(i) National Contexts

Studies have varied in the degree to which they take account of the impact of national contexts (the production system, labour market structures, economic cycle, and socio-demographic characteristics) on transition outcomes, and 'success' in such transitions. In some studies, differences in the national context are effectively 'bracketed off' in assessing youth transition outcomes. Schupp et al. (1994), for instance, attribute differences in employment rates and third-level participation between Germany and the United States to differences in the education/training system. However, these differences are also likely to result from differences in the production systems and labour market structures of the two systems. Other studies have explicitly taken account of such differences, most notably in comparisons of the former 'command economies' of Eastern Europe with western capitalist economies (see, for example, Koklyagina, 1995; Roberts and Tan Ying, 1994). Considering such differences allows researchers to explicitly test the impact of varying contexts on transition outcomes. In the case of East and West Germany, for example, Konietzka and Solga (1995) found very few differences in the relationship between education/training and labour market outcomes, in spite of striking differences in preceding State regulation of the economy.

Researchers have tended to focus on two aspects of contextual variation in their discussions of youth transitions: labour market structures, and the economic cycle. Perhaps due to the pioneering work of Maurice, Sellier and Silvestre (1986) on the links between education and labour market outcomes, labour market structuration (and, to a lesser extent, wage-setting mechanisms) has received considerable attention in studies of school to work transitions (e.g. Ashton et al., 1993; Marsden and Ryan, 1991). Researchers have also focused on cross-national differences in the level of youth unemployment over the economic cycle, as well as on the differences between countries in the timing of economic recession (e.g. Ashton, Maguire and Spilsbury, 1990; Smyth and Surridge, 1995).

In comparison, researchers have paid less attention to cross-national variations in production systems and socio-demographic factors. To date, no systematic research has been carried out on differences between more and less industrialised countries in the 'success' of transition outcomes. However, it appears self-evident that young people are more likely to achieve successful outcomes (such as obtaining employment) in more developed systems with lower overall levels of unemployment, and that national differences in unemployment rates are likely to affect the saliency of ET qualifications for occupational entry. Similarly,

socio-demographic factors may facilitate or constrain the successful transition between school and employment.

(ii) Education/training systems and policies

The main focus of transitions research has been on institutional differences in education/training systems between countries. In this respect, studies have tended to focus on the dimensions of differentiation and, to a lesser extent, standardisation (see Allmendinger, 1989). These studies have generally posited Germany as an example of a highly differentiated system against less differentiated systems such as France and the United States (e.g. Schupp et al., 1994). Discussions have often veered close to a 'one best way' approach (Smith and Meiksins, 1995) in stressing the positive impact of the dual system on 'success' in transitions:

• a much higher level of `intermediate skill level' provision in the dual system - though presumably this is also the case in other countries with highly developed OLMs, such as the Netherlands (see Schupp et al., 1994);

• a slower `pacing' and longer period of transition from school to work in the dual system (Roberts, Clark and Wallace, 1994);

• a clearer `bottom floor' qualification to occupational entry, and less competition from the more highly qualified for semi-skilled and unskilled manual and service jobs in the `dual system' - with a higher degree of `reservation' of such jobs for the most poorly qualified; and, as a consequence, a lesser degree of exclusion of the latter in the dual system (Roberts et al., 1994; Heinz, 1993).

We have commented on the neglect of non-German dual systems such as those of Austria, Switzerland and Denmark. The Netherlands provides a fascinating opportunity to contrast `dual' and `school-based' systems within a country (Van der Velden and Lodder, 1994). Such comparisons suggest that, while the dual system leads to easier transitions in the short-term, school-based training may prepare people better for occupational or career change. Some of the research on Germany tends to focus on `positive' outcomes and to attribute these to the dual system rather than features of its context. However, some studies have also drawn attention to more negative outcomes:

• the higher level of occupational and career rigidity in the dual system (Schupp et al, 1994; Heinz, 1993; Roberts et al., 1994);

• an apparent lower level of job satisfaction, and more rigid individual matching of aspirations to opportunities - or restriction of choice - in the dual system (Heinz, 1994; Roberts et al., 1994);

• and finally the growing preference of many parents and pupils for study leading to the Abitur, instead of, or in addition to, the dual system.

Thus, it is necessary to consider the balance between different outcomes of the transition process. For example, some education/training systems, such as the dual system, may promote successful transitions to employment but may have associated implications for subsequent career mobility and household/family formation transitions.

In contrast, there has been much less focus on the dynamics of policy development in relation to education/training. An analysis of the changing structure of pathways remains at the level of hypothesis (Raffe, 1994) but an empirical ten-country study based on the same conceptual framework is shortly to be published by the OECD (Pair, forthcoming). There has been a relative absence of comparative analyses of government interventions in relation to educational failure, with the exception of Lange (1995) and some

descriptive studies of measures for early leavers. Research on Britain, Ireland and the Netherlands indicates that, while the rate of school drop-out/failure is quite similar in the three countries, the most effective interventions are likely to differ significantly. In the Dutch case, the nature of the ET and employment systems along with lower unemployment rates allow for effective labour market integration through access to vocational training, options which would not be appropriate in the Irish context (see Hannan et al., 1994).

Comparisons of education/training systems often appear quite static, positing the 'German system' against the 'British system' without taking account of policy changes within both systems. There have been substantial differences between countries in the strategic approach to policy development, even among those with relatively similar education/training systems. For example in the early 1980s, the UK pursued postschool vocational training as its main strategy for dealing with youth unemployment while Ireland and France emphasised the expansion of both upper second-level education and 'within school' vocational courses (see Smyth and Surridge, 1995) and Canada prioritised participation in general education (Ashton et al., 1993). But British policy has changed several times since 1981, and now gives higher priority to fulltime education, but with significant divergence between a multi-track approach in England and a unified system in Scotland (Raffe et al., 1996). The likely effectiveness of these differences in national policy can only be evaluated over a longer time frame, and need to be analysed at both a micro and macro level: in terms of the delivery of 'middle level' skills, access to life-long retraining, labour productivity growth etc. Policy interventions can occur within the existing education/training system or, in the longer term, can change the nature of the system itself. The dynamics of policy development should be given much more attention in studies of youth transitions.

(iii) Variation in outcomes

The relationship between aspects of the education/training system and 'successful' transitions may vary across different groups of the youth population. Among recent cohorts, gender differences in post-compulsory educational participation have almost disappeared in many European countries and, in some instances, participation levels are higher among young women than among young men (Shavit and Blossfeld, 1996; OECD, 1995). However, gender differences persist when type of education/training is considered, with females more likely to enter 'general' rather than 'vocational' tracks and to take gender-typed vocational courses. Gender differences in patterns of educational participation are associated with differences in transition outcomes. Many studies report lower unemployment rates among females than males, a pattern which is partly attributable to educational differences (see Smyth and Surridge, 1995). However, the minority of young women who do not succeed in mainstream education may lose out disproportionately because they lack the qualifications for employment access and vocational training provision tends to be disproportionately targeted on traditionally male areas of work (see Hannan, Ó Riain, 1993).

Research has indicated remarkable commonalities across countries in the relationship between social class background and educational attainment (see, for example, Müller, 1996), and in the way in which education mediates the association between class origin and destination (Ishida, Müller and Ridge, 1995). Studies have also indicated that social class has a direct impact on chances of (un)employment on leaving school (Breen, 1995; Smyth and Surridge, forthcoming). `Success' in transitions - in terms of employment and occupational status - therefore varies significantly by social class background, over and above the effect of educational level.

In contrast, there has been little concern with differentiation by ethnicity or nationality in transition outcomes across countries in recent research, although within-country studies highlight the significance of ethnicity for such outcomes (e.g. Shavit, 1990). This partly reflects data limitations, particularly in countries where there is a reluctance to collect data on ethnicity (e.g. France) or where surveys typically only cover nationals of the country concerned (e.g. Germany). Further research is needed on the way in which

characteristics, such as gender, class and ethnicity, interact with educational attainment to shape the nature of the transition process.

V. Methodological issues in cross-national research on youth transitions

The analysis of cross-national differences in youth transitions raises a number of methodological issues. This section is designed to provide a brief overview of the most salient issues to emerge from our review of the research.

◆ Data availability: Studies of school to work transitions tend to rely disproportionately on secondary data sources (for exceptions, see the Anglo-German study reported in Evans and Heinz, 1994; and also Nakijima, 1990). Existing national data sources fall into two categories: (i) general household surveys, including labour force surveys; and (2) surveys of school leavers. Most of the conventional labour force (or other household) surveys have only limited information on education and training characteristics as well as on family background. This limits their usefulness as a data source for analysing transition behaviour. In addition, many such surveys have little or no information on first job or detailed work history. Surveys of school (or third-level) leavers and youth cohort surveys have much more potential for such analysis. However, there are some limitations: such surveys are only carried out in a limited number of countries; the coverage of different education/training leavers varies across countries; and there are significant differences in the type of information collected. Variables representing 'policy' interventions are particularly likely to be absent from, or poorly measured in, the available data sets. For example, few data sets provide even basic curriculum information, let alone record curricula which have been enhanced by transition policies. Participation on youth training schemes is often hard to measure when these are integrated with 'ordinary' jobs. In addition, employment and training subsidies are rarely recorded; and the provision and effectiveness of guidance is notoriously difficult to measure.

• *Cross-sectional v. longitudinal*: Existing data sources tend to be cross-sectional, in many cases covering only very recent labour market entrants. For example, the regular school leavers' surveys tend to focus on those who have left full-time education within the previous year. Estimates of 'over-qualification', level and 'content congruence' may be biased by focusing on such a short time period in the labour market. In contrast, longitudinal information is available from a number of youth cohort or follow-up surveys (e.g. in Scotland, England & Wales, Norway and Ireland). Household panel surveys may also provide data on educational achievement and employment history. Since countries vary significantly in the pace, timing and pattern of the transition process, it is important to use longitudinal data to analyse the complexity of life histories among young people.

• *Cross-sectional v. time-series*: the nature of employment and other outcomes will vary across the life course of young people. In addition, changes in education/training policy and secular shifts in the economy will result in differences between cohorts of young people in their employment chances, access to further education and so on. For this reason, it is necessary to incorporate a time dimension into the analysis of transition outcomes.

• *Micro and macro levels*: Much of the information on youth transitions has been collected at the individual or household level. However, it is often difficult to link information on personal experiences to institutional factors and differences in institutional arrangements. This problem could be counteracted by triangulating information from a number of different sources, including surveys on employers' recruitment practices, case-studies of firms, case-studies of policy development on education/training and so on. In addition, some important institutional variables can only be measured at the societal level, thus causing a serious 'degrees of freedom' problem in cross-national research.

• Equivalence: Perhaps the most difficult task in conducting comparative research is establishing 'equivalence' between variables across different countries (see Bynner and Chisholm, 1995; Hannan et al., 1994). This task is particularly problematic when comparing level and type of education/training. The current official (Eurostat and OECD) concepts and measures of educational and training qualifications of labour market entrants are, to a large extent, based on pre-existing statistical measures and on what appear to be common-sense judgements about the comparability of national qualifications. Consequently, they tend to ignore significant inter-country differences in relation to the kind of education/training provided by ET institutions and its linkage to labour market outcomes. In contrast, studies such as the CASMIN project (see Müller et al., 1990; Müller and Karle, 1993; Ishida, Müller and Ridge, 1995) have developed a unified classification schema for education/training in nine countries by first carefully delineating the nature of ET provision and institutional arrangements within each country. The problem of equivalence aggravates the difficulty of comparing policy interventions in different national contexts. Even `comparable' measures - for example the provision of youth traineeships - may assume a very different character according to the system in which they are introduced. Comparing labour market statuses may also be problematic. The boundaries between labour market statuses (such as `employed', `unemployed' and `scheme trainee') are often far from clear-cut and are highly contingent on the national context (see Smyth and Surridge, 1995). Using `principal economic status' measures may be problematic in countries where `full-time' students are also employed for a relatively high number of hours. In addition, the boundaries between occupations, their status, pay and conditions may differ significantly between systems, rendering comparisons problematic.

In summary, the combination of problems at the level of data availability, research design and equivalence seriously restrict the ability of researchers to conduct rigorous comparative research. These problems are compounded by the lack of resources necessary to enable teams of researchers to carry out systematic research across a number of countries.

4. Toward a Typology of Cross-National Differences in School-to-Work Transition Processes

We can best illustrate the utility of the conceptual framework by systematically combining a number of these dimensions to create a typology of education/training (ET) and labour market (LM) systems. Initially, in Figure 1, we take two main characteristics of ET systems - their degree of differentiation and associated stratification, and their degree of standardisation - and see how they are empirically related to each other and to LM outcomes and levels of `success'. The work by Allmendinger (1989), and earlier work by Maurice et al. (1986), is used as a basis for these classifications: illustrating differences in `national logics'. The categorisation, which applies to second-level systems, is suggested tentatively and hypothetically for illustrative and initial hypothesis generation purposes.

Germany and the Netherlands, for instance, have highly standardised second level systems in terms of their curricula, funding, teacher training/certification, and national certification systems. Both countries have highly differentiated school systems with different curricula/examinations, and selection procedures occurring at relatively young ages; selection into particular school types is subsequently difficult to reverse (see Allmendinger, 1989; Schupp et al., 1994). These types of school system make sense only in the context of labour market systems which are highly `occupationalised' and segmented: with ET designed for specific occupational niches. This `content matching/congruence' of ET and LM may be achieved by direct interlinkage, through joint responsibility for vocational education and training between ET providers and employers, as in the German `dual system', or by setting both `level' and `content/type' education/training pre-requisites for specified occupational entry. The latter approach is used in the Netherlands where there is a very extensive range (c.200) of occupational niches with specific ET requirements; and also applies to the limited range of professional/technical occupations in English-speaking countries.

At the polar extreme to the standardised `dual system' is that of the American high school system: offering a comprehensive, general education up to age 18 for around 90 percent of the age cohort, with wide regional

and local variation in the curriculum, teacher qualifications and instructional effectiveness, and school resource levels. The system is unstandardised not only in terms of the curriculum and pedagogy adopted, but also in the examination/ certification system used. As a result of this lack of reliability and generalisability of the examination results from high schools, employment decisions are not, indeed cannot be, based on performance/achievement levels in high schools, other than completion/non-completion of the high school diploma (see Rosenbaum and Kariya, 1991). Viewed in either conventional ('content') human capital theory terms, or in terms of merely signalling underlying abilities/aptitudes, the American high school system does not provide employers with reliable information on which to base employment decisions. In either 'content congruence' or 'level congruence' terms, the matching of high school leavers to jobs/occupations is much less prevalent in the United States than in Germany or Japan; or indeed one suspects most other OECD countries with standardised second-level systems (Rosenbaum and Kariya, 1991). Schupp et al., 1994).

		Degree of Differentiation of ET System			
Degree of national standardisation of E		High	Medium	Low	
	High	Germany Netherlands	England France Italy	Japan Ireland Scotland	
	Medium		Spain		
	Low			USA Canada	

Figure 1: A Typology of Education/Training Systems

In many respects, the Canadian case seems much closer to that of the US than others: with an undifferentiated high school system, though somewhat more standardised, but with no nationally standardised examination system at completion of second level. In both the United States and Canada, however, there is almost universal completion of upper second level education and much higher rates of third level participation; however, the third level system appears to be more differentiated and stratified than in many European countries (Ashton et al., 1993).

In more standardised second level systems - such as the English or Irish systems - 'level congruence' appears to be much more pronounced; with some 'matching' between vocational/technical subjects and access to skilled manual occupations (Hannan et al., 1991 and 1993). In more segmented and stratified cases - such as those of Israel and Italy - the 'match' between taking the vocational/technical tracks at school and entry to skilled manual occupations appears to be even clearer, even in the absence of the 'dual system' (Shavit et al., 1994).

The 'low differentiation' and 'high standardisation' category is an equally interesting variant to that of the American/Canadian system: one with a high degree of comprehensivisation of the second level system, a high degree of national standardisation of the examination system, and an equally high completion rate of upper second level education. Japan is a typical example, though the Scandinavian countries and Ireland would also be examples here. In these countries, there is a high degree of reliable 'signalling' to employers of second-level leavers' educational achievements and characteristics; this results in a much higher degree of

congruence between level of education and performance in examinations and decisions relating to employment and occupational allocation (Rosenbaum and Kariya, 1991; Breen, Hannan and O'Leary, 1995). There appears, in other words, to be a higher level of 'level' and 'performance' congruence in such systems than in unstandardised ET systems. Equally third level entry, particularly where there is a 'numerus clausus', is highly determined by performance in the final second level examination.

The relative lack of congruence between educational performance levels at second level and employment decisions in the United States, for those not going on to third level, and the consequent low level of returns for such performances, has been asserted to create a serious 'motivation to learn' problem amongst American high school students: partly accounting for their reported lower performance levels. These likely reciprocal relationships between level of educational performance and its pay-off in the labour market are obviously very important, and have hitherto received relatively little attention in the research literature.

In contrast, our knowledge of Southern European countries, like Italy and Spain, is relatively limited. In these countries, there appears to be a very low correlation between level of education achieved and unemployment rates, particularly among the youngest cohorts (see OECD, Education at a Glance); and there appears to be no 'numerus clausus', with a much higher percentage going on to third level - though the first year failure rate appears to be high. In these countries, the main concern about 'educational failure' and unemployment appears to be about third level rather than early leavers, in contrast to the concerns in Northern Europe. These differences may relate to a number of factors, such as:

• certification and standardisation issues;

• clearer employer `upper qualification boundaries' to occupational recruitment, so that the `overqualified' are not recruited - or at least not to the same extent as in the USA, Britain and Ireland;

• the greater significance of the informal/family economy; and

• the imbalance between occupational demand and education/training supply in these countries.

The nature of the ET/LM linkage:

In the above discussion, we refer only to two basic characteristics of the ET system, and discuss some of their relationships to labour market outcomes. However, the nature of the relationship between ET and LM entry, or initial employment decisions, can vary substantially: from situations of almost complete isolation, or `decoupling', of the ET system from the LM system to one where both systems are highly interconnected/coupled.

We can conceptualise such variable linkages along the following ordered set of dimensions:

(a) *Strong and direct shared interlinkage* - where employers and schools/trainers are directly linked (and sometimes legally governed/supported, with joint financial responsibility) in the provision and delivery of training, including on-the-job training, for young people; and where both employers and ET providers jointly agree on ET requirements for specified `occupations' in national economic contexts in which the youth labour market is highly `occupationalised' (and generally highly segmented). This pattern is particularly evident in the German-speaking countries, and Denmark. In these cases both strong `content congruence' and `level congruence' take place between the output/qualifications from schools and intake to the labour market (Konietzka and Solga, 1995).

Previously, the importance of such apprenticeship arrangements for many skilled manual and service occupations would have been almost equally characteristic of major sectors of British industry - particularly

in manufacturing and construction; however, since the beginning of the 1980s such apprenticeships have declined substantially in importance (see Ashton et al.,1993). In these cases, the traditional apprenticeship system was not as strongly linked to the ordinary school system as in the German system, and the proportion of young people on apprenticeships was considerably lower. In the British case, as in Australia and New Zealand, there is widespread shared delivery of work-based training which results in strong interlinkage for some sectors of the economy. However, for the purposes of this paper we view this work-based training as normally following the transition point from school to work rather than comprising part of the transition process.

(b) *Collinear Linkage*: where a substantial occupational labour market exists, training for specific 'occupational positions' takes place in second level schools and colleges, but where there is little or no joint delivery of training for young people moving from school in the labour force. In these cases, education and training requirements are specified and clearly known to the schools.

The Netherlands, for example, has over 200 occupations which require that specified second and third level courses/qualifications be taken before entry. So there is a substantial occupational labour market served by a substantial and (early) age-defined occupational ET programme provided on a full-time basis. Of course, in most countries there is a range of professional and higher technical positions (such as medicine, law and engineering; and more recently in computer science), where specified, long cycle, educational/professional training programmes at third level are required (sometimes statutorily, sometimes by professional bodies, and sometimes by employers).

In these systems, there is strong, though less pronounced, content and level congruence between the output/certification of schools/colleges and labour market entry. Such congruences are covered by a combination of state regulations, professional/technical body regulations; and in countries like the Netherlands this is linked to an extensive 'occupationalised' labour market governed by regulations.

(c) No direct linkage, but market signals from schools are strong, reliable and standardised: Although employers are not involved in schooling or training, school 'outputs'/certifications, and 'signals' about the learned and innate competencies of graduates, are publicly certified and used actively by employers in making employment decisions. Education systems here are highly standardised but tend to be less differentiated in terms of school type or curricular tracking. There is a high degree of 'level congruence' between educational outputs and labour market outcomes, but little regulated 'content congruence'. In addition to 'levels', examination grades may be widely used in access to employment (see Breen, Hannan and O'Leary, 1995). With the exception of the American and Canadian second level systems, most of the English- speaking countries fall into this category; as does France and most of the Scandinavian countries.

(d) *School placement function*: A somewhat stronger version of (c) exists in countries like Japan, where besides open market 'reading' and matching of educational outputs to job offers, employers may be directly linked to schools by the school guidance service acting as job placement officers in the employment system. This arrangement may be supported by, and officially acting in place of the state employment service, as in Japan (Nakajima,1992; Rosenbaum and Kariya, 1991).

(e) *No direct linkage and weak market signals*: The USA is the exemplar here. There is no standardisation of the educational system at first or second level. It tends to be comprehensive and relatively undifferentiated at second level. There also tends to be limited post-school training of those high school graduates or dropouts who do not go on to third level, compared to Germany (Schupp et al., 1994). On the other hand, a much higher proportion of the cohort both complete upper second level education and go on to third level (or other further) education in the USA and Canada; and the third level systems there appear to be much more open and flexible - both in terms of part-time participation, as well as 'return' to full-time

education of adult workers who have been employed for a number of years than is true for Germany, the UK (see Ashton et al., 1993) or for Japan (Nakajima, 1991).

		De	egree of Stand	lardisation of ET System		
	High			Low		
School-Work Linkage	Degree of Differentiation of ET System					
	High←		→Low	High←bow		
(a) Strong Linkage (Dual System)	Germany Austria Switzerland Denmark					
(b) Collinear Linkage	Netherlands					
(c) De-coupled with Strong Market Signals		England France Finland Italy Israel	Scotland Ireland Sweden	Spain*		
(d) School placement function	D		Japan			
(e) De-coupled with Weak				Canada USA		
Market Signals						

Figure 2: A Typology of ET Systems and Labour Market Linkages

Note: * Medium standardisation

In these cases, there appears to be both weak 'content congruence' and weak 'level congruence', though high school graduates tend to be at some advantage in relation to school drop-outs and third-level graduates have some advantage over high school graduates (Rosenbaum et al., 1990).

In Figure 2, we propose a more elaborated typology of ET systems by taking into consideration the nature and the strength of the relationship between ET and LM. The allocation of countries to cells is tentative; further research is needed on particular (types of) countries in order to identify the specific linkages between the education/training system and labour market outcomes. When the three variables are cross-classified in this way, it becomes apparent that some combinations are unlikely to occur and thus there are many empty cells. Having a high degree of standardisation and a strongly coupled linkage with the labour market, for instance, (whether with the German dual system or Dutch in-school model), makes sense only in the context of a high degree of differentiation of second level education and training: or of a high degree of 'tracking' within second level education .

This typology also reflects the type of labour market structuration, particularly the prevalence of occupational labour markets. If we take the most structured ET and LM systems - the German or Dutch systems of education/training and LM linkage - for instance, it is obvious that such institutional arrangements could not exist without a highly occupationalised labour market. In addition, the degree of

'social closure' implied by such a 'closed system' - in terms of upward mobility chances - needs to be considered (see Erikson and Goldthorpe, 1992; Müller and Karle, 1993).

The position of some of the East European States and Russia in such a typology is unclear, given the rapid economic changes occurring in these countries. Koklyagina's (1995) study of Russia and the Baltic Republics suggests that the residues of the 'command' economy are still very influential - at least in Russia: so there may be very strong connections between differentiated and standardised ('in-school') ET system and LM position, determined by state fiat rather than market forces.

The position of southern European countries is not clear - mainly because of the lack of comparative studies - and our linguistic limitations. The reasons for a weak relationship between level of education achieved and youth unemployment rates in Italy and Spain (where the overall rates are very high), for instance, are not at all clear (see OECD, Education at a Glance, 1995). An explanation of this pattern may necessitate taking account of other aspects of the national context, such as the different nature and `culture' of the production system, the pattern of economic development, and so on. Further research is needed to trace the specific linkages between educational and economic institutions in Southern Europe.

The above typology does not imply that countries cannot change their position. Obviously, medium to long term state policy/strategy can result in a shift from, for instance, a situation of no/low standardisation to one of high; or from high school/curricular differentiation to a more comprehensive/unitary system. Equally countries have varied in the importance attached to expanding participation in general upper second level education (e.g. France and Ireland) as opposed to expanding post-school vocational training provision (as in the UK) or expanding full-time school-based vocational courses (e.g. the Netherlands). These medium to long term state strategies concerning ET and LM system changes have not been effectively evaluated in any systematic way: though some individual, primarily descriptive, cross-national comparative studies have been carried out (see Ashton et al., 1993).

Besides their relationships to employment decisions, the structure of ET and LM systems also has clear implications for the nature and level of social class/ethnic inequalities in educational achievement, access to employment and occupational achievement, as well as gender inequalities. Systems with early selection into separate ET streams/tracks - such as in Germany, or the Netherlands, appear to lead to increased inequality at the middle to higher levels of educational and occupational achievement, but are likely to be less exclusionary at the bottom - given the greater barriers to competition from the more highly qualified for positions at the bottom of the occupational ladder.

5. Working Hypotheses

In this section we propose a number of hypotheses concerning ways in which the determinants of transition outcomes - including the impact of given types of policy intervention - may vary across countries with different types of education systems and ET/LM linkages. The hypotheses are informed by existing research but do not attempt to cover all influences or all policies. Their main purpose is to illustrate the potential of the conceptual framework, described above, to guide and structure future research.

Differentiation of the ET system:

• Class inequalities in post-compulsory educational participation, particularly at third level, tend to be much greater in countries with differentiated systems and earlier selection than in undifferentiated systems (see Müller and Karle, 1993).

• Gender differences in the nature of post-compulsory education/training participation are greater in systems with earlier institutional differentiation in educational provision.

• The degree of matching between education/training received and job entry requirements ('content congruence') tends to be far greater in countries with highly differentiated ET systems (a and b above). This occurs at both an aggregate and individual level, through the provision of relevant skills for the economy, and lower levels of job changing among labour market entrants (Allmendinger, 1989).

• In countries with undifferentiated ET systems, employers tend to pay more attention to the 'level' of education achieved. Where the system is also standardised in terms of curriculum and certification, employers tend to use examination performance (grades) as a criterion for recruitment (see Breen, Hannan and O'Leary, 1995).

• In countries with little ET differentiation and high levels of second-level participation, the dominance of third-level entry pathways significantly reduces the value and currency of other non-academic dimensions of educational achievement.

Standardisation of the ET system:

• In standardised systems, the higher the proportion completing upper second-level education and the greater the importance of grades to labour market success, the greater the barriers to 'success' for early school leavers and low achievers.

• In standardised ET systems with weak labour market linkages, the degree of success of interventions for those 'failing' in the mainstream ET system is dependent on the degree of standardisation and quality control of such interventions.

• State training schemes which are not work-based are unlikely to have a positive impact on employment chances, unless their 'outputs' are standardised and recognised by employers.

• Informal networks (family, relatives, friends) play a greater role in employment chances and allocation in less standardised systems with looser ET-LM linkages (such as the USA). This role reinforces social class and ethnic inequalities in access to employment.

• At the policy level, enhanced vocational guidance and placement functions are likely to have most effect where there is less direct linkage and weaker market signals between the ET system and the labour market. School guidance services and State employment agencies have the potential to improve access to the labour market for the less academically oriented.

Education/training-labour market linkage:

◆ In type (c), (d) and (e) systems (i.e., no direct linkage), work experience/training schemes will have most effect by giving young people access to the internal labour markets of sponsoring employers (Raffe, 1990). In systems of type (a) and (b) (i.e., strong or collinear linkage), such schemes are only likely to be effective if they can direct young people back into the mainstream training routes which confer recognised credentials.

• Policies emphasising curricular adaptation in systems (c), (d) and (e) are more likely to emphasise generic (core/key) skills, but face difficulty in having their certificated outcomes recognised and rewarded in the labour market. Employers are more likely to recognise standards in terms of 'levels'.

• The degree of content congruence may decline over time with occupational and industrial restructuring, and technological innovations, even in systems (a) and (b). Consequently, policies which emphasise curricular adaptability to take account of changing technologies and skills requirements are likely to have more impact in systems (a) and (b).

National contexts:

◆ The prolongation of initial education and training increases the importance of family support for young people during the transition period. The reduction in state support for young students/trainees in many countries is likely to raise the 'costs' of participation and thus may increase social class differences in education/training participation. Successful intervention policies (through the ET system and through social welfare/taxation policy, e.g. child benefit) need to be designed to complement this support and to fill gaps.

• The role of the family economy in shaping youth labour market integration may cross-cut the typology developed above. Research on the Irish context (Hannan, forthcoming) indicates that a significant minority of young people with poorer qualifications obtain their first job in family businesses. This pattern may be replicated in the southern European countries, although not enough is known about these systems.

◆ Low rates of labour market return to higher educational achievement have a negative feed-back effect on learning motivation within the school system (see Sadlak et al., 1986; Rosenbaum et al., 1990).

◆ The importance of ET qualifications for labour market success varies depending on whether young people enter local, regional, national or international labour markets. The more local the labour market, the greater the importance of informal networks in job search and employment decisions and the lower the relative importance of universalistic ET criteria in labour market entry. These effects vary across systems, being less marked in type (a) and (b) countries.

• Successful entry to national and international labour markets is highly dependent on the 'level' of education achieved and the portability of qualifications into different national contexts.

Conclusions

These hypotheses are proposed tentatively since gaps in our knowledge of the transition process in particular (kinds of) countries may reduce the generalisability of certain findings. To systematically test these hypotheses, we would need to include the following:

• Countries with varying national contexts, including less developed countries along with those in the `core'; this would extend the analysis to include Southern Europe, the Atlantic periphery, Middle-Eastern countries, South America and countries on the Pacific Rim.

• Systems with varying education/training-labour market linkages (see above typology);

• Longitudinal data to allow for cross-national variation in the pace and timing of the transition process;

• A wider range of transition outcomes; migration, in particular, would be an obvious concern if the range of countries was expanded;

• Information concerning variation in outcomes within countries, e.g. on the basis of gender, social class, ethnicity or regional differentiation.

In addition, much greater cooperation is necessary between countries on the content of national surveys currently used for studying school to work transitions. Systematic cross-national studies are dependent on the involvement of research teams in a wide range of countries and on the availability of adequate funding for long-term work in the area.

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Authors	Countries	Time period	Data Source	Transition Outcomes	Variation in Outcomes
Allmendinger (1989)	Norway, West Germany & USA	Year varies by country; adult samples	Life history data sets	Occupational prestigeJob mobility/spells	•Educational background
Ashton, Green and Lowe (1993)	Canada & UK	1989; incl. all age- groups	Labour Force Surveys; cross-sectional	 Occupational allocation Educational participation 	 Educational background Gender (limited)
Beduwe, Espinasse et al. (1995)	France & Spain	1981-1990; all age-groups	Labour Force Surveys; cross-sectional	 Labour force participation Employment/ unemployment	Educational background
Bouder, Mansuy, Werquin (1995)	12 EU countries	1988-1991	Labour Force Surveys; cross-sectional	 Labour force participation Employment	Not considered
Brauns, Steinmann et al. (1995)	France & West Germany	1979 & 1991; 5-10 years after leaving school	Labour Force Surveys; cross-sectional	 Labour force participation Unemployment Occupational class 	 Gender Marital status No. of children Educational background
Furlong and Hammer (1995)	Scotland & Norway	1985-87; 17-19 year olds	Longitudinal surveys of young people	 Educational participation Full-time employment	GenderSocial class background
Hannan, Hövels et al. (1995)	Ireland, England & the Netherlands	1980s	Official statistics; annual survey of school leavers (Ireland)	School drop-outUnemployment	Educational backgroundGender (limited)

Appendix 1: A Summary of Selected Cross-National Studies on School to Work Transitions

Hannan, Lamb et al. (1994)	Ireland, Scotland & the Netherlands	1991; one year after leaving school	Regular School Leavers' Surveys; cross-sectional		GenderEducational background
Heinz (1993); Evans and Heinz (1994); Roberts et al. (1994)	England & West Germany	1989 & 1991; aged 16-22	Qualitative interviews of matched samples; longitudinal component	 Career trajectories (post- school destinations) Participation in schemes Establishment of independent household Marriage and family formation 	 Gender Educational background
Koklyagina (1995)	Britain, Russia & Estonia	Varies by country; aged 16-20	Longitudinal data sets	 Career trajectories Occupational group 	 Gender (limited) Social class background (limited)
Konietzka and Solga (1995)	East & West Germany	1940s-1980s; four birth cohorts	German Life History Study; longitudinal	 Occupational class Level consistency Content congruence 	 Gender Educational background
Marsden and Germe (1991)	France & Britain	early 1970s & 1980s	Secondary analysis of official statistics		 Gender (limited) Training background (limited)
Marsden and Ryan (1991)	Belgium, France, Germany, Italy, Netherlands & UK	1966-1978	Secondary analysis of official statistics	 Youth share of manual employment Industrial allocation Relative pay 	• Gender

Marsden and Ryan (1995)	Britain & Germany	1950-1990	Secondary analysis of official statistics/ literature	Participation in apprenticeships	Not considered
Maurice, Sellier and Silvestre (1986)	Germany & France	1970s	Matched case-studies of industries/firms	Type of jobJob mobility	Educational backgroundSocial class background
Nakajima (1990)	Japan, USA & Britain	1986; aged 25-30	Surveys of young people; cross-sectional	 Employment status Occupational group Industrial group; size of firm Job satisfaction Educational participation Family formation 	 Gender Educational background
Moncel (1995)	France & Britain	General	Review of literature \rightarrow framework for analysis	-	-
Oskarsdottir (1995)	Scandinavia & USA	General	Secondary analysis; survey of Icelandic school leavers	• Drop-out from full-time education	Social class background
Raffe and Courtenay (1988)	Scotland & England	1984-86	Youth cohort surveys	 Educational participation Post-school destination	GenderEducational background
Rosenbaum and Kariya (1991)	Japan & USA	1980-82; 2 years after school	Surveys of school seniors with follow-up; longitudinal	Occupational group	 Gender Social class background Educational background

Schober-Brinkmann and Wadensjö (1991)	Sweden & West Germany	1970s & 1980s	Secondary analysis of official statistics	 Labour force participation Employment v unemployment Participation in labour market programmes Industrial distribution Pay 	• Gender
Schupp, Buchtemann, Soloff (1994)	Germany & USA	1978-1990; 12 year period after leaving school	Household panel surveys; longitudinal	 Employment Skills matching Skills transferability Wages/ wage growth 	Not considered
Shavit, Müller et al. (1994)	Italy, Israel & Germany	Year varies by country; males aged 26- 40 years	Household surveys; cross- sectional	EmploymentOccupational class	Educational background
Smyth and Surridge (1995)	Ireland & Scotland	1979-1991; one year after leaving school	Regular School Leavers' Surveys; cross-sectional	• Post-school destination (employment status, educational participation)	 Gender Social class background Educational background