

The role of vocational education and training in enhancing social inclusion and cohesion

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John Preston and Andy Green

Abstract

Social inclusion and social cohesion are two dominant themes in vocational education and training (VET). They are important policy objectives of the Lisbon goals. In this contribution we explore the relationship between cohesion, exclusion and VET with particular reference to exploratory new research using the European and world values survey.

Separate traditions of social inclusion and cohesion have in the past (and more recently) been part of discussions of the concept of vocational socialisation which presents one important way in which VET can jointly contribute towards inclusion and cohesion within societies. In our introduction we chart the historical and contemporary ways in which societies have attempted to reconcile cohesion and inclusion through various forms of VET and socialisation. There appears to be a movement away from socialisation towards competence approaches to VET which may emphasise narrow forms of inclusion, through employability. In short, VET has many potential benefits for societies beyond narrow labour-market functions – although these remain important. Whether these benefits are enacted or not depends on the place of VET for social inclusion within a national welfare system.

The obverse of social inclusion is social exclusion – a contested concept. Social exclusion is a multi-dimensional variable which has different meanings across national systems of education. Using exploratory evidence from the latest sweeps (2000-02) of the European and world values surveys we consider that an outcome-based approach to social exclusion (based on objective lived experiences) is superior to a taxonomic categorisation (based on household composition or other descriptive variables). Taking an outcome-based approach to social exclusion we examine the dynamics of exclusion in five countries (Norway, Poland, Portugal, England and the US) showing that VET can sometimes (but not universally) protect against certain forms of exclusion. However, this evidence needs to be supported by further work using other surveys. In particular, longitudinal and labour force surveys would be useful. Our quantitative analysis is supported through policy analysis which critically examines the ability of VET to meet the needs of the socially excluded. In this analysis, we also consider the experiences of immigrants and the disabled in VET who we find are particularly marginalised from mainstream VET provision. Our conclusions are that targeting VET towards specific

client groups is not necessarily the optimal policy choice. First, various groups possess characteristics of social exclusion which might not be reached by targeted VET. Second, targeted VET may reinforce social exclusion if it is independent of non-targeted VET action.

We then consider social cohesion, differentiating this from inclusion, and arguing that cohesion is compatible with, and indeed conducive to economic growth under certain circumstances. In particular, VET can contribute towards value formation, institutional integrity and (arguably) the reduction of inequality. Using a unique time-series analysis for European countries during 1965-90 we consider that educational equality can contribute towards a protection of civil and political liberties, suggesting that improving educational equality is positive for social cohesion. In this context, educational equality is measured by the *edgini*, a version of the income inequality gini coefficient based on the distribution of educational qualifications in the general population. We find an association, rather than strong causation, between VET enrolments and educational equality. We argue that VET may have a role to play in terms of the reduction of educational inequalities as well as in value formation.

We conclude by developing a conceptual model of social cohesion regimes which indicates the difficulties of policy borrowing while indicating possibilities for developing progressive systems of VET within national polities. In particular, we stress the need to modernise VET towards addressing issues of social cohesion and exclusion through greater client participation and integrating the socially excluded into mainstream VET rather than necessarily targeting the socially excluded.

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Introduction

This contribution to the Cedefop's fourth research report examines the role of VET in promoting social inclusion (or alternatively reducing social exclusion) and social cohesion. These two concepts, both seen in the literature to represent positive potential outcomes of VET, are related but there are important distinctions.

Social exclusion is a multi-dimensional category encompassing various types of exclusion experienced by individuals. It has different meanings across societies ranging from a narrow focus on employment to a broad orientation towards democratic participation. Social cohesion we take to be a more universal concept applied to society as a whole. It may be enhanced through higher rates of employment and certainly, as with social inclusion, implies strong communities, low rates of crimes and other social benefits at the individual level. There is certainly a relationship between social cohesion and community cohesion. However, social cohesion also implies levels of inter-community cooperation and social solidarity across communities and social groups which are likely to be enhanced by relative equality of incomes, strong social institutions (particularly those involved in welfare provision such as health and education) and the prevalence of societal attitudes of trust and tolerance.

In the structure of this report, social inclusion and social cohesion are considered separately in relation to VET. However, in the conclusion to the report we consider conceptual models which relate social cohesion and social exclusion.

Our approach to the contribution is to consider the historical, political, economic and sociological contexts of VET regarding social cohesion and social inclusion. We support our arguments using original and innovative empirical evidence conducted uniquely for this contribution. Where possible, we use evidence from evaluation studies to support our arguments, but we consider that examining the institutional and cultural contexts within which VET functions are important in understanding the ways in which VET can be modernised to foster social inclusion and cohesion. Indeed, the modernisation of VET to meet the Lisbon goals for 2010 and beyond needs to take into account the historical trajectories and path dependencies of European countries as well as the polysemic nature of both exclusion and cohesion. Concerning the nature of VET we consider both the nature of VET systems (regarding transitions, funding and particularly regulatory frameworks) and specific interventions. We consider VET in terms of interventions provided by, or regulated by, the state from upper-secondary schooling through adulthood. Aside from apprenticeships, we do not consider employer-based training in detail as there is no substantive evidence connecting this form of training to either social inclusion or cohesion. In the report, we focus on four European countries: Norway, Poland, Portugal and England. We additionally consider other national systems and models of VET, particularly Germany and France, and the VET system of a major EU competitor: the US.

The report is divided into four sections. In the first, we consider the concept of vocational socialisation both historically and in contemporary policy literature. We focus on this concept

as it is central to discussions of social cohesion and social inclusion, being a key mechanism through which inclusion and cohesion were reconciled in the public domain. Although forms of vocational socialisation were relatively country specific, the broad aims of VET programmes in terms of reconciling inclusion (through labour-market integration, economic citizenship, political participation) and cohesion (through employment, industrial democracy, commitment to national polity) were striking. We consider that although some aspects of vocational socialisation were reactionary and rigid, the move away from vocational socialisation to a focus on narrow competences and employability in VET is problematic for inclusion and cohesion. The challenge for modernising VET is not necessarily entrenchment in national models of vocational socialisation but how to reconcile some principles of vocational socialisation with the challenges of social exclusion.

In the second section, we then consider the relationship between social inclusion and VET both theoretically and empirically using data from the latest sweep of the European values survey (EVS) and World values survey (WVS) (2000-02). We consider the meaning of social inclusion in various policy discourses in its solidaristic (where inclusion is central to social cohesion), liberal (where social cohesion is mediated by market processes) and monopolistic (corporatist) forms (where social cohesion is based on the dominance of certain majority groups and, therefore, social exclusion does not particularly consider the interests of excluded groups). We stress the multi-dimensional nature of social exclusion beyond employment and economic domains. This approach remains true to the original formulation of social exclusion as a relative and social (rather than simply economic) concept. Although certain groups, such as workless households, are often tautologically classified as excluded, we use cluster analysis, which we argue is an innovative and more appropriate method of classification. Cluster analysis classifies individuals according to shared characteristics (indicators of exclusion) rather than on a dimensional scale of exclusion/inclusion. We use WVS and EVS data for five countries (Norway, Poland, Portugal, England and the US) to identify the dynamics of social exclusion in each country. We choose these countries to exemplify various dynamics of social exclusion and VET in a transitional economy (Poland), a southern European economy (Portugal), a market orientated/liberal economy (England), a major international comparator and competitor (the US) and a social democratic/welfarist state (Norway). By using a broad measure of social exclusion focusing on both income and social capital exclusion (rather than a narrow, employment focused measure) it is possible to identify (through logistic regression) that VET qualifications are sometimes, but not always, associated with a lower probability of being in a socially-excluded category. We also consider associations between VET and other measures of social exclusion in terms of political disenfranchisement and health. Considering national policies on VET in these countries we argue that an embedding of not only user involvement, but democratic participation by the socially excluded in the operation of VET is beneficial. We also reflect on the targeting of VET for the socially excluded, explaining that the broad nature of social exclusion in societies means that there are limits to the effectiveness of targeting of VET initiatives.

In the third section, we turn our attention to social cohesion, emphasising the positive role of VET in both system and social integration. Although growth and social cohesion are not

necessarily considered to be conflicting objectives, we emphasise the potential role for VET (among other parts of welfare provision) to reduce conflicts between these two key policy objectives. Indeed, social cohesion is another mechanism by which VET can promote economic growth. In particular, VET potentially provides mechanisms through which knowledge of, and participation in, institutions can be increased and may potentially be used to reduce educational inequalities. It also enables individuals to benefit in terms of their health, makes them more likely to participate in civic associations and reduces crime. The reduction of economic and social inequalities is implicated in processes of economic growth as we will explain in the third section of this report. Rather than concentrate on individual data (which we have previously argued cannot represent social cohesion – Cedefop, Green et al., 2004) we use cross-national time series data for European countries to provide evidence that educational equality is associated with an increase in civil and political liberties, but not necessarily with unrest. Although there is not a sufficiently robust dataset to incorporate vocational enrolments into this time series, cross-sectional data is used to assess the relationship between vocational enrolments and general educational inequality (measured by the education gini coefficient). We find a relationship between participation in vocational courses at ISCED3 and general educational inequality although, in addition, VET may have an impact on social cohesion through alternative mechanisms (in particular vocational socialisation and values). However, we urge caution on the interpretation of this data given the limitations of the evidence available.

In our conclusion we assess conceptual models of social exclusion and cohesion with regard to VET. We use Silver's (1994) conception of models of social exclusion to consider four possible conceptions of social exclusion/cohesion within Europe. In each VET has a particular (but not deterministic) function in delivering social cohesion/exclusion. We consider that to modernise VET in terms of social exclusion and cohesion three key policy priorities for European countries are:

- (a) participation of the socially excluded in implementing VET;
- (b) inclusion in mainstream VET (rather than necessarily targeting, particularly as the socially excluded are distributed outside of target groups);
- (c) a return to the principles associated with vocational socialisation to enhance social cohesion;

Aside from the policy domain, we consider that for research evidence there is a priority to improve data on equity in VET, not just contemporary data, but also reconstruction of past time series on equity. This will enable researchers to gain purchase on the dynamics of VET over time and inform debates on equity and social cohesion. Additionally, there needs further work in modelling social exclusion multi-dimensionally and over time, exploring the impact of VET on social exclusion using longitudinal analysis. Finally, in terms of VET providers we stress a broader categorisation of VET users in considering the meaning of social exclusion and to emphasise user involvement towards civil-society forms of inclusion.

1. Socialisation through VET for inclusion and cohesion: historical and contemporary contexts

1.1. Historical overview

In reforming VET to meet the Lisbon goals of 2010, Leney et al. (2004, p. 116) comment: '[...] we need to explore the extent to which VET contributes to the integration of groups that otherwise would be marginalised, and to the formation of vocational identities'.

This comment is an important starting point in considering the relationship between VET and social cohesion/inclusion. The role of VET in bringing all groups into the national polity has been an important, but neglected, aspect of education. Schooling and, in particular, general education has often been regarded as a key agent of socialisation. It has variously been seen as a vehicle of formation by the state, a cradle of future adult citizens, and a potential force for social cohesion (Boli, 1989; Curtis, 1988; Green, 1990; Melton, 1988; Miller, 1986; Miller and Davey, 1990). VET, on the other hand, has often been ascribed more limited roles, as merely providing skills for particular jobs or preparing for working life in general. Compared with the profusion of writings on education and socialisation, relatively little has been written on the role of VET in socialisation, or in promoting of social cohesion. Where the topic has been discussed, it has been mainly in relation either to the role of VET facilitating initial access, or re-entry into work (and thus, in modern parlance, in enhancing social inclusion through employability); or to the process of professional socialisation. Both, it can be argued, have impacts on social cohesion, but in a more circumscribed sense than implied in discussions about education and citizenship. However, within the limited parameters of these discussions, there have undoubtedly been considerable differences in perspectives. How the role of VET in socialisation has been perceived, arguably, reflects variations both in political logics and national pedagogic traditions.

In Europe, different accounts of VET and socialisation reflect political and regional cultural cleavages. Variations across political traditions are evident, although more complex than often thought. Liberals and conservative political ideologies, and their associated pedagogic traditions, have tended to promote the dichotomous view of education and training which holds that only general education – in the 19th century a classical education – was the royal road to cultivation and the acquisition of the essential attributes of a good citizen (Silver and Brennan, 1988). Derived originally from the ancient Greeks, specifically Plato's division of humanity into the gold (the elites), the silver (their auxiliaries) and the bronze (the peasants and craftsman), the tradition has generally reserved higher levels of general education for the dominant classes – whether in the form of Cardinal Newman's liberal education or von Humboldt's *Bildung*, practical – or vocational – education. The lot of the bronze others, was a preparation for labour but not citizenship, at least in the full sense of the word (see also Arendt, 1998).

By contrast, socialists have often seen vocational education and work-based education, not only as job training, but also potentially as a source of enlightenment or consciousness raising, in a way distinct from, but parallel to, the role of general education in the liberal/conservative paradigm. For the early 19th century English Chartists, the learning of ‘really useful knowledge’ went beyond developing practical skills and offered the possibility of general enlightenment and raised class consciousness (Johnson, 1979). For Communists, from Lenin and Krupskaya onwards, work-related polytechnical education was, among other things, a way of cultivating the new Soviet man. Both objectives suggested particular visions of the role of VET in promoting their chosen forms of social solidarity. August Bebel, the German socialist, cleverly captured the tensions and elisions in the socialist and dominant ideologies in regard to vocationalism, allegedly commenting ‘vocational education was the general education of the working class. General education was the vocational education of the middle class’

The philosophy of liberal education, dear to European elites in the 19th century and after, was, after all, based on a scarcely buried contradiction – what semiologists would call an *aporia*. Advocates of liberal education, idealised in the idea of the liberal university, claimed to value learning, as Newman had it, ‘for its own sake’ (Silver and Brennan, 1988). It was not to be sullied with any base utilitarian or merely occupational motives. However, liberal education already included theology, and soon embraced comfortably within academe, law, medicine and other liberal professions. Technical education, on the other hand, was practical and had to do with a narrow training for a job. However, the origins of the term ‘vocational’, which soon replaced ‘technical’, lay in the notion of vocation or calling – pre-eminently associated with a religious calling. But whereas training for higher professional vocations – such a law, theology and medicine – became classified as part of general university education, only lower occupations were classified as vocational. Some philosophers refused the invidious dichotomisation of vocational and general learning. Alfred North Whitehead, for instance, wrote in 1932 that ‘[t]he antithesis between technical and liberal vocation is fallacious. There can be no adequate technical education which is not liberal and no liberal education which is not technical: that is, no education which does not impart both technique and intellectual visions’ (quoted in Silver and Brennan, 1988). John Dewey and George Kerschensteiner also, as we will see later, contested the inept polarisation. However, the distinction has been remarkably durable because it refracted an essentially class issue. The elite should have one education and the masses another.

Socialist traditions in education have also not been without equivocation and division over the meaning and purpose of vocational education. Often they supported vocational education as an important aspect of overall educational provision for all social classes. Vocational education has been supported, not only as a provider of essential skills for working life, but also as having potential to reveal the true nature of work relations and thus to empower future employees (Johnson, 1979). Typically socialist advocates of vocational education have argued for it to be broad in nature, and usually combined with general education, or a distinctive sphere accorded equal status with general education. However, the political Left has not invariably championed vocational education. Where it has involved the early

separation of children from different social groups into different tracks it has often been condemned as an agent of social class reproduction. The Italian communist, Antonio Gramsci, famously argued for a broad general education for the working class, rejecting new forms of vocational education advocated by Giovanni Gentile and adopted by Benito Mussolini's regime. Technical schools, he feared, would not only perpetuate social differences – they would 'crystallise them in Chinese complexities' (Gramsci, quoted in Anderson, 1976, p. 22). Technical schools should not become 'incubators of little monsters aridly trained for a job, with no general ideas, no general culture, no intellectual stimulation, but only an infallible eye and firm hand' (Gramsci, 1977, p. 27). The combination in Gramsci's thought of social progressivism and pedagogical conservatism has been frequently echoed in subsequent socialist writing on education (Entwistle, 1979).

Historically, differences in attitudes towards vocational education have not only reflected different political ideologies, but also different regional traditions. One obvious difference can be observed in the contrast between 19th century Britain and continental Europe.

Britain had very little vocational education prior to the late 19th century. This was partly because employers gave little support for it, fearing, as they did, that they would end up paying in taxes for something which would serve only to endanger their trade secrets and prompt their workers to demand higher wages. It was also no doubt a legacy of Britain's early industrial revolution which, occurring as it did despite, rather than because of, any advances in education and skills, encouraged the complacent belief that its continuing economic growth did not require new efforts to educate and skill the workers (Green, 1990; 1995). Opposed to State action to develop technical education, employers ended up relying almost entirely for their supply of skills on the privately organised and unregulated apprenticeship system. However, the results of this were often far from beneficial, as Flemming Jenkins, a Professor of civil engineering at University College, pointed out in his evidence to the Samuelson Commission in the 1880s. Explaining that in his experience apprentice supervision was often very lax; he maintained that while the best apprentices learnt a good deal, idle ones learnt nothing at all. Comparing the apprenticeship system with continental trade schools Jenkins argued that, in terms of practical ability and common sense, the English apprentice was a match for anyone, and even for the products of the Polytechnic. However, he continued: 'when in after life, the two men came to fill the higher stations, the English engineer would begin to feel the want of elementary training very severely, and he is at a disadvantage compared with the man abroad, in the judging of new problems which come under his eye' (HM Government, 1868, p. 130) Other contemporary commentators, like Silvanus Thompson, were less generous to the English apprenticeship system, claiming that in all respects it was inferior to the continental trade school. Thompson, in his book *The apprentice schools in France*, argued that the English apprentice spent six years in repetitive drudgery that failed 'to make anything but a bad, unintelligent machine' (Thompson, 1897).

If the evidence from the 19th century generally points towards a highly instrumental and very narrow conception of technical education in Britain, northern continental European States generally had a wider range of technical provision by the mid 19th century and typically

adopted a much broader concept of the technical education curriculum. France, for instance, had many trade schools, in addition to the vocationally oriented *écoles primaires secondaires*, for elementary school graduates, as well as numerous *écoles des arts et métiers* for training craftsmen (Artz, 1966; Day, 1987). Higher levels of the education system, including the famous *école polytechnique*, probably the best engineering university in the world at the time (Weiss, 1982), were also vocational in nature. These vocational establishments not only far outnumbered their equivalents in Britain, they also offered a different kind of education. Whereas the apprenticeship and trade schools in Britain were regarded as separate from the education system and provided no general education, French vocational schools were considered part of the education system and combined skills training and general education in equal measure (Thompson, 1897; Day, 1987). The *école polytechnique* promoted what advocates called *la science industrielle* which combined a holistic approach to the study of science and technique (Weiss, 1982).

The distinction between British and continental European vocational traditions from the 19th century is clear and is still evident today, as we will show later. However, there were distinctions within continental European systems which became more apparent as time went on. French technical education was firmly rooted in the education system, and continued to be so in the 20th century when the apprenticeship remained relatively weak. Other countries in southern Europe, many influenced by France, also developed school-based technical education systems alongside limited apprenticeship provision. Portugal is an example. Germany, after unification in 1871, other German-speaking countries and countries bordering Germany, such as Denmark, the Netherlands and Austria, however, developed a different tradition. Here apprenticeship systems dominated but combined with part-time school learning to become the dual system with master schools accessible after initial training and some work experience. Like the school-based systems in France, these systems combined skills training and continuing general education, but whereas the French style system remained largely state organised, apprenticeship systems were predominantly controlled by labour-market institutions – for instance through what later became known as the social partners (Thelen, 2004). This added its distinctive dimension to the dominant conceptions of the functions and means of vocational training. Nordic countries were distinct again. There were parallels between Nordic systems and German social-partnership and apprenticeship based VET models, particularly in Norway. However, the origins of Nordic VET systems emerged from craft (rather than industrial) paradigms and centred on notions of locality and community rather than state formation. After the 1960s social democratic reforms in Nordic countries, VET agreements became legally constituted (Cedefop, Heikkinen, 2004). In Eastern Europe there was early centralisation of vocational education systems (particularly in Poland) but in the latter part of the 21st century these systems became distinctively socialist in nature with an emphasis on polytechnical education.

The three traditions of 19th century vocational education broadly outlined above, have, arguably, remained distinctive in the 20th century and led to different conceptions of the socialising role of VET. Wolf-Dietrich Greinert (2004) identified three major historical traditions in VET the societal model of training, represented by Germany, the market model,

represented by Britain, and the state model, represented by France. Each conceptualises the socialising function of VET in different ways. The societal model emphasises professional socialisation. The state model emphasises cultivation of technique and general culture – as in the French notion of *culture générale*. The more minimalist and instrumentalist market version emphasises occupational training. However, here, in recent years, a rationale for the social benefits of VET has also been developed in terms of employability and social inclusion.

Although the German, French and British paradigms of vocational education and their social and labour-market functions have been well articulated and discussed they do not necessarily help us to fully understand the vocational education systems of other European countries. These systems may be analogous to those described above, but have their own distinctive characteristics. To provide some continuity between this section and section 2 on social exclusion, which follows, we will examine systems of Nordic countries in general (Norway in particular) Poland and Portugal, in Section 1.3.2.

These national paradigms of VET map onto conceptions of social inclusion as will become clear in Section 2.3. In particular, the market model of VET is similar to the specialisation paradigm of social exclusion and the state model to the solidarity paradigm.

1.2. Kerschensteiner and Dewey on vocational education

Philosophically, there has been much early work reconciling vocational education with social cohesion. Georg Kerschensteiner (in Germany) and John Dewey (in the US) were responsible for establishing ideologically distinct, but pedagogically connected, traditions of VET in their respective countries. To understand developing VET for social exclusion and social cohesion it is useful to comprehend the principles underlying their thought.

Kerschensteiner was head of the school system in Munich from 1895 until 1919. He was largely responsible for reforming vocational education there, culminating in the 1907 compulsory continuation school law and a system much admired across Germany. At a time when continuation schooling in much of Germany was largely general, associated mainly with evening classes in elementary schools, he campaigned successfully for day-time continuation schooling up to 18 years of age in specialist schools where general education was integrated with learning craft skills. Like Dewey he saw pedagogic merits for young people to learn through practical and work-related activities. However, he also believed that this should form the basis for a wider general curriculum which together with workshop learning would have great benefits in socialising young people into adult life in the community.

Kerschensteiner believed that the existing school curriculum in Germany was too academic to engage the interest of many young people. Rather than support more academic education in continuation schools he believed in focusing continuing schooling around work. Preparing for

work was not the only object of this schooling; vocational education would also be an education in citizenship. Diana Simons' biography of Kerschensteiner, says that his 'system of education was to educate its members to form a community of thinking, selfless, efficient people all working willingly and joyfully together for the betterment and progress of the state' (Simons, 1966, p. 29). The notion of the state appears repeatedly in Kerschensteiner's writings and his formulation of objectives often seems to reflect a kind of idealised Hegelian statism. For instance, he wrote that 'the third and greatest of the schools' educational tasks [...] is to develop in them the inclination to contribute their part in the furtherance of the state's programme towards the ideal of the moral community' (quoted in Simons, 1966, p. 32). However, Simons maintains that Kerschensteiner's views were far from the nationalist opinions of Friedrich Lange's German League which was at the time trying to 'Germanise' education in Germany. His concern was as much with humanistic notions of world citizenship as with the concerns of the state. Kerschensteiner was keen to emphasise this, writing 'my objectors [...] always interpret "education for citizenship" only to mean educating the student to perform blind service to a strictly defined organism [...] but just as the family's task is to foster the state-idea and to prepare for state-citizenship, so one could say it is the job of the state to promote the "humanity-idea" of world citizenship [...] if we educate good state-citizens we are also educating good world-citizens' (quoted in Simons, 1966, p. 31). Whatever Kerschensteiner's views on the state it certainly appears that his main emphasis was on the role of vocational education in character building.

The basis of Kerschensteiner's pedagogy was his belief that education, to be effective, had to gain the interest of the student by engaging with the things which interested them. The objective then was to meet students on the grounds of their own egotism and turn interest to an altruism which would form the future moral citizen. 'How then, shall we tackle the question of educating the young citizen to develop an altruism which is born of insight?' (Kerschensteiner, quoted in Simons, 1966, p. 44). His answer was through work: the vast majority of young people 'are engaged in some kind of employment and want to advance by means of their work. Their interests are centred around their job and nearly all youngsters are to be won over through this sphere of interest. If we win the boy over in this way, we also gain his confidence and with it we can guide him both intellectually and morally' (ibid.).

To Kerschensteiner, education through work was the way to develop the moral sensibility and character of young people. In his book on *Character and character training*, published in 1912, he argued that the four central aspects of character were: will, clarity of judgement, sensibility and engagement. These could only be developed through work. 'For there is only one thing common to all upright serious work, namely, that it exercises the power of the will, on which are based the most important civic virtues – diligence, care, conscientiousness, perseverance, attention, honesty, patience, self-control, and a devotion to a firm, disinterested, aim' (quoted in Simon, 1966, p. 47). The learning of crafts meant the building of character to Kerschensteiner, because it involved 'serious, intensive, productive activity' (ibid. p. 52). But so it was with other forms of human labour. 'The craftsman, the farmer, the artist, the scholar all reach true greatness through independent work at definite tasks' (ibid. p. 52). Further,, vocational learning not only involved individual concentration on a task but also collective

endeavours in the workshop. These developed the ability to cooperate. 'When they are all engaged in some common piece of work in this way, they all experience common success and failure, and they will all come to feel common joy in their work and common disappointments. The ambitions of the individual must fit in with the ambitions of the class [...] It is in group work that a sense of responsibility for one's actions is developed, which is so important in later life and which is so painfully lacking here in Germany [...]' (ibid. p. 61).

Kerschensteiner's educational philosophy focused on work but was not limited in its aims to fostering skills for work. Vocational education developed moral values and social skills through activity. It should also develop general knowledge and understanding through study of broader topics related to work. History, law, book-keeping, civics, were all part of the curriculum of the 'activity schools' in Munich, whose reform he completed by 1914. Kerschensteiner's great insight was to understand how these things could be taught through vocational study. As he wrote in a memorable example: 'I should like to look on our civics lessons as presenting a kind of history of civilisation which emerges from the history of the particular trade, in which the boy is engaged. Every trade, every profession, has a history which extends from the simple conditions of the past, through the fluctuating fortunes of time, to the complicated circumstances of the present. Here on its historic path, which, step by step, uncovers the ever increasing interdependence and bonds between man and groups of trades, and which demonstrates the gradual interweaving of interests between the professions, people and States, the pupil best comes to realise the limits of his justified egoism and to understand the tasks which the State has to perform in order to protect the rights of each citizen (quoted in Simon, 1966, p. 57).

Kerschensteiner's vision was very much of his time and there is much in his philosophy discordant with modern values – not least the pious and idealised statism, his obliviousness to class and gender inequalities in education, and his somewhat strident preaching on the duty and joy of work. He had his critics in his own day, although these were mostly those with instrumentalist notions of training who objected to the scale and cost of his vision of vocational training. However, he made a case for the pedagogic potential and broader social purposes of vocational learning which has rarely been argued so forcefully.

Dewey wrote his major works on education at the same time as Kerchensteiner, although there appears no record that they knew of each other's writings until later in their careers when their ideas had been largely formulated. It is therefore striking that many of their pedagogic starting points are similar. Both argued for a vocational education that would have social benefits beyond those of inculcating the skills necessary for work. However, ultimately their standpoints are different. While Kerchensteiner promoted vocational education in specialised schools, albeit in conjunction with general education, Dewey opposed differentiation in schooling and wanted general and vocational education integrated in the same schools. Further, while Kerchensteiner argued for a vocational education that would strengthen character and promote good citizens of the state, Dewey sees the aim of vocational education more in promoting local community.

Dewey's pedagogy begins, like Kerchensteiner's, from the observation that learning occurs when the learner's interests are engaged. He also shared the other's belief that public schools had become too academic and were not perceived as relevant by many students. In his seminal work – *The school and society* Dewey (2002) explains this in terms of the changes brought by modernisation. Whereas children used to acquire much of their learning at home, through carrying out useful activities, industrialisation and the decline of home-based production meant this opportunity was no longer available to most children. Schools, which had replaced learning through home-based production, were out of touch with the needs of the majority of children, 'meeting the needs of only one class of people, those who are interested in knowledge for its own sake, teachers, scholars and research workers' (ibid., p. 300). Public schooling could not easily appeal to the child's interests in real life experience and thus rarely offered the same kind of stimulation. 'No training of the sense organs in school introduced for the sake of learning, can begin to compete with the alertness and fullness of sense that comes through daily intimacy and interest in familiar occupations' (ibid., p. 25).

Part of the answer to this dilemma for Dewey was to introduce more practical activities into the school. 'It keeps them [children] alert and active, instead of passive and receptive; it makes them more useful, more capable and hence more inclined to help at home' (Dewey, 2002, p. 26-27). However, practical activities alone were not enough. They had to be made real if the school was to engender the spirit of social life. The school had to be made like a real community: 'the great thing to keep in mind, then, regarding the introduction into the school of various forms of active cooperation, is that through them the entire spirit of the school is revived. It has a chance to affiliate itself with life, to become the child's habitat, where he learns through directed living, instead of being only a place to learn lessons having an abstract and remote reference to some possible living to be done in the future. It gets a chance to be a miniature community, an embryonic society' (ibid., p. 32).

Dewey favoured the introduction of more practical activities into the school, alongside general education. However, he did not favour the creation of a separate sector of vocational schools. Continuation schools and trade were to him an inadequate compromise. This was partly because they focused too narrowly on preparing students for a job. He did not want education to serve the existing industrial system, 'The ideal is not to use the schools as tools of existing industrial systems, but to use industry for the re-organisation of schools' (Dewey, 2002, p. 311). He also objected that trade schools and continuation schools forced a choice of occupation too early and encouraged the division of social classes and it was 'fatal for democracy to permit the formation of fixed classes' (ibid. p. 313). The formation of such tracked systems forced a separation of social classes which was 'unfavourable to the development of a proper mutual sympathy' between social classes. It promoted an academic education for some and an 'over practical education for others' which brings about 'a division of mental and moral habits, ideas and outlooks' which was out of keeping with the spirit of democracy (ibid., p. 315).

Despite their similar pedagogic interest in the importance of engaging children's interests through practical activities, Dewey's vision of the social function of vocational education

was, ultimately, different from Kerschensteiner's, who emphasised its role in teaching children their duty to the state, Dewey emphasised how it could foster community. Whereas Kerschensteiner accepted that children were being socialised into different social roles, Dewey advocated social mobility and social mixing as the road to a higher form of democracy. Both favoured integrating general and practical in education, but Dewey also wanted social integration through education. As he wrote: 'the democracy which proclaims equality of opportunity as its ideal requires an education in which learning and social application, ideas and practise, work and the recognition of the meaning of what is done, are united from the beginning and for all' (Dewey, 2002, p. 315).

In conclusion, the substantive issues which Dewey and Kerschensteiner addressed are influential in the current modernisation of VET. The role of VET in aspects other than productivity (character formation) and beyond the individual (for Dewey the community, for Kerschensteiner the state) is an issue of current debate on VET. Although linguistically and ideologically there has been a movement away from character formation to social inclusion and from the community/state to social cohesion, there are some similarities between theories of the wider role of VET and contemporary perspectives.

1.3. Contemporary conceptions of VET and socialisation

Contemporary viewpoints on vocational have rarely stressed the moral and developmental dimension of VET in the kind of language used by influential philosophers such as Kerschensteiner (Simons, 1966) and Dewey (2002) who emphasised the role of ethics and character in (what are called now) social inclusion and cohesion. Morals have been replaced by social competences. Discussions of character formation tend to be conducted now in the more sociological language of transitions to adult roles. Nevertheless there are still quite widely held, if understated, assumptions that VET should play some role in building civic consciousness and promoting social cohesion. These are couched in general terms in policy statements of the major international agencies, such as the European Commission, OECD, Unesco and ILO.

1.3.1. The international agencies and VET

The European Commission study group on education and training entitled its 1997 report rather boldly *Accomplishing Europe through education and training*. Lifelong learning and vocational education were assigned a prominent role in promoting European identity and social cohesion. Europe, the report says: 'should play a role through education and training: i) to affirm and transmit the common values on which civilisation is founded; ii) in devising and disseminating ways of enabling the young people of Europe to play a fuller part as European citizens; iii) to identify and disseminate best practise in education and training for citizenship, in order to filter out the best means of learning contemporary elements of European citizenship' (European Commission, 1997, p. 57).

The report notes that active citizenship demands the acquisition of cognitive and communicative competence through social and educational processes, assuming, although not detailing, how this can occur through vocational education. Conclusions from the Lisbon meeting of European Council in March 2000 reaffirmed even more strongly that ‘lifelong learning is an essential policy for the development of citizenship, social cohesion and employment’ (Lisbon European Council, 2000). The Commissions’ *Memorandum on lifelong learning* detailed the favoured approaches to lifelong learning. It also adopted a broad notion of what cohesion meant in Europe. ‘Employability is obviously a key outcome of successful learning, but social inclusion rests on more than having paid work. Learning opens the door to building a satisfying and productive life, quite apart from a person’s employment status and prospects’ (European Commission, 2000, p. 9).

Other international organisations have mentioned, with more or less stress, the role of education and training in social cohesion. Sometimes, like the European Commission, they remain unspecific about what VET in particular can contribute. The International Labour Organisation adopts, as one might expect, a broad conception of social cohesion and of the role that vocational education can play in promoting it. Programmes of technical and vocational education should, it says, include both general and vocational subjects and cover a wide range of social topics related to the vocation being studied, including ‘social and economic aspects of the field as a whole’ (ILO, 2001). Programmes should aim at ‘preparing the learner more generally for life and the world of work, bearing in mind that technical and vocational education is for economic, personal and social benefit’(ibid). Unesco also promotes a broad agenda. Its second international conference on technical and vocational education in Seoul in 1999 urged that technical and vocational education and training (TVET) address sustainable development: ‘social and economic trends predicate the need for a new developmental paradigm which builds a culture of peace and environmentally sustainable development as its central features’(Unesco, 2004). OECD policies on lifelong learning (OECD, 1996) have generally placed more emphasis on economic competitiveness than social cohesion but this is not always the case. The OECD’s *Beyond rhetoric: adult learning policies and practise* argues that adult learning is equally a ‘tool for achieving goals of economic development and social cohesion’ (OECD, 2003, p. 8) ‘At a macro level,’ it argues ‘equity and social cohesion, the inequity of market outcomes, the development of democratic values, and the improvement of skills to participate in the economy and labour market, are all stated as vital reasons for government participation in adult learning’ (ibid, p. 70). Adult learning is only part of VET but the document provides some evidence of OECD concerns beyond economic growth.

1.3.2. Continuing policy differences

Policies and visions of international agencies generally advocate a social role for VET. However, the necessarily generalised – sometimes rather bland – language of their reports tends to mask the different policy perspectives of national governments and those advocated by academic commentators of different persuasions. Here we may return to the marked

regional differences which persist in VET traditions noting the continuing importance of Greinert's distinctions between the social model, the state model and the market model. However, we would say that although these models are exemplary as a method of categorising the education systems of most of continental Europe (particularly Germany and France) and England, there is not an exact correspondence between these models and the vocational education systems of other countries. In this section, we consider as well as Germany, France and England, the nature of the vocational education systems in Norway, Poland and Portugal. Although there is some relation between these education systems and the social, state and market models there are also important differences.

French VET continues to emphasise the primacy of school-based routes, the unambiguous location of VET in the national education system of institutions and diplomas, and the importance of marrying general and vocational education within vocational programmes. Despite attempts in recent years to revive the apprenticeship system, the school based route for VET, centred on the vocational *lycées*, dominates provision and is substantially integrated with the general education system through the location of the vocational baccalaureate within the overarching system of baccalaureate qualifications. Even the more craft-oriented CAP (*certificat d'aptitude professionnelle*) programmes, and the lower general vocational BEP (*brevet d'enseignement professionnel*) programmes, are located in the general education system and act as staging posts to higher qualifications. General education still occupies between a third and a half of the time spent by students on these courses and civic education is compulsory on all programmes, including the CAP. Promoting *la culture générale* remains a central aspect of vocational education. Arguably it has become dominant as vocational courses have become increasingly academic in the past two decades (Green et al., 1999; Mas and Werquin, 2005; Tanguy, 1991a and b). Vocational education is seen as being centrally about promoting French citizenship, defined, in the French republican tradition, in a state-oriented and political fashion (Brubaker, 1992).

Initial vocational education in Germany and other German-speaking countries and regions, has placed an equal stress on the social role of vocational learning. However, the emphasis is more on developing civic values through professional socialisation. Being run along sectoral lines, and largely regulated through the joint actions of the social partners, the German dual system of apprenticeship tends to promote the professional values of the industry sector in which it is embedded (Brown et al., 2001; Crouch et al., 1999). Apprenticeship training is explicitly designed to develop in apprentices a *Beruf* (occupational) identity and an affinity with the professional values associated with it. According to Streeck, the concept of *Beruf* signifies 'a body of systematically related theoretical knowledge (*Wissen*) and a set of practical skills (*Können*), as well as the social identity of the person who has acquired these' (Streeck, 1996, p. 145). Broader civic values are also promoted by inculcating professional values, still, in a sense, in the way Kerschensteiner advocated. The (part-time) *Berufsschule* (vocational school) has a broad mission in dual system training including general education and occupational theory. Its terms of reference are drawn up by both the *Länder* Ministries and the BIBB. According to the general 1991 framework agreement for vocational schools the *Berufsschulen* have among their objectives to:

- (a) 'impart professional competence, specialised competence in conjunction with human and social capabilities';
- (b) 'develop occupational flexibility to cope with the changing demands of the working world and of society, as well as having regard to the growing together of Europe';
- (c) 'encourage preparedness for continuing and further professional training';
- (d) 'provide the ability and willingness to act responsibly in terms of the individual shaping of one's own life and in the public sphere' ⁽¹⁾ (Brown et al., 2001).

The German dual system has been under strain in several respects in the past two decades, not least as a result of unification. The growing needs of modern production for labour flexibility, multi-skilling and job mobility put in question the long established notion of *Beruf* and a singular occupational identity. Apprentice programmes have consequently been reduced in number and made somewhat more generic in terms of the jobs for which they qualify apprentices (Green et al., 1999). There has also been more emphasis on generic or transversal skills. This has led to pressures to slim down the general education part of the training and for a new stress on competences as general skills. This can be seen in the widespread debates about key qualifications (*Schlüsselqualifikationen*). However, even here concern for the broader civic purposes of VET has not been entirely lost since key qualifications include a broad notion of social competences and thus can be clearly distinguished from the significantly narrower notions of core skills in Anglo-Saxon literature (Kämäräinen et al., 2002).

There is a relationship between the German system of vocational education and those of Nordic countries. They all support strong social partnerships grounded in a supportive social welfare model and they emphasise apprenticeships leading to employment routes. For young people, these have been historically constituted under youth guarantee systems where young people receive a promise of employment after training (Hummeluhr, 1997). In Finland, for example, there has been an emphasis on models of lifetime employment where vocational education is premised on the willingness of social partners to provide work (Kivinen and Rinne, 1998). German and Nordic models emphasise the role of education in enhancing social cohesion. In Nordic countries, vocational education is part of the socialisation of what might be called the citizen worker (Hernes, 1988) with a strong emphasis on participation in social democratic institutions in and outside the workplace. Unlike the British model, the state is responsible for funding and regulating vocational education. However, collective, national agreements for vocational education have more recently been superseded by local agreements suggesting some need for flexibility with regard to regional labour-market conditions. This is not to say that the Nordic countries are identical in terms of vocational education systems. Denmark has a more traditional system of apprenticeship than other Nordic countries (with parallels to the German system) whereas Finland introduced a competence based model of vocational education (with similarities to the English qualification system) (Lankinen, 1999).

⁽¹⁾ Translation by Jana Haeberlein with assistance from Caroline Steenman-Clark.

Since 1994, vocational education in Norway has been based largely on the 2+2 model with two years in vocational education followed by two years in a training enterprise. This form of study was promoted as part of the package of education reforms known as Reform 94 (updated by a further set of education reforms known as Reform 97). Reform 94 gave young people the right to three years of upper-secondary education, specifically promoting vocational pathways around 30 subject areas (*Studieretninger*). At the tertiary level, many vocational qualifications have been adapted along the lines of general higher education accredited at Bachelor, Masters and PhD levels.

However, the curriculum characteristics of the vocational system of education in Norway are not necessarily as important as the system characteristics. In common with other Nordic systems of education, there is close cooperation between providers of vocational education (particularly schools) and other social partners. The *Rådeet for fagopplæring* (National council for vocational training) which has democratic representation by various social partners advises the government in matters such as the demand for vocational skills and participation in reforms concerning vocational education (Shapiro, 2004). Like the German system of vocational education, globalisation and changes in labour-market structures have placed the Norwegian system of vocational education under strain. However, the statutory nature of instruments to maintain participation in vocational education and the importance of social partnerships in continuing these instruments has been maintained.

In comparison to the Nordic and Germanic models, in Britain and, to a lesser extent, in other English-speaking countries, a quite different conception of the role of vocational educational and socialisation has developed. As we saw earlier, vocational education in Britain has historically always been somewhat marginalised from mainstream education, often marooned in a rather indeterminate place between education and work. General education never occupied a central place in vocational training programmes and vocational qualifications, which were always separate from general qualifications and awarded by independent bodies. They never required proficiency in any but the most basic of general educational skills. Developments since the 1970s in Britain have in many ways served to exacerbate this singularity.

During the 1980s a widespread reform of vocational education, including of the apprenticeship system, was undertaken by the then Conservative government through its agency the Manpower Services Commission. The reforms had a number of objectives, including to rationalise the so called 'jungle of vocational qualifications' (de Ville, 1986) offered by private awarding bodies and to ensure that vocational training better served the needs of employers. In pursuit of the latter objective the government sought to wrest control of apprenticeship from trades unions by abolishing the time-served criteria for qualification and replace them with new standards for skills required in different occupations developed through scientific skills profiling and linked to performance rather than mode or length of study. The result was the new framework of national vocational qualifications based on competences (Green, 1998). This process, in effect, severed the link between vocational training and professional socialisation, at least in as much as this was understood by employee

organisations, and took the training system off in a direction quite different from that typified by social partner-based systems in German-speaking countries. Whereas the old apprenticeships in the UK had involved a considerable emphasis on professional socialisation, as in Germany, through learning the customs and mores of the occupation in question, now all such elements, deemed to identify too much with trade union interests, were removed from training programmes. The objective was no longer to develop occupational identities and the values associated with them but rather to promote competences which were clinically isolated from any of the old labourist values and interests.

Vocational education in Britain, marginalised as it was from mainstream education, had always embodied a rather limited conception of general education. With the development of the competence paradigm a yet more impoverished conception of general learning was put in place. In line with the highly utilitarian and behaviourist underpinning philosophy of the competence movement, general education subjects were deemed not relevant to VET for work and were removed from the programmes. At the same time it was recognised that employers did require some generic or transferable skills from new employees, above all the basic skills of literacy, numeracy, listening to instructions, punctuality and so on. Using the now dominant methodology of occupational skills profiling a set of core competences or core skills were developed to be incorporated in all VET programmes. The national vocational qualification framework thus adopted core skills units in: communications; problem-solving; improving own learning and performance; working with others, application of number; and IT. When the broad general national vocational qualifications were introduced in 1992 they likewise included compulsory units in: communication; application of number and IT, and as additional and desirable outcomes: foreign language; problem solving and personal skills (working with others and improving learning performance). These core skills – later re-labelled key skills – acted as a surrogate for general education in vocational education (Green, 1998). In practise they represented a decisive move away from any broader notion of the social function of VET. Professional socialisation was replaced by competence acquisition.

The model of vocational education in Britain would appear, at first sight, to make few claims as regards the socialising function of VET since the social and values dimensions have been largely removed from the curriculum. It is hard to see how, in this model, VET can contribute towards citizenship and social cohesion. However, in recent years, Labour governments have developed a different conception of the social role of VET which relates not so much to values and socialisation but to the idea of employability and its putative role in enhancing social inclusion.

The concept of employability was used widely in human resource management circles in the 1990s to replace the notion of employment security which was deemed to be increasingly obsolete in an era when few employees would be lucky enough to experience it (Hillage and Pollard, 1998). The idea of employability recognised the increasingly uncertain nature of employment and the need for individuals to be prepared for successive job changes. In doing so it transferred responsibility for maintaining employment from the employer to the employee and job-seeker. It was up to individuals now to maintain their ability to find and

keep employment by continually updating their skills and presenting their employment credentials effectively to employers. This could also imply a greater facility in managing individuals' careers autonomously and effectively. Hillage and Pollard, in a report for Government in 1998, wrote that 'employability is the capacity to move self-sufficiently within the labour market to realise potential through sustainable employment' (Hillage and Pollard, 1998).

After coming into government in 1997, New Labour rapidly adopted the employability agenda as the mainstay of its policies on VET. It has become a central component of government thinking on social inclusion. Employment, it is argued, is the primary means to integrate people into the mainstream of society. Employment helps individuals avoid the social risks are associated with unemployment and social exclusion, including those of poverty, illiteracy, ill-health, social marginalisation, crime and lack of self esteem. Employability is the key to finding and keeping work, and thus the main objective of VET. In this sense, then, VET policy in Britain still claims to have a social function – that of promoting social inclusion which is held to be central to active citizenship, community renew and thus, indirectly, to social cohesion.

In the above discussion, we have been able to exemplify the social, state and market models with examples of existing education systems. However, it is worth remarking that not all vocational education systems in Europe can be simply allocated to these models. There are education systems which may be described as hybrid or transitional models for example. Two countries considered in this report – Poland and Portugal – may be regarded as not fitting comfortably with the cases described above. In Section 2 of this report (on social exclusion) we consider some similarities between the systems of vocational education in Poland and Portugal. In particular, these systems emphasise academic education and rarely use VET to target issues of social exclusion (which are culturally not given the same level of priority as in other European economies). However, in terms of what might be called the integration functions of vocational education there are substantive differences.

Vocational education in Portugal is often considered to form part of a southern model of VET with parallels drawn between the Portuguese system and those of other countries (in particular Spain and Italy). These countries have historically low participation in VET and a weak link between systems of VET and the labour-market. In Italy, this may be due to an emphasis on a classical system of education which favours academic education as a route into high status occupation. In Portugal, however, this is more likely to be connected to the preponderance of locally based and informal routes into the labour market. There is no strong, socially partnered apprenticeship system in Portugal and firms are particularly resistant to expenditure on worker training (Leney, 2004, p. 11). However, vocational schools provide a growing function in the socialisation of technical workers and a new form of vocational school (*escolas profissionais*) is designed to integrate academic and vocational education (Meijer, 1993; Da Cuhna, 1993, p. 219). These schools do not necessarily require students to attend a training centre or work place, rather the curriculum will be orientated towards vocational and technical subjects – 30-40 % in the pre-vocational stages (ages 13 to 15),

rising to 50 % in the later stages (1-3 years). These arrangements also encourage public-private partnerships (rather than social partnerships – a substantive, rather than linguistic distinction. It is envisaged, for example, that the vocational schools should eventually become self-financing) between employers and education providers (Meijer, 1993, p. 20). However, it would be a mistake to consider that Portugal has a market approach to vocational education and integration. The Portuguese education system (including vocational education), at least following the reforms of 1974, was relatively democratic (even Frierian ⁽²⁾ in some respects) in terms of involving teachers and parents in decision-making in schools. Despite democratic tendencies and integrating vocational/academic schooling there is still high demand for general education and for retaining the academic emphasis of elite schooling. There are, therefore, important parallels between French and Portuguese models of education (Da Cunha, 1993).

The classification of the vocational education system in Poland is also difficult to depict as an ideal type using the categories of social, state and market models. Perhaps best described as a ‘transitional’ model of vocational education, there are clear historical reasons to consider that there was formally an extraordinary level of integration between vocational education, work and forms of citizenship. This was under the forms of socialism which existed in the central-European countries in the 20th century. While not romanticising this form of vocational education, it proposed a unique form of vocational socialisation. In these centrally planned economies, polytechnical education was designed ‘[...] to achieve all round development of the pupil’s personality, to inculcate in him the materialist outlook and communist morality and to prepare him to play an active part in building a society striving for world peace and friendship between all nations’ (Shatkin, 1963, p. 17). In practice, forms of polytechnical education stressing integration of theory and work through practical interaction with socialist enterprises were most established in the former Soviet Union (Shapovalenko, 1963) and the German Democratic Republic (Kohn and Postler, 1975), but they also had a major effect on institutional and curriculum design in Poland (Anweiler, 1975). It is important not to underestimate the legacy of polytechnical education in the transitional VET system of Poland. There are obvious similarities between polytechnical education and integration between vocational education, work and citizenship proposed by Kerschensteiner and Dewey. They and polytechnical education are similarly modernist in scope in the application of science to the social. Indeed, Lewis (1998) has argued that the legacy of polytechnical education (in the former centrally planned States) and Dewey’s (in the US) ideals have influenced the nature of the new vocationalism. This emphasises education about work (its nature and relationship with human activity such as democratic participation) rather than education for particular occupations. Therefore, the foundations of what might be now considered to be a market system of VET were statist. This has had an impact on VET in the newly marketised system of education in Poland. For example, Poland continues to experience high enrolments in VET at ISCED 3 (Cedefop, Strietska-Ilina, 2001, p. 222). It is not necessarily apt to describe

(²) According to Da Cunha, Portuguese education involved the democratic involvement of learners and study techniques (such as study circles) in adult learning derived from the work of Friere.

Poland as a market system of VET (as in England). It is a transitional system which is undergoing a double transformation (Strietska-Ilina, 2001, p. 223) in terms both of marketisation of VET and shifting expectations of VET, the labour market and citizenship.

There are, therefore, multiple visions of social cohesion and the role of vocational education in promoting it. These can be characterised as social, market or state systems but complex histories involving states, market and civil society (as in Poland and Portugal) mean that it is sometimes complex to allocate countries to particular models. In Portugal, for example, there are some similarities with the French (social) model, but also elements of what might be called a southern European system. In Poland, the transition to a marketised system of VET has been inflected by the legacy of polytechnical education under socialism. This does not mean that the social, market and state models are redundant methods of describing the relationship between VET and social cohesion. Rather we should recognise that there is movement within systems and that historical legacies do not automatically disappear with policy borrowing.

An obvious generalisation from the above analysis is that the vision of social cohesion, and the role of vocational education in promoting it in England, clearly differs substantially from that embodied in visions proffered by the European Commission and in the social and state models of VET which Greinert identifies in continental Europe. In contrast to the latter, vocational education is not seen as having a socialisation mission, in terms of professional socialisation of citizen formation. Nor is it particularly concerned with the nature of work relations, the quality of working life or the identity of the worker. Its central claim is about the potential of vocational training to enhance employability and enhance social inclusion in a very limited form. Critics of the employability model point out, as they do in relation to market economies generally, that they show no concern with low pay, work and environmental quality, or income equality, and as such is a very impoverished conception of social cohesion. Critics of the social and state models say that these fail to reduce unemployment and promote social solidarity and income equality among the waged at the cost of exclusion of the unemployed. The question of which model most effectively enhances social cohesion remains at the heart of contemporary debates about the future models of the European knowledge economy. In this report we draw on the historical and contemporary themes discussed in this section to address this very question with regard to VET.

2. Social exclusion and VET

2.1. Defining social exclusion

As we have shown in our discussion of the role of VET in socialisation (Section 1), there are different national models of VET – this is also true for conceptions of exclusion. Social exclusion has come to mean different things in different political and national contexts and it is useful to track the concept back to its origins. As the discussion in our first section indicates, the objectives of VET are broader than a particularly Anglo-Saxon emphasis on employment and there are various national models of VET and cohesion/inclusion. Extending the concept of the social beyond this employment emphasis, Silver (1994) traced the historical development of the discourse of social exclusion in terms of its association with paradigms of social solidarity. She attributed the first use of the term to René Lenoir (1974), Secretary of State in the Chirac government. Lenoir estimated that around a 10th of the French population were socially excluded and categorised them as ‘[...] the mentally and physically handicapped, suicidal people, aged invalids, abused people, drug addicts, delinquents, single parents, multi-problem households, marginal asocial persons’ (Silver, 1994, p. 532). These objective dimensions of social exclusion were complemented by subjective dimensions of exclusion. This mix of subjective and objective dimensions of exclusion makes it a multi-faceted and highly contextualised (and contentious) variable. Social exclusion is multi-faceted in that individuals may be considered excluded in terms of many social aspects including wealth, income, cultural resources and political participation. It is contextual in that social exclusion may operate in various fields so that individuals who are socially excluded in one particular context, or field, are not in others. This has led to criticisms by some authors that social exclusion refers to a subjective and field specific state which has no conceptual purchase on the reality and persistence of material poverty.

To account for these differences across societies, Silver (1994) describes social exclusion as a polysemic variable which has different meanings in various political cultures. In the context of French republicanism, exclusion is not only considered to be a social or economic phenomenon, but as a lack of social solidarity – hence it is intimately connected with discourses of social cohesion. Exclusion can be perceived to be a breakdown in the social bond between the individual and society (Silver, 1994, p. 541) and she refers to this as the solidarity paradigm of social exclusion. In the Anglo-American tradition, exclusion is primarily in the economic domain, or exists in one of many independent social spheres (economic exclusion, social exclusion, cultural exclusion). Methodologically, this means that the Anglo-American tradition relies on definitions of social exclusion around multiple barriers and hardships in an individual’s life (Hills et al., 2002) although there are also liberal-communitarian strands of this thought which connect social exclusion to meso-level concepts such as social capital or community cohesion. Silver refers to the Anglo-American conception of social exclusion as the specialisation paradigm as it perceives social exclusion to result

primarily from individual choices and the division of labour. Finally, Silver defines monopoly (perhaps better described as a hierarchical, or power, or corporatist) paradigms of social exclusion whereby certain social groups can collude to control access to labour market and other social positions. In this position, social cohesion and social exclusion are not necessarily in opposition. Exclusion is part of the maintenance of social order.

From this discussion, it can be seen that the concept of social inclusion is not necessarily equivalent to that of social cohesion. In some paradigms of social inclusion (the specialisation paradigm, the monopoly paradigm) social exclusion can co-exist with social cohesion. In the specialisation paradigm, social exclusion is taken to result from individual preferences and, therefore, not something that necessarily threatens the stability of social order or collective value systems. Social exclusion is, therefore, seen to be as arising from perverse incentives, or moral failures, among the underclass. According to neo-liberal discourses of social cohesion (Murray, 1994) this underclass may, in extremis, threaten the security of the majority population but the simple application of market mechanisms (such as the reduction of welfare benefits) is sufficient to reduce this problem. Therefore, social exclusion is seen to arise not due to market mechanisms, but due to the insufficient application of market mechanisms in areas of social and moral life. In the monopoly paradigm of social exclusion, social exclusion may be believed to be an acceptable consequence of securing welfare for nationals or majority groups. In such circumstances, social exclusion may actually support a narrow and reactionary form of cohesion in that the socially excluded provide a political justification for maintenance of a corporatist system of welfare provision. It is only in the solidaristic paradigm of social inclusion that social exclusion is considered to be truly antithetical to social cohesion.

2.1.1. Social exclusion: implications for growth and cohesion

Social exclusion is thought to inhibit both social cohesion and economic growth. In terms of cohesion, social exclusion is associated with a range of social problems such as crime (Oberwittler, 2005), increased support for extremist parties (Preston et al., 2005) and urban riots (Olzak et al., 1996). In each of these studies, the authors are cautious to posit an inevitable relationship between social exclusion and lack of social cohesion. Temporal and spatial contexts are particularly important in understanding exclusion. For crime, Oberwittler (2005) uses a multi-level analysis of European crime data to conclude that although social exclusion leads to youth crime, in practice spatial contexts are important. The activity patterns of youth (networks, activities, time use) in each neighbourhood need to be understood as there are major deviations between crime patterns between youth. Similarly, Preston et al. (2005) reveal a strong relationship between low levels of skill and support for extremist parties. However, it should be noted that degrees of support for extremist parties can change dramatically over the life course. Urban riots (Olzak et al., 1996), occurred in areas of social exclusion, but this was not always the case. It must also be noted that there is a danger of over-estimating the impact of social exclusion on social cohesion at the national level. These problems mainly impact upon community cohesion at the local level, rather than damaging

the functioning of the nation state or national democracy (although in extremis this is the case). For example, recent riots in France and support for extremist parties in the UK (both 2005-06) were concentrated in specific localities where social exclusion is a problem. Therefore, social exclusion increases the risks of reduced cohesion although this may be at the community level rather than social (national) cohesion.

In terms of economic growth, there is not the same quality of evidence connecting social exclusion with growth as there is in terms of unemployment. In general, the literature shows a negative impact of unemployment on economic growth and there is no evidence that there are positive Schumpeterian creative-destruction effects associated with unemployment in terms of re-skilling after periods of unemployment (Fanati and Manfredi, 2003) ⁽³⁾. There is other evidence that inequalities may be harmful for economic growth (Persson and Tabellini, 1993). In general, as much as social exclusion can be correlated with unemployment and inequalities, we may say that it is probably detrimental to economic growth. There is some evidence that social problems are associated with slower economic growth. According to Knack and Keefer (1997) and Woolcock (1998) lower levels of trust are associated with poor economic growth and economic performance. However, for the most part these studies are correlational, rather than making strong inferences about causality (Cedefop, Descy and Tessaring, 2004, p. 210).

Therefore, although causality of the impact of social exclusion, lack of cohesion and economic growth is not always necessarily established, exclusion carries a risk of reduced cohesion (particularly at the level of the community if not necessarily national social cohesion) and (through mechanisms such as unemployment) reduced growth.

2.2. Modelling social exclusion

2.2.1. Justification for use of cluster analysis

Given that social exclusion is a multi-dimensional variable where individuals experience different types of exclusion in various fields we employ a '[...] typological approach, focusing on people rather than variables [...] researchers try to identify groups of people with similar personalities, focusing on the unique patterning of attribute within the person' (Kagan et al., 1998, p. 139). The particular strength of the typological (or person-centred) over a dimensional (or variable-centred approach) in this study is its ability to isolate groups of individuals with qualitatively distinct characteristics. In dimensional approaches, identifying individuals with extreme characteristics, such as the socially excluded would be a matter of examining overlapping distributions at a particular point (for example the bottom 5 % of

⁽³⁾ Slow economic growth obviously increases unemployment. However, long-term unemployment causes depreciation of skills and other forms of human capital with the possibility of impacts on long-term growth. Fanati and Manfredi support this position, denying that there are positive impacts of mass unemployment in terms of unemployed workers relocating or re-skilling.

individuals by economic and social capital). This approach has been identified as using the bimodal distribution (Bergman, 1998, p. 141). However, in a typological approach, similar individuals can be identified using a '[...] method for determining the similarity between individuals' personality profiles and for identifying distinct groupings of individuals' such as cluster analysis (ibid, p. 142). Each group thus established is considered to be qualitatively and substantively different from other groups rather than arbitrarily different as in variable-centred methods which depend on where the distribution(s) are cut. In particular, excluded groups are of emergent interest in psychology and sociology: 'the domination of research in both personality and development by statistical treatments that rely on analysis of covariance and regression has frustrated a small group of investigators who have had the intuition that some samples were qualitatively different from the majority of their sample' (Kagan et al., 1998, p. 66). Exclusion is not just a matter of degree. There is also a qualitative difference between the types of exclusion experienced.

Individuals are grouped in this analysis of social exclusion is through cluster analysis (or pattern centred analysis). This method attempts to identify groups of people thought of as particular types. It can also be thought of as a technique of data reduction whereby respondents are grouped on the basis of their scores on various dimensions, including economic, cultural and social scales. Hence individuals are grouped in terms of their scores on variables and it is these groupings of individuals (rather than the variables themselves) which are the primary source for data analysis. Cluster analysis is increasingly being used in the analysis of political attitudes (Keulder and Spilker, 2002; Delhey, 1999; Moon et al., 2001) and other adult-developmental variables. It is also a recommended and innovative strategy for the current analysis of social exclusion when comparative data is available (SEU, 2005).

2.2.2. Dataset, variables and analysis

We use the latest sweep of the EVS for the European countries in this analysis and the closely related WVS for the US. We use the 1999-2000 sweep of the EVS and the 1999-2001 sweep of the WVS in the combined file issued by ICPSR (Inter-University Consortium for political and social research) and coordinated by Ronald Inglehart et al., 2004. The questions used on the WVS/EVS are compatible between countries and between the EVS/WVS. These surveys are intended to provide a basis for cross-cultural and cross-national comparison of attitudes, values and socioeconomic variables. The latest 1999-2000 sweep of the EVS and 1999-2001 sweep of WVS contains data for 60 countries. In this analysis we select five of these countries – Great Britain (being for the purposes of this survey England and Wales) (N=1095), Norway (N=1127), Portugal (N=1000), Poland (N=1000) and the US (N=1200) to provide coverage of the variety of European lifelong learning systems and one non-European comparator. We weight the data in accordance with the guidelines provided by ICPSR. Our analysis is exploratory in not only of applying cluster analysis techniques to this data, but also of more generally exploring the potential of the WVS/EVS data in examining social exclusion.

To operationalise social exclusion we use two types of exclusion: economic exclusion (represented by income decile) and social capital (represented by memberships).

We use social capital as an indicator of social exclusion following the pioneering work of Granovetter (1973), who indicated the importance of social networks in job search, and Putnam (2001) who associated poor health, crime and lack of participation in democracy with low levels of social capital. Recent work on social exclusion (Hills et al., 2002) confirms the importance of social capital as an indicator of social exclusion. It can also be considered that economic and network exclusion are related in that resource limitations can lead to lack of participation in social groups and lack of social contacts can limit informal job search. In using social capital as an indicator of social exclusion we are working on developing social exclusion indicators in the ways suggested by key researchers in this area. For example, Robinson and Oppenheim (1998) suggest that social capital would be an essential part of developing a wider social exclusion indicator, 'in the future, we hope further indicators will be developed to assess disadvantage from poor housing, high crime environments, family breakdown, and social and political exclusion, omitted from this report as they are difficult to extract from existing data sources. It is essential to develop indicators of social capital at a later date. Initial suggestions include the proportion of population who are members of a civic organisation and the extent of social support networks' (Robinson and Oppenheim, 1998, p. ii).

The relevance of social capital as a factor in social exclusion has recently been made in EU regional policy. Social capital is seen as relevant to the European Employment Strategy (EES) both through the importance of networks in finding employment and in terms of capacity building of institutional and community trust (Norris, 1998).

We use questions from the WVS/EVS on income deciles and on types of membership to allocate each individual in the samples to a level of economic and network resource. The question on income asks the respondent to specify the income band in which they find themselves which are compatible with country income deciles. The question on social capital asks the respondent to specify whether they are a member of a particular association or not. Cluster analysis is then used to determine groups of excluded individuals (in each country we differentiate between those individuals who are most socially excluded and those who are social capital excluded). With reference to VET we then use logistic regression to consider whether VET and other types of education reduce the probability that an individual will be socially excluded.

One contentious point in our analysis is the lack of differentiation between forms of social capital. According to Putnam (2001) it is important not to over emphasise differences between forms of social capital in terms of associational memberships. The use made of an associational membership cannot automatically be read *a priori* from the membership type. For example, memberships of a church or membership of a sports group are equally likely to develop positive externalities associated with social capital. In terms of the WVS analysis presented here, the questions used to create the social capital variable were a summation of

memberships of fifteen groups – church, cultural, union, national political party, local political party, human rights organisation, consumer organisation, professional association, youth, sports/recreation, women's, peace movement, health promotion, consumer groups and other groups. Following Putnam, we consider that it is not necessarily possible to rank these associations in terms of which are more likely to generate fewer risks of social exclusion. However, we accept that there might be inter-cultural differences in social capital that mean certain types of memberships may be particularly important in combating social exclusion within particular national contexts. Pragmatically, though, there are as yet no quantitative indices for such ranking and significant analysis on the empirics of social capital use a quantitative, aggregated measure of social capital (Knack and Keefer, 1997). In addition, of all social outcomes in the WVS, social capital has the most complete data for the countries covered in this study.

2.2.3. Who are the socially excluded?

In our analysis we concentrate on social exclusion as an outcome category rather than one which is always inhabited by a particular group of individuals. Although some approaches to social exclusion focus on particular groups of individuals, intersections between individual areas of disadvantage mean that it is more appropriate to focus on outcomes. To illustrate this point, Table 1 shows the proportions of individuals in 'socially excluded' (and 'not socially excluded') groups who fall into various outcome categories, these being low income (household earnings less than 20 % of mean country income), the poorest social capital category (no memberships), and those with incomplete secondary education, interest in politics ⁽⁴⁾ and self-reported 'poor health' ⁽⁵⁾.

There are two things that are apparent from Table 1. First, there is a wide inter-country variation both between proportions in each category and differences in the proportions in each category between 'excluded' and 'non-excluded' groups. For instance, in England and Wales and Norway only a small proportion of households fall into the lowest income category. However, in Norway the discrepancy between workless and working households falling into the lowest income category is very small (in fact, from EVS it appears that there is a marginally greater proportion of working households in this category) whereas in Poland the discrepancy is far larger. In Poland, 24 % of workless households are in the lowest income category compared to 10 % of working households. Naturally, this could be connected to the difference in welfare regimes between Norway and Poland. Second, falling into a 'socially excluded' category is not always an indicator of extreme poverty, network exclusion and educational exclusion. Although we have not mapped cumulative exclusion in Table 1, there is a fair proportion of individuals who might not be considered to be socially excluded (in a working household, in a dual parent family, non-immigrants) but face some forms of

⁽⁴⁾ A proxy measure for the degree with which the respondent feels 'included' in the political system.

⁽⁵⁾ For which data for only Norway and the US was available, but which provides a useful indicator of social exclusion.

exclusion. For example, in the US although 9 % of immigrants are in the lowest income category, 5 % of non-immigrants and 2 % of working households are also in this category. Another example in terms of schooling would be that of England and Wales, where although 68 % of respondents in non-working households do not have recognisable levels of secondary graduation qualifications, 42 % of those in working households also lack such qualifications. As this analysis shows, an approach to social exclusion which focuses unduly on those who may (on the basis of measurable characteristics) be excluded (e.g. immigrants with low skills, the long-term unemployed) may neglect those who experience similar disadvantage but are often not considered as excluded in a similar manner (e.g. working, but low waged; the citizen excluded from democratic process; the dual parent household with poor collective skills). Therefore, indicators of social exclusion which stress descriptive categories (citizenship status, family structure, working patterns) rather than outcomes may not fully capture the dimensions of social exclusion.

In Table 1 we include two indicators – no interest in politics and (self reported) poor health – which we do not consider in the analysis of social exclusion in subsequent sections of the report. This is due to the absence of data for the countries studied on these measures of social exclusion and because the small number of categories in these measures makes cluster analysis difficult. However, these dimensions of social exclusion are also strongly related to education (Tables 2 and 3) and in future analysis of social exclusion these further categories could be employed.

Table 1: Proportions of individuals, by social category and income/network/educational exclusion

	%				
Income exclusion	Norway	Poland	Portugal	England and Wales	US
Workless households	8	24	27	4	9
Working households	11	10	2	1	2
Single parent households	N/A	25	22	18	N/A
Dual parent households	N/A	15	21	5	N/A
Immigrants	12	20	11	3	9
Non-immigrants	12	10	21	6	5
Social capital exclusion					
Workless households	45	83	78	77	14
Working households	37	76	76	66	11
Single parent households	N/A	72	80	78	N/A
Dual parent households	N/A	76	74	68	N/A
Immigrants	37	80	55	71	13
Non-immigrants	42	76	75	68	11
Incomplete secondary education					

Workless households	49	70	70	68	31
Working households	30	49	36	42	18
Single parent households	N/A	44	40	39	N/A
Dual parent households	N/A	56	53	42	N/A
Immigrants	27	60	10	37	8
Non-immigrants	30	56	53	43	20
No interest in politics					
Workless households	10	31	45	48	11
Working households	6	26	38	39	12
Single parent households	N/A	20	50	63	N/A
Dual parent households	N/A	26	35	34	N/A
Immigrants	7	0	33	29	9
Non-immigrants	7	27	36	37	11
Poor health					
Workless households	19	N/A	N/A	N/A	5
Working households	5	N/A	N/A	N/A	1
Single parent households	N/A	N/A	N/A	N/A	N/A
Dual parent households	N/A	N/A	N/A	N/A	N/A
Immigrants	10	N/A	N/A	N/A	2
Non-immigrants	5	N/A	N/A	N/A	1

Table 2: Poor health, by qualification level

	%	
	Norway	US
No qualifications	11	4
Incomplete secondary vocational (lower than ISCED3)	7	3
Complete secondary vocational (ISCED3)	5	2
Complete academic secondary and higher qualifications	3	3

Table 3: No interest in politics, by qualification type

	%				
	Norway	Poland	Portugal	England and Wales	US
No qualifications	12	44	53	50	17
Incomplete secondary vocational (lower than ISCED3)	12	23	43	NA	16
Complete secondary vocational (ISCED3)	7	9	34	35	16
Complete academic secondary and higher qualifications	3	16	23	27	8

For Tables 1, 2 and 3: Great Britain (N=1095), Norway (N=1,127), Portugal (N=1000),

Poland (N=1000), the US (N=1200). All data extracted from WVS/EVS. N/A indicates insufficient observations to perform a calculation.

2.2.4. Results of cluster analysis and logistic regression

2.2.4.1. Social exclusion: which groups exist in which countries?

We have conducted cluster analysis for five countries: Norway, Poland, Portugal, Great Britain and the US (as an outside of EU comparator). For all countries we conducted the cluster analysis along two axis, networks ⁽⁶⁾ and relative income ⁽⁷⁾. We used Duda/Hart stopping rules to determine the optimum number of clusters for each country which we discovered to be 9 (in the case of Portugal) to 15 (in the case of the US).

Figure 1 shows the cluster analysis conducted in England. Categories 1-11 represent groups of individuals which the cluster analysis identified as discrete groups. Each dot in the analysis represents at least one individual. Individuals in group 4 represent a particularly socially excluded category in terms of low incomes and a small social network. However, there are other groups which have a higher income but similar network exclusion. For example, groups 5 and 6 would perhaps not be considered excluded in terms of income, but possess poor social networks. In England, network exclusion and low incomes are not always connected. For example, at the highest end of the income spectrum are a group of individuals (group 8) who are not particularly well networked (although this may represent self-exclusion, or social closure, rather than social exclusion). There is also a disparate group of individuals with relatively high incomes and high levels of social networking (group 11).

For purposes of comparison, Figure 2 shows the result of the cluster analysis for the US. Unlike EU Member States in the analysis (including Great Britain) the US sample has higher levels of social capital. As can be seen from the cluster analysis, even those groups with relatively low incomes can have reasonably high levels of social capital. For example, group 9 has a wider dispersion of social capital levels than similar groups in the European sample countries. This shows the markedly different dynamics of social capital in exclusion in the US. There are other differences in patterns of social exclusion in countries as discussed in Section 2.3.4.2. We can use these different patterns of exclusion in logistic regression analysis to ascertain whether vocational qualifications act as a protective factor (Section 2.3.5).

⁽⁶⁾ A scale representing number of memberships running from 0 to 15 for all countries except Norway where the scale ran from 0 to 9.

⁽⁷⁾ In deciles for all countries except Portugal and Norway. For Portugal the scale ran from lowest/middle/highest income. For Norway, we did not have accurate data on incomes so we constructed a scale of financial precariousness based on the relation between income and debt in the last year from least stable to most with four categories.

Figure 1: Cluster analysis of social exclusion for England

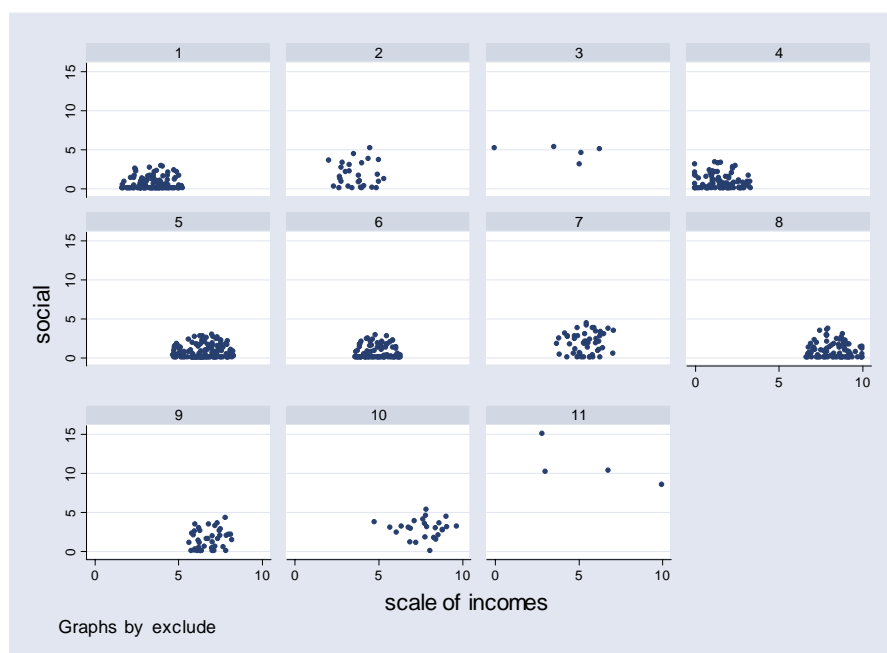
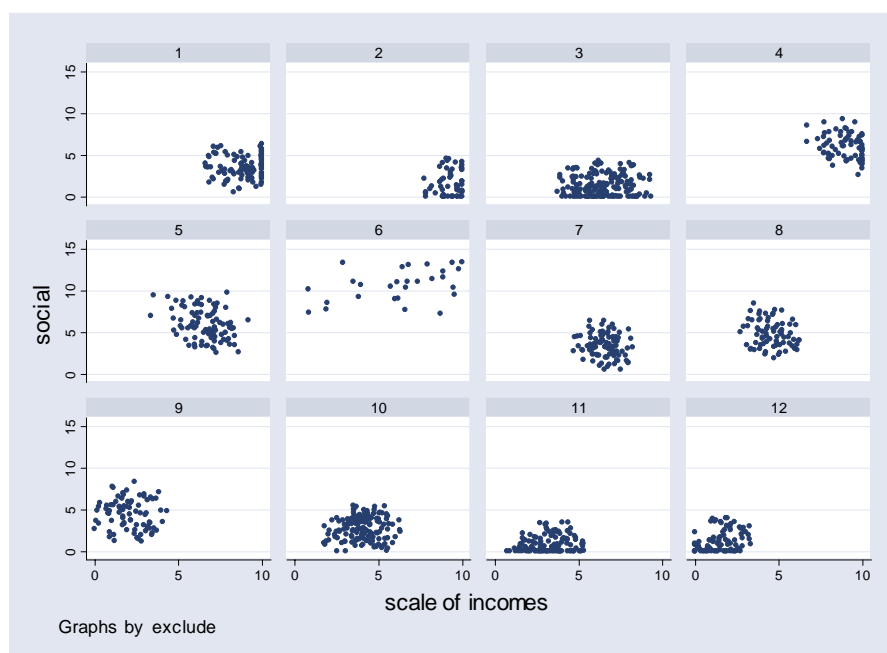


Figure 2: Cluster analysis of social exclusion for the US



The Annex provides figures for each country showing the results of the cluster analysis discussed in Section 2.3.4.2. In addition, we have identified particular groups from the cluster analysis as ‘most excluded’ and ‘excluded’ (in Table 10 in the Annex, the most excluded groups are indicated in bold, and the excluded in italics). ‘Most excluded’ groups are those where there is significant economic and network exclusion whereas ‘excluded’ groups experience network exclusion. For example, in Figure 1 for England, individuals falling into group 4 are most excluded, whereas those in groups 1, 5 and 6 are network excluded on a

wider social network dimension of exclusion. Notes to Table 20 in the Annex explain the rationale for allocating groups to these categories.

2.2.4.2. Patterns of exclusion in each country: similarities and differences

The figures and Table 10 of the Annex show differences between the patterns of social exclusion in each country. Here we describe differences in the patterns of social exclusion, or what may be considered the dynamics of social exclusion in terms of the relationship between network and economic exclusion.

In Norway, one group (group 11) can be considered as the most excluded in terms of income and social networks. However, there are two groups which are formally socially excluded in having no formal social network (groups 1 and 2) and one group where there is low income with some form of social network (group 12). Similarly, in Poland there is one group which is most socially excluded in terms of low income and no formal network (group 5) and a number of groups with no formal networks and a variety of incomes (groups 2, 3, 6, 8 and 9). Therefore, the dynamics of social exclusion are similar in Norway and Poland with one group which is most socially excluded, but several groups which although socially excluded in terms of civil society, are not so excluded in terms of income.

However, in Portugal there is a difference in mapping social exclusion. There are groups with a range of income and no formal networks (groups 1, 3 and 4) but no group with simultaneously low income and low social networks. Members of the group with the lowest income, group 5, have on average a greater social network than the network excluded groups with higher incomes. This is similar to England where members of the group with the lowest income (group 4) have on average a greater social network than the network excluded groups (groups 1, 5 and 6). This difference between income and network excluded groups is much clearer in the US where members of the lowest income group (group 12) have a reasonable social network. The group which has a low social network has a moderate income (group 11).

Therefore, we can identify two major typological groups of social exclusion from these country studies. First, countries where there is a group of socially excluded individuals both in terms of networks and income (Norway and Poland) and several network-poor but not income-poor individuals. Second, countries where income-poor individuals participate in social networks and where there are simultaneously richer groups who do not participate extensively (Great Britain and Portugal) – the extreme case of which is the US. This may be due to the generally higher levels of social capital existing in the US as commented upon by Norris (1998) among others. This suggests that the dynamics of social exclusion may be different in the US where lack of welfare provision may make it necessary for less well off individuals to maintain social networks.

The different dynamics of social capital and income exclusion in these countries reflects their different histories including the degree to which different countries valorise civic engagement. Obviously, developing this analysis would have to involve a qualitative

appreciation of the relative importance of cultural factors in social exclusion. However, the benefit of using cluster analysis is that the groups created are specific to the countries involved. Hence rather than defining social exclusion in terms of levels of income or social capital (or other characteristics), the groups generated are based on the patterning of data within each country.

2.2.5. Vocational qualifications and social exclusion

In this section we consider whether vocational qualifications and other types of advantage may prevent individuals from being socially excluded using the categories derived from the cluster analysis (Section 2.2.4). We conduct two forms of analysis using the technique of logistic regression. First, we examine whether the highest level of qualification obtained by an individual prevents the individual from being socially excluded using what we consider to be the most excluded category from the cluster analysis (the clusters selected are indicated in bold in Table 10 in the Annex and explained in the notes following this table). Second, we examine whether the highest level of qualification obtained by an individual (and other factors) prevent the individual from being socially excluded on the basis of what may additionally be considered to be categories of low social capital (the clusters selected are indicated in italics in Table 10 in the Annex). The analysis below provides odds ratios for each country with the comparison category being those individuals with no qualifications. Where possible we use controls for other qualification levels or characteristics of the household, although the conditions required for estimation in terms of sample size did not always make this possible.

As can be seen in Table 4, in Portugal vocational qualifications (completed or not) act as a protective factor against being in the most socially excluded category (significant at the 1 % level). The odds of an individual with incomplete secondary vocational qualifications falling into this category are 0.2 and with complete secondary qualifications 0.17. In the US, although vocational qualifications do not seem to be a protective factor, academic secondary and higher qualifications do where individuals have odds of 0.3 of being in the most excluded category.

Table 4: Odds ratios for falling in most socially excluded category

Norway	Poland	Portugal	England
Incomplete secondary vocational (lower than ISCED 3)			
0.913	2.149	0.225	0.494
-0.15	-0.62	(3.20)**	-1.49
Complete secondary vocational (ISCED 3)			
0.587	.	0.177	0.863
-1.02	.	(2.32)	-0.51*
Academic secondary and higher qualifications			

1.27 -0.64	3.602 -1.17	. .	0.31 . (4.76)**
Observations			
1121	1060	924	1196

Absolute value of z statistics in parentheses

* significant at 5 %; ** significant at 1 %

Note: Analysis was not completely possible for Great Britain due to missing values

Table 5 presents odds ratios for falling in the most excluded or excluded category which is not necessarily a category with the lowest income, but also incorporates elements of network exclusion (these categories are explained in the Annex). As can be seen in Table 5, this means that educational qualifications do not always act as a protective factor against broadly defined forms of social exclusion in terms of exclusion from civil society. In Portugal, for example, those with vocational qualifications are more likely to be excluded in these terms than those with lower levels of qualification whereas those with academic qualifications are less likely to be excluded. Those with incomplete secondary vocational qualifications or even complete secondary vocational qualifications are more than twice as likely to be excluded in these terms as those who do not have these vocational qualifications. Taken together with the results in Table 4 this presents an interesting paradox in terms of the relationship between vocational education and social exclusion in Portugal. That is, although vocational education may protect against the risks of falling in the most extreme socially excluded category in terms of exceptionally low income and social capital it is not protective against broader (social capital) forms of deficit. We also see that in Portugal, being a member of a household where an adult is in work reduces the odds of social exclusion. However, in Norway, vocational qualifications do act as a protective factor against broader forms of social exclusion. In the US vocational qualifications are not found to significantly to protect against falling into an excluded category although possessing academic qualifications (in the US) are protective factors. The results for Great Britain are difficult to interpret as it appears that being in a working household leads to low social capital. This could be an artefact for the low 'N' in the analysis of this result which may have biased the sample.

Table 5: Odds ratios for falling in most excluded OR 'low social capital' category

Norway	Poland	Portugal	England	US
Incomplete secondary vocational (lower than ISCED 3)				
0.576 (2.31)*	1.098 -0.32	2.001 (2.14)*	. .	0.898 -0.34
Complete secondary vocational (ISCED 3)				
0.659 (2.25)*	1.838 -1.02	2.973 (2.38)*	1.113 -0.15	0.785 -1.05
Academic secondary and higher qualifications				
0.447 (5.06)**	1.87 (2.31)*	0.545 (2.08)*	0.522 -1.51	0.602 (2.84)**

Working household				
.	0.957	0.412	4.487	
.	-0.19	(3.36)**	(3.70)**	
Not single parent household				
.	1.501	2.095	.	
.	-0.35	-0.97	.	
Observations				
1119	467	482	220	1126

Absolute value of z statistics in parentheses
* significant at 5 %; ** significant at 1 %

This preliminary analysis of the WVS/EVS data obviously presents some interesting points. In particular, it does not reveal that for every country VET protects against social exclusion, defined broadly, and that there may even be country specific patterns. However, as an exploratory analysis there are caveats. First, the data is associational (cross-sectional) and in future analysis of this type it would be necessary to make use of longitudinal or panel datasets. Second, with richer datasets (perhaps with better indicators of social exclusion) the cluster analysis could be extended to encompass a wider set of categories. The development of indicators of social exclusion, beyond the economic, is at an early stage but in our analysis we have shown that it is possible to incorporate social indicators (although there may be future debate as to whether social capital, proxied by associational membership, is an appropriate indicator to use) and, if statistics on educational levels are available, that these can be used to assess whether VET or other educational qualifications may prevent exclusion.

2.3. Social exclusion and VET in five countries

As the above analysis has shown, social exclusion is a complex and multi-faceted phenomena and VET (or even employment) does not necessarily preclude individuals from social exclusion. To contextualise the above analysis, we consider how VET policies have been formulated to tackle social exclusion in the five countries considered. We pair England and the US in terms of marketised systems of VET and Poland and Portugal as sharing characteristics which may be considered to be transitional models of VET. We discuss Norway separately as having a Nordic model of VET and social exclusion. In our discussion we consider VET and social exclusion generally, as well as making reference to two particularly socially excluded groups – immigrants and the disabled.

2.3.1. England and the US – marketised systems of VET, differences in dimensions of social exclusion

2.3.1.1. England

As discussed in Section 1.3.2 one of the primary policy motivations behind VET in the UK ⁽⁸⁾ since the 1990s has been the desire to promote competitiveness and (since 1997) the articulation of a close relationship between the economic and social purposes of VET. Accordingly, the position of VET in the general education system has been promoted. According to Stanton and Bailey (2001) several initiatives are indicative of this move. For example, bringing together academic (A level) and general (GNVQ) qualifications under a single curriculum structure (Curriculum 2000) and creating a single funding body (the Learning and Skills Council) to fund all post-16 provision. In general, the UK has pursued a policy of horizontal integration of VET (in terms of the integration of educational functions such as funding, provision, inspection) at the same age level while not particularly encouraging vertical integration (in terms of the integration of professional/vocational routes through a career trajectory). However, as we have commented earlier even the horizontal integration in VET is not as advanced in England as in other countries such as France. This leads Stanton and Bailey (2001) to consider that system is too strong a word to use for the English structure of VET, and that voluntarism may be a better way to describe the VET system. While the (2001) introduction of the Learning and Skills Council may encourage VET to address issues of social exclusion (focusing on employment), this is largely done through incentives rather than planning. This voluntarism can be evidenced by the modular nature of the vocational education system (there are very few equivalents to ‘licences to practice’ in the English VET structure) which is dominated by competence based qualifications.

In terms of social exclusion, these output based approaches have led to a concentration on skills necessary for employment rather than (necessarily) relevant to other features of social exclusion. As Stanton and Bailey (2001) explain, the 1999 report *Bridging the gap*, by the government’s social exclusion unit, called only for changes in certification, not for programme innovation in VET to tackle social exclusion. However, in more recent years Stanton and Bailey (2001) refer to three key developments in English VET since 2000 relevant to social exclusion.

First, the introduction of modern apprenticeships (MAs) in 1996 as a work based route leading to a recognised vocational qualification (either NVQ or GNVQ with embedded key skills – vocational competences designed to aid employability and/or workplace

⁽⁸⁾ In other parts of the UK, slightly different policies for VET have been followed. For example, in Scotland the Curriculum 2000 reforms did not take place as Scotland does not have a National Curriculum. However, the reform of the Scottish Highers system was similar to the reforms which took place in the rest of the UK. Other schemes referred to here such as modern apprenticeships apply across England, Scotland, Wales and Northern Ireland.

productivity). Modern apprenticeships have been criticised in terms of its uneven quality (with some sector modern apprenticeships equating to traditional apprentice provision and others very much less rigorous and leading to only low level skills). According to Fuller and Unwin (2003) modern apprenticeships indicate a move by government from earlier demand-led apprenticeship policies in England to supply-led policies (creating an entitlement to apprenticeships without necessarily the full time employment opportunities necessary to employ them). Fuller and Unwin criticise the approach taken to social inclusion as concentrating on the volume of skills created (in terms of meeting qualification aims) rather than on skill formation and the creation of long-term employment opportunities. In addition, the qualification to which the modern apprenticeships lead often do not meet the skill needs of employers.

Second, the introduction of vocationally orientated foundation degrees (in 2001) in higher education which are two year degrees providing a grounding in the vocational skills necessary for employment in a particular sector. These are mainly delivered in Higher Education Institutions (HEIs).

Third, the proposed introduction of a technical certificate to provide an over-arching qualification certificate to cluster the various vocational competences and sub-qualifications acquired on a modern apprenticeship, for example.

However, these policy measures are aimed primarily at the 16-19 age group. As far as these policy measures have penetrated the post-19 age group in employment they have been to focus on the reliability of the measures of outcomes across sectors rather than the validity of the measures of vocational skill within a sector (Stanton and Bailey, 2001). As we argued in Section 1.3.2, this indicates the continued antipathy towards socialisation functions of VET in the English system.

Although the VET system in England has moved towards a marketised system in terms of course choice and route and a centrally planned one in terms of the regulation and organisation of qualifications/inspection routes for specific socially excluded groups, there is evidence of a bespoke and regionalised approach to reducing exclusion. This is partly based on a welfare model in the UK which sees the contracting out of services (including the provision of VET) as an increasingly important part of more general restructuring. This means that there are not necessarily coordinated policies in terms of the VET provision for 'socially excluded' groups such as immigrants, the disabled and low income households.

In terms of immigrants, there is emerging evidence that the impact of immigration on local labour markets has been small (Dustmann et al., 2006) on local wage rates and unemployment. According to the authors, there is even evidence of positive wage effects on the native population which plausibly means that immigrant groups may have skills currently not present or sufficient in the native population of the UK and/or possess additional entrepreneurial skills, creating endogenous sources of growth. In skill terms, therefore, immigrants to the UK may actually not be disadvantaged in terms of labour-market skills.

Indeed, other evidence (Kempton, 2002) indicates that immigrants to England often have higher levels of qualification for their occupational position. However, immigrants may face some difficulties in entering the UK labour market with an employment rate of 64 % compared to 75 % for natives. Given this more highly qualified (when compared to UK nationals), but heterogeneous, immigrant population, initiatives around training have mainly focused on local labour-market requirements or language training (Kempton, 2002).

In terms of disabled people, there are a number of ‘bespoke’ schemes designed to help with the employment related dimensions of social exclusion (access to work, new deal for disabled people). An evaluation of these training programmes in the new deal for disabled people (NDDP) (Pires et al., 2006) discussed their skill heterogeneity. As in the case of vocational programmes for immigrants this means there is not necessarily one type of programme of use to all clients. However, one finding in the NDDP evaluation was that VET providers occasionally acted as gatekeepers in terms of who gained access to the programme and the type of resources that they received. This led to an interesting paradox in that those in least need of the training programme (disabled people who had high levels of vocational skills) would self-exclude themselves from training in favour of using networked contacts/local information to find work. Those with low levels of skill would occasionally be excluded from training due to the demands of the providers of skills.

In summary, for England, social exclusion is tackled through local training markets with little direct employer intervention aside from in the setting of occupational standards. This has led to criticisms (Fuller and Unwin, 2003) that the reintroduction of an apprenticeship system through modern apprenticeships will not tackle even the employment dimensions of social exclusion. Participation of heterogeneous groups such as immigrants and disabled people in VET, is tackled through bespoke programmes of VET. However, there is evidence that the lack of universalism in provision may allow skills inequalities to increase. For example, in the recent evaluation of the NDDP there is evidence that participation is low due to its lack of relevance to disabled people with relatively high levels of skills and the inability of the programme to deal with the requirements of those with very low level skills. It is worth noting that there is also some evidence of race inequality in VET in England with the proportion of skilled workers from ethnic minorities participating in apprenticeships and employment being worse than even that of the US (Penn, 1998).

2.3.1.2. The United States

The US faces similar issues to the UK in coordinating VET to tackle social exclusion, mainly connected with issues concerned with the separate funding of vocational/educational programmes by state and federal authorities. According to Finch (1997), although federal funding for vocational education programmes to tackle skill shortages had existed in the US since 1917, the implementation of the Carl D. Perkins *Vocational and applied technology education Act* of 1990 (Perkins II) was a significant piece of legislation that led to a national focus on VET for social exclusion. This act provides States with financial incentives for reskilling and up-skilling workers and encourages educational institutions to adopt VET

programmes that are flexible in meeting the needs of various client groups. However, Finch (1997) considers that VET programmes at the local level are so heterogeneous that the ability of the vocational instructor/teacher is a significant component in the programmes ability to tackle social exclusion. The issue of variability in the delivery of VET was raised by Silverberg et al. (2004) in their report to Congress as part of the national assessment of vocational education (NAVE). The contribution considered that curriculum change would be unlikely to improve the quality of VET without significant improvements in teacher training.

As Penn (1998) explains, one of the purposes of VET and apprenticeships in the US (and to a lesser degree in Europe) has traditionally been social exclusion in terms of delineating occupations in terms of whiteness. In Roediger's (1991) *Wages of whiteness* the association between work, craft apprenticeships and the formation of white identity in America in the early part of the 19th century are made explicit. Roediger considers that white workers used craft unions and skill formation to make etymological distinctions between 'white' work and that of slaves and free-blacks and create a cohesive, but exclusionary, homogenous white identity. For example, through apprenticeships, white skilled workers adopted the term mechanic to distinguish their work from slave and free-black artisans and the term boss to replace master or master mechanic to make a distinction between their work and that of other races. Although the European experience of whiteness is somewhat different to the American one, there are case studies which suggest that vocational skills and apprenticeships are powerful aspects of the formation of white working class identity. Therefore, the integrative potential of VET in terms of the formation of a vocational identity and in social exclusion in the US must be counter-posed with the, albeit moderate, role of VET in the formation and consolidation of racialised and class identities which may be exclusionary. However, this pattern has recently changed and Penn (1998) examines the ways in which patterns of apprenticeship and employment have differed according to ethnicity and immigration status. For those of Hispanic and Black ethnicity in the US, there has been an increase in employment in the areas of electricians, tool and die makers, and sheet metal workers⁽⁹⁾. Unlike in the UK where modern apprenticeships have done little to alter the ethnic balance of the workforce, in the US affirmative action movements have managed to influence government and employers (rather than necessarily unions) to reduce employment related social exclusion among ethnic minorities in the US.

As in the case of general apprenticeships and VET in the US, the provision of VET for social inclusion for disabled people in the US is characterised by considerable heterogeneity both between and within the states. According to Fairweather and Shaver (1991) this has led to variable and skewed patterns of participation by disabled people in VET in the US. Although for higher level (degree level) vocational courses, participation rates are similar for the disabled and non-disabled population, for lower level (2 year) vocational post-school programmes a significantly lower proportion of disabled people attend these institutions.

⁽⁹⁾ However, there had been a decline in participation in typesetting and compository work which Penn (1998) suggests is now dominated by white female workers.

Plausibly, this is the opposite situation to that faced in apprenticeships by ethnic minorities and immigrants in the US. In the case discussed above, strong affirmative action lobbies and weak industrial unions have simultaneously led to high (relative) apprenticeship rates for these groups. However, in the case of disabled people in the US, weaker civil rights movements and marketised provision of vocational education has not led to a response in terms of opening places on vocational courses for these groups at the lower level.

In conclusion, England and the US share similar characteristics in the ways in which VET is directed towards social exclusion – that is to emphasise employment, reskilling and labour market participation for all. However, the strongly marketised natures of the VET systems in these countries means that inequalities persist in VET, although these may differ between countries due to the operation of countervailing forces in civil society. In the American system, for example, the racial bias of apprenticeships is less than in England due to affirmative action and weaker industrial unions.

2.3.2. Poland and Portugal – transitional models of VET and exclusion?

Geographically and historically, Poland and Portugal are not countries that should necessarily be grouped together. In terms of education systems, Poland could be described as transitional in terms of movements from a centrally planned to a marketised system and Portugal is an example of a southern European emphasis on academic, rather than vocational, education – although this emphasis is changing. However, in the dynamics of VET and social exclusion there are striking similarities between the countries. Both are in a period of substantive transition, at least with regard to the role of VET in tackling social exclusion.

2.3.2.1. Poland

The transitional status of the economy and the vocational education system of Poland led in the 1990s to a rush towards a marketised system of education which largely favoured academic education at the expense of apprenticeship and VET. The system of VET remains centred on schools. According to Mykhnenko (2005) the Polish VET system has much in common with Mediterranean countries in its emphasis on secondary academic education rather than vocational or further professional training, as in Portugal as we will see. Unlike the Ukraine, which did not rapidly dismantle its polytechnical and higher level vocational programmes, Poland favoured a marketised model with state funding directed towards schools rather than post-school or training programmes. This led to wide disparities in the provision of vocational education in Poland. In particular, rural areas have been poorly served by vocational provision with poor quality of courses and high drop out rates. This has obvious implications for the socially excluded from poor families in these areas. It also has implications for provision to minority ethnic groups in Poland – Ukrainians, Belarusians, Germans and the most socially excluded group in Poland, Roma (although the numbers of Roma remaining in Poland are small). Although special schooling projects are aimed at these groups (particularly the Roma) there is little extra funding aimed at targeted VET (Czesana

and Matouskava, 2004). As wage inequality has been increasing in Poland with privatisation being a contributory factor ⁽¹⁰⁾.

However, it is important not to generalise about the marketisation of the Polish VET system. It is arguable whether some remnants of the command economy mean that for the urban population social exclusion is not as marked, at least in subjective terms, as in other countries. According to Roberts (2001) the assumption that high and persistent unemployment leads to social exclusion can not be generalised for all countries. Roberts (2001) contends that in Poland and other former transition countries the instability of labour markets (the shortage of permanent stable jobs) and the lack of clearly defined status hierarchies in employment mean that neither economically or socially are the unemployed particularly socially excluded. Although this may be considered to be a romanticised picture of the realities of unemployment in Poland, Robert's arguments indicate that social exclusion (close to the earlier formulation of the concept) is relative to the in context which an individual finds themselves.

For disabled people in Poland, vocational education is primarily seen as a particular branch of general education associated with rehabilitation rather than necessarily towards integration to the labour market. Interestingly, for those who are in employment who lose their position according to a disability, there is a requirement for the employer not only to continue to provide the employee with continued work, but also to seek to maintain the social networks of the disabled person. However, in terms of people with a long-term disability there is a considerable disintegration of vocational pathways with the disabled working in sheltered workplaces. This might be seen as a continuation of the system in existence under Polish communism where disabled people were expected to set up their own separate vocational cooperatives. As is the case for low income groups and immigrants, vocational provision for the disabled is *laissez faire* and uncoordinated with little integration with actual labour markets (Ostrowska, 1994).

2.3.2.2. *Portugal*

Similarly to Poland, Portugal has low levels of participation in VET and training when compared to the EU average and much VET provision is employer based and not necessarily targeted at those outside of work who might be considered (on the basis of an Anglo-American definition of the term) to be socially excluded (Asplund, 2005). These low levels of participation in training mean that the returns to low-skilled, socially excluded individuals are particularly high in Portugal although this does not seem to have led to an increase in participation in VET activities by this group (Budria and Pereira, 2005). As in the case of Poland, this suggests systemic barriers to participation in VET by the socially excluded. There was some support for this position in a recent report by Cedefop, Gomez Centeno and

⁽¹⁰⁾ As private employers in Poland tend to pay much lower wages than the EU average at the lower end of the scale, and relatively higher wages at the upper end of the scale) (Newell and Socha, 2005) this may have implications for social cohesion as well as social exclusion.

Sarmiento (2001) which indicated that a lack of flexibility in VET provision and an over-dependence on the European Social Fund had impaired the ability of the VET system to cope with specific skill needs. Portugal has experienced relatively low rates of unemployment in recent years which means that the necessity for remedial VET programmes is lesser than in other EU Member States. This does not mean that social exclusion is not a problem in Portugal which faces one of the worst rates of poverty, inequality and health inequality in the EU. The nature of social exclusion in Portugal is much deeper than unemployment and in a review of social exclusion in Portugal (arguably more so than other EU Member States) (Santana, 2002) the heterogeneity of socially excluded groups including the elderly, poor families and drug addicts was discussed. According to Santana, these groups are poorly served by social welfare agencies (including education and training) as they are hard to target with traditional welfare models.

In integrating immigrants and minorities into the general education system, Portugal has performed better than other countries with respect to one particularly marginalised group: the Roma (CREA, 2004). Between 1993 and 1998, for example, the numbers of Roma children educated in Lisbon increased by over 25 %. However, in Portugal (and in other EU Member States – Portugal is not exceptional in this regard), the Roma are not well represented in VET and the labour-market skills that they possess are not necessarily valued.

In summary, Poland and Portugal face similar issues in terms of social exclusion and VET and also paradoxes for countries operating (arguably) outside of traditional Anglo-American models of social exclusion. First, in terms of relative poverty (compared to the EU average) they score highly on these indicators although labour-market disadvantage may (subjectively) be felt less harshly in Portugal and Poland compared to other EU Member States. In both States, the nature of labour markets (low unemployment in Portugal, non-socially exclusive unemployment in Poland) means that social exclusion is not necessarily judged in terms of failure to gain employment. This means that it is difficult to introduce VET which is sufficiently responsive to unemployed clients needs – they may not judge themselves to be excluded and have sufficient faith in informal contacts and local labour markets to gain (low skilled) jobs. Second, in both countries there are groups of socially excluded individuals who are not part of the conventional labour market – but general education (rather than VET) is seen as a mechanism for re-socialisation (for example, the Roma in Portugal). Conversely, where VET exists for socially excluded groups its aim is in terms of rehabilitation rather than labour market participation (as with the disabled in Poland).

2.3.3. Norway: Nordic exceptionalism in VET and social inclusion

The Nordic countries are often judged to possess exceptional social welfare systems which mitigate against problems of social exclusion, as well as possessing a social partnership model, similar to the German system. Although this may be true to some extent in other welfare programmes, in terms of VET and social exclusion the picture is mixed. Although it is the case that for the socially excluded the welfare state in Norway provides an adequate

safety net in terms of social necessities, re-integration into the labour market VET is not necessarily targeted at the most excluded. According to Cedefop, Heikkinen (2004) the historical routes of this can be located in the ways in which VET was separated from general education in the first half of the 20th century with a more legalistic method of control and regulation in social partnerships when compared to models in other European countries – notably Germany.

This separation of vocational from general education led to political moves to reintegrate vocational and general education on the grounds of social exclusion. However, such institutional moves, without support from social partners, may be insufficient to remedy issues of social exclusion. According to Mjelde (1997) the apprenticeship system in Norway has suffered from an over-articulation with the formal education system which has not benefited the socially excluded. Reforms since 1994 have meant that apprentices follow a two year school programme and the lack of integration of these programmes with the world of work and a shortage of apprenticeship places in manual trades has meant that both the employment and wider social integration objectives of apprenticeships have been compromised. Part of the problem, as in the UK, is due to weak employer involvement in the apprenticeship system other than through vocational training councils (*Opplæringsråd*) (Shapiro, 2004). The demand for places in training has meant that groups such as immigrants who do not possess Norwegian language skills and the disabled are unlikely to gain training places (OECD, 1997a). However, more recently Payne's (2002) policy analysis of the early outcomes of these reforms suggests that, despite implementation problems, the model of apprenticeship reform adopted in Norway has been much more successful than other VET changes in Europe at that time.

With reference to the above, recent research by Hammer (2000) based on extensive samples from European unemployment surveys is that socially excluded families in Norway possess high levels of gender segregation in terms of women's participation in the labour market. This has a dual implication in terms of VET. First, it means that the lack of opportunities to enter manual careers after apprenticeships discussed by Mjelde (above) means that men in socially excluded households are not necessarily able to enter 'masculine' fields of employment. Second, that women in these households are (due to familial gender relations) unlikely to be able to gain labour-market status.

Provision for immigrants offered by the general education system is comprehensive in terms of access to upper-secondary and higher education. Although there is competition for apprenticeship places it is not considered that immigrants are discriminated against with regard to their ability to gain places (OECD, 1997a). However, in terms of the funding and nature of VET there may be problems. First, training for immigrants usually consists of language and cultural courses which are part of gaining a residency permit. Second, the funding of VET means that even in the poorer parts of Oslo there is little incentive for municipalities to fund training. Despite these issues a recent evaluation of the outcomes of various training programmes aimed at immigrants in Norway (Schøne, 1996) such as ALMP (active labour market programmes) and training programmes with sponsors showed that

immigrants attending such programmes had better outcomes than those who did not attend. In particular, the sponsor scheme where immigrant trainees gain a sponsor who provides them with a guide to the enterprise was thought to be particularly successful and a model for other countries' VET systems (OECD, 1997a).

Like Poland, the proportion of disabled people working in sheltered vocational environments is high in Norway. However, the purpose is reintegration into an open labour market and there are many other vocational programmes – such as employer/employee workshops aimed at more active reintegration. However, as with apprenticeships for other socially excluded groups opportunities were limited for disabled people to find a manual occupation (Aakvik and Dahl, 2006). Myklebust (2006) is particularly critical of the separation of individuals with disabilities in vocational education into separate vocational tracks. Using a longitudinal study of Norwegian young people with special needs he finds that integrating disabled people within mainstream VET makes them significantly more likely to obtain vocational qualifications.

2.3.4. Social exclusion and VET – which measures are effective?

The statistical and policy analysis above point to several considerations in modernising VET for social inclusion. The polysemic nature of social exclusion means that it has different significances across nation states. In particular, a model of social exclusion which concentrates on one variable (employment) is too narrow to incorporate the dimensions of social exclusion. As our analysis indicates, an approach to social cohesion which focuses on categories of excluded groups (by unemployment, citizenship or family structure) may not capture dimensions of social exclusion which can be experienced by groups not necessarily categorised as marginalised. Another issue is that there are different dynamics of social exclusion in different countries where low social capital and economic exclusion operate relatively independent of each other (Norway, Poland, to some extent England) and other countries where 'income poor' groups may have extensive access to social networks (the US). There are implications here both for targeting individuals in terms of VET and the applicability of different VET measures between nation states (policy borrowing). In targeting groups for VET according to group characteristics, there is a risk of resource misallocation as there are individuals in 'non-excluded' groups (for example, working households with dual incomes) who would also form part of a 'socially excluded' category in terms of outcome. In terms of policy borrowing, different relationships between economic and network exclusion between countries suggests that policies that combat social capital deficits and income exclusion simultaneously may not be appropriate for countries in which these types of exclusion are not codeterminate. Our conclusions here are tentative and we would again remind the reader that this is exploratory research using a recently released dataset (WVS/EVS). Although key authors in the field (Robinson and Oppenheim, 1998) suggest that social capital is a key element of social exclusion (and we have demonstrated here that such an analysis is possible) this is still a matter for debate.

Our statistical analysis also indicates that it should not be assumed that VET can always combat social exclusion. Interestingly, in Portugal we found that although VET could protect against the extremes of social exclusion, those with vocational qualifications were more likely to find themselves on the periphery of economic/network exclusion. Again, there are caveats concerning the associational nature of our analysis. Coupled with our policy analysis, this indicates that VET has not necessarily been successful in addressing social exclusion problems. However, particular factors for successful VET in addressing social exclusion can be determined.

First, where civil society is also integrative of the socially excluded, exclusion can be reduced. For example, in the US, affirmative action programmes (and weak industrial unions) have led to better equity in apprenticeship provision than might otherwise have been expected in this country. In addition, the sponsor system in Norway has been successful in bringing immigrant workers into the wider spheres of employment relations. Where the socially excluded have not been particularly well integrated in civil society (the disabled in Poland, recent immigrants into England, arguably disabled people in Norway), although there are mechanisms to tackle social exclusion these are largely focused on separate vocational tracks for the socially excluded which are not necessarily conducive to labour-market participation or other forms of citizenship. To extend the analysis of Cedefop, Vranken and Frans (2001) in the second research report, this means that VET governance structures need to be considered in order not only to integrate the social excluded into society, but also include them in the governance of VET policies that are targeted at them.

Second, across the five countries there has been a focus on employment and competences rather than necessarily the social functions of VET. This has been mainly true of England and the US, although elements of this approach are creeping into the VET systems of Norway and Poland with approaches stressing language or basic competences. As we have stated, the multi-dimensional nature of social exclusion means that these approaches are not necessarily conducive to wider forms of inclusion other than at the lower ends of the labour market.

Third, the polysemic nature of social exclusion means that, unemployment should not necessarily be considered to coincide directly with social exclusion (as in Poland, and to a lesser extent in Portugal). This might suggest that different cultural approaches are necessary in the design of VET to tackle social exclusion, taking into account different national interpretations of the term 'exclusion'.

3. Social cohesion, growth and VET

3.1. Defining social cohesion

According to Gough and Olofsson (1999) the trajectory of theories of social cohesion follows a common pattern in the social sciences – orthodoxy, fragmentation and rediscovery. The origins of the concept are located in 19th century sociology and political economy where a concern with industrialisation and the division of labour presented challenges to local and even national concepts of community and solidarity. A concern with fragmentation and integration was shared by seminal theorists such as Marx, Spencer and Durkheim although the expression of this fragmentation and its possible resolution differed between these authors. For Marx, the actions of capital and the contradictions between capital and labour were destroying older forms of social solidarity and forming a new set of capitalist social relations. While these relations would establish forms of equality based on property rights and the free sale of labour, ultimately (and for Marx imminently) a new form of communist sociability would supersede capitalism. The problem of social order would thereafter be of historical interest only. Spencer's argument was wholly opposed to that of Marx, considering that spontaneously arising social forces would reintegrate individuals into capitalist society and maintain social cohesion. These would be mechanisms in civil society which maintain mechanical forms of solidarity and 'invisible hand' mechanisms such as changing labour-market signals: however, we would probably question whether these spontaneous mechanisms are sufficient to maintain social cohesion. Although much contemporary thinking on social cohesion often takes Durkheim as the critical starting point, the issues raised by other 19th century theorists are still alive in debates on social cohesion and VET. For example, concerns with capitalism's impact on social cohesion in terms of globalisation – resulting in dislocation caused by unemployment, changing labour markets and increased product competition on local/national markets.

However, there is no doubt that much contemporary thinking on social cohesion owes a particular debt to Durkheim. For example, Mortensen (1999) refers to disintegration as being the converse to social cohesion with a number of negative social outcomes such as discrimination, suppression of ideas and poor health. This one-dimensional view of social cohesion as a single disease (disintegration) with multiple symptoms is similar (even if it includes) to Durkheim's concept of anomie. Durkheim's concept of anomie is a single societal sickness, not amenable to direct observation but which displays itself in terms of various societal dysfunctions – the prime example being anomic suicides. Similarly, Mortensen's view of disintegration is that it is a societal property which displays itself in a variety of ways. However, significantly, Durkheim perceived professional and vocational forms of socialisation as one way in which individuals could be integrated into society. For Durkheim the state and intermediate professional associations had a key role in maintaining social cohesion. The legacy of Durkheim was particularly important in influencing later

functionalist work on social cohesion by theorists such as Talcott Parsons.

Although functionalist theories of social cohesion were criticised both for their lack of social and class dynamics (by Marxists and others on the left) and essentialism (by post-modern and post-structuralists) there has more recently been a renewed interest in macrosocial cohesion. David Lockwood (1976, quoted in Mortensen 1999) is one of the key theorists in re-establishing social cohesion. Lockwood critiques value consensus theories of cohesion as neglecting considerations of power in determining value formation and conflict theories for underestimating the role of institutional arrangements in accommodating intense social conflict. Lockwood charted two dimensions of social cohesion: social and system integration: ‘whereas the problem of social integration focuses upon the orderly or conflictual relationships between actors, the problem of system integration focuses on the orderly or conflictual relationships between the parts of a social system’ (Lockwood, 1992, p. 400 quoted in Mortensen, 1999).

Social actors are micro (individual) or group actors (such as capitalists, workers, social classes, ethnic groups, unions) whereas parts of a social system are relations or processes (such as means of production, bureaucracy or branching points in education systems). Interactions between social and system integration produce different forms of cohesion in a non-determinant fashion (Mortensen, 1999, p. 19). There is no necessary movement towards social cohesion or integration although social integration and system integration are related. For example, social classes may make use of particular social systems and processes to enhance their social position, thus exacerbating inequality with negative impacts on social cohesion – ‘[...] class conflict is now increasingly conducted *de haut en bas* through market mediated mechanisms that simultaneously undermine the likelihood of inter-class corporate struggles’ (Lockwood, 1999, p. 63). Lockwood’s perspective on the importance of both social and system integration has been hugely influential in latter writing on social cohesion. In particular, the importance of system integration at the macro level is shared by a number of contemporary sociologists including Giddens, Mouzelis and Habermas: ‘in the different conceptions of system and social integration there seems to be some unanimity that system integration should be seen as a matter of macro-structural principles, and also that modern (late) capitalist societies suffer from a structural contradiction between “privatised” economic principles and “socialised” politics, or, in other words, a contradiction between “market” and “state” ’ (Mortensen, 1999, p. 33)

Although the authors that Mortensen (1999) refers to differ on their views on social integration, there is a repositioning of the problematic of social integration at the macro level. In addition, there is an acknowledgement if not of inequality, of the problematic of marketised values for social cohesion. As our discussions (below) suggest inequality and marketisation may compromise social cohesion. Mayes (1995) describes the issue of social cohesion and social inequality in an EU context as being one of tolerability: ‘[...] it is the political tolerability of the levels of economic and social disparity that exist and are expected in the EU and of the measures that are in place to deal with them. It is thus both a dynamic and a subjective concept. As time passes, constant or even diminishing disparities may

become less tolerable. Widening disparities may be tolerated if major efforts are being made to ease the process and absolute levels are rising' (Mayes, 1995, p. 1)

In our previous discussion of social exclusion and vocational socialisation, the reciprocal role of VET in social and system integration is also apparent. In terms of social integration for individual actors VET may act as a conduit for the formation of social values conducive to democracy as well as those attitudes favourable to a modern industrial environment. As our discussion of vocational socialisation has shown, these functions of VET are well established in German speaking systems of vocational education. In other countries, these functions have been compromised by a move towards competence based and decentralised systems of VET (see the discussion of English and US systems of vocational education above). However, social actors are greater than the individual. This means that social partnership is particularly important in securing social integration. In the case of Norwegian VET (above) this social partnership was not found to be particularly strong with regard to the participation of employers in the apprenticeship system. In terms of system integration, the role of VET in securing social cohesion is not so strongly established. For example, in Poland and Portugal VET does not play a particularly strong role in the allocation of rewards in the labour market where academic qualifications seem to take priority.

3.2. Indicators of social cohesion

The convergence of recent theoretical and policy interests in the macro and in inequalities, markets and competitiveness leads Gough and Olofsson to remark that there has been a re-emergence of interest in social cohesion but that the concept has re-emerged as a 'more diverse and complex issue' (Gough and Olofsson, 1999, p. 3). These complexities are mainly due to changed economic, political and social circumstances. However, there is also a theoretical and empirical drive to conceptualise social cohesion as a multi-dimensional phenomena rather than operating along a single axis. For example, contemporary writers on social cohesion have become interested in particular manifestations of lack of social cohesion. Lockwood (1999) adopts a taxonomy of symptoms of social cohesion adapted from his earlier work on social integration (Lockwood, 1976). He distinguishes between two forms of social integration: civic corruption by macro-social (or mega-social: individuals with great economic and cultural influence) actors which threatens the functioning of the core institutional order and declines in social cohesion at the communal level which he refers to as social dissolution. Crime would be an example of an activity which encompasses both forms of social integration. Economic crimes, such as corporate fraud, would be an example of civic corruption whereas crimes against the person or theft would be classed as social dissolution.

Using a number of statistical measures for the UK on social dissolution, Lockwood argues that civil society and family kinship is thriving whereas crime rates and fear of crime are high. However, this is not considered to be a threat to social cohesion as most crimes are property related and committed by individuals, rather than organised groups of criminals. There is also little evidence that the UK and other EU Member States have been particularly susceptible to

urban riots. For family disorganisation, findings are mixed, but there appears to be a strong class basis in terms of family outcomes. Therefore, in terms of social dissolution there is little evidence that the UK has particular problems in terms of social cohesion. In terms of civic integration, although economic crime is not a significant problem there is evidence of erosion of social citizenship and rights. The picture is, therefore, conflicted and Lockwood comments that: '[...] selecting measures of macro-social integration presupposes a close and agreed definition of its basic constituents. On this front little headway has been made in comparison with work that has been done on indicators of "social exclusion". This is all the more remarkable since more than a century has passed since Durkheim identified the study of social solidarity as the central task of sociology' (Lockwood, 1999, p. 82).

At European level, there are several collected statistics on social cohesion. Formally, Eurostat collects data on income distribution, at-risk-poverty rates, early school leaving, unemployment rates and numbers of jobless households as structural indicators on social cohesion. Some of these indicators may be considered to be social exclusion rather than social cohesion indicators (such as at-risk-poverty-rates and unemployment rates) which might be indicative of individual circumstances, or temporary economic difficulties, rather than systemic social cohesion problems. The OECD, on the other hand, has recently started to compile a range of indicators of social cohesion which are more indicative of systemic problems in social cohesion (strikes, suicide, crime, juvenile crime, teenage births, and number of prisoners).

3.3. Social cohesion, growth and VET: models and evidence

The links between human capital formation and economic growth have been convincingly shown in various endogenous growth models (Lucas, 1988; Romer, 1990). However, according to Greiner et al. (2005) these models do not account empirically for the relationship between exponentially expanding human capital in these countries and relatively slow growth in more recent years. They argue that by using a time-series, cross-country approach this paradox in the relationship between growth and education may be resolved. In doing so Greiner et al. identify that there is considerable heterogeneity in the forces of growth between countries and that not only technology and preference parameters may differ between countries but also their institutional structures. In terms of social cohesion, this means that generalisations concerning growth and social cohesion are not easily made. This point was supported by Leney et al. (2004) in terms of the ability of European countries to meet the challenge of the Lisbon goals for 2010. Leney et al. argue that the Nordic countries are the closest in terms of VET and associated institutions to have the potential to meet the Lisbon goals. However, there are other institutional arrangements that countries are making which must be read in the context of their specific systems. For example, Leney et al. argue that while in some countries (Norway, Lithuania) centralisation of the system of VET is being followed – and may be appropriate in each country context – in other countries centralisation, or at least greater degrees of social partnership, may be required given the persistence of

informal labour-market structures and lack of coordination in sectors of VET.

More generally, the incompatibility of social cohesion and economic growth may be considered rather *passé* in current social theory and policy. Many international institutions such as the OECD and EU consider that there are models of mutual growth and social cohesion. According to these models, institutions and governance are particularly important in securing growth and social cohesion. The OECD (1997b) considered that there were three factors which were necessary in ensuring that growth and social cohesion were not exclusive. First, the persistence of normative traditions within a society that supported citizenship rights outside of the political domain. This factor was necessary so that societies possessed the political will to redistribute resources towards those who might be disadvantaged through the processes of economic growth. Second, the existence of cosmopolitan institutions and governance structures which would guard against the rise of ethnocentrism and autarky as a response to globalisation to secure an insular form of cohesion. Finally, elite innovation in terms of the formation of new governance structures which would (seemingly paradoxically) lead to an increase in democratic participation in processes of growth. More recently for the OECD, Ritzen et al. (2000) discuss the importance of measures to reduce corruption hence increasing the possibility that growth may have a positive impact on social cohesion. EU policies also stress the importance of institutions and governance in securing growth and social cohesion. However, there is also an emphasis on the importance of welfare provision in securing access to social necessities given that the main barriers to social cohesion in the EU's future are considered to be unemployment, low income levels and an ageing population (which increases the possibility of inter-generational conflict over the distribution of resources). This is supported by earlier empirical work which suggests that income equality is important to growth (Perotti, 1996). The main factors influencing social cohesion are, therefore, societal values, institutions and inequalities. This means that social cohesion is not necessarily dependent on a society achieving rapid rates of economic growth.

According to Beauvais and Jenson (2002), in policy terms, it is not necessarily helpful to consider the relationship between social cohesion and growth as being over-determined by either one factor or the other. In terms of EU policy, they consider that social cohesion has become a framing concept rather than a potential driver (or consequence) of economic growth. That is, social cohesion (as part of social policy) frames and contextualises economic or employment policies, rather than determines them. However, for the purposes of research it is useful to know something about the causality between social cohesion and growth. The difficulties of operationalising social cohesion as a single variable means that there are a range of studies in which elements of social cohesion are associated with forms of growth. In many cases, growth is depicted as a single dimension (GDP or GNP/capita), focusing on economic efficiency. However, in some studies a wider perspective on growth is discussed. For example, Ritzen et al. (2000) consider what they call 'pro-poor' growth where growth with equity is considered.

Much political science literature on democracy and growth argues that direction of causality runs from economic growth to democratisation, rather than the other way around. An

influential study in this field (Pourgerami, 1995) uses time-series data to establish that economic growth has a powerful influence on democratisation through education and physical capital formation. There is some reverse causality between democratisation and growth through the enhancement of labour quality that might result from positive welfare effects of democratisation, such as access to health and education, but these effects are relatively weak. They are also contingent of the nature of welfare regimes in countries. This contention has been strongly supported by Helliwell (1994) who uses a design based on aggregate statistics for 125 countries for the period 1960-85. Helliwell finds that there is a strong causal relationship between economic growth and democratisation, supporting Pourgerami that human and physical capital investments are the predominant mechanisms. He finds that there is no evidence to support that democracy leads to future economic growth (reverse causality).

Although this evidence might suggest that there is no causal relationship between political stability and economic growth (rather that economic growth is supportive of democracy) we should be cautious in arriving at this conclusion. Although democracy may be thought to be a precondition of any meaningful form of social cohesion (other than authoritarian forms) the analysis conducted by Pourgerami (1995) and Helliwell (1994) may be more appropriate for countries outside of the EU – most EU Member States have been, in general, democracies for much of the past century (however, there are obvious lessons from this research for the transitional economies, in that strong economic growth may be a pre-condition of establishing democratic structures). More appropriate for EU Member States may be evidence that suggests that political regimes (institutions and structures of governance) may be significant in growth rather than simply democratisation (Przeworski and Limongi, 1993). Therefore, political factors such as trust, civil and political rights, and social policies on equality and crime are (possibly) more significantly associated with growth.

Knack and Keefer (1997) use data from the WVS to argue that levels of general trust are strongly associated with economic growth whereas associational memberships are not associated with growth. Although a useful contribution to the literature on social cohesion in how micro-social processes (trust is measured at the individual level in WVS) are linked with macroeconomic growth, there is no evidence that this process is causal. Rather, there is an associational relationship between these variables. More convincingly, Ritzen et al. (2000) conceptualise a model whereby social cohesion provides the foundation for sound political and institutional governance. Without social cohesion, politicians are engaged in satisfying factional interests and crisis management rather than building stable institutions. Social cohesion, therefore, produces the conditions whereby political reform, democracy and rights can be consolidated. In turn, this produces the conditions necessary for what they call pro-poor growth: that is growth with equity in terms of the distribution of income. Using civil and political liberties (the rule of law), measures of institutional corruption and democratisation they use growth models to examine the relationship between these factors and economic growth. As both social cohesion and growth are modelled over time, there is evidence that causality runs from social cohesion to economic growth.

According to Easterly (2001), forms of social cohesion and economic development that

promote what he calls the middle class consensus are particularly important in fostering both future economic growth and social cohesion (in terms of political stability and democratisation). Easterly defines the middle class consensus as a society where there are few strong class or ethnic differences – that is societies which are relatively homogenous. There is some evidence that there is a causal relationship between a middle class consensus in that the regression models used show that changes in homogeneity occur before changes in economic growth and social cohesion (although panel data would be more convincing). However, the explanatory mechanisms by which the middle class consensus might promote both growth and social cohesion are less obvious. Easterly (2001) concedes that there is no obvious social reason (other than deeply reactionary ones) why class and ethnic homogeneity should produce growth and cohesion. Instead, he argues that class and ethnic heterogeneity make a society open to division by political factions and politicians. This presents an alternative hypothesis whereby political and institutional factors are implicated in both social cohesion and growth.

Entorf and Spengler (2000) review the literature on crime and economic growth and seek to improve on this literature in terms of establishing forms of causality. They consider that although the literature is relatively silent on these issues there are important findings concerning the relationship between crime and efficiency/equity. In terms of economic performance, there are impacts of crime on job creation as crime imposes additional costs on households and businesses. According to Pallo and Godefroy these costs are around 4-6 % of GDP each year. Entorf and Spengler (2000) show, through an analysis of regional data on 550 European regions, that there is a causal relationship between certain types of crime and household wealth. In particular, theft, robbery and drug offences are strongly causal in terms of decreased household wealth. Although the authors are cautious in making direct links between household wealth and GDP, they argue that the locations of these crimes (in poor areas) and their impact on economic activity mean that there are negative consequences in terms of sustainable economic growth.

In conclusion, although much of the evidence is associational there is some evidence of causality between elements of social cohesion and elements of economic growth. Although the political science literature on democratisation points towards a strong role for economic growth (rather than *vice versa*) this analysis does not tell us much about EU Member States which (for the most part) are democratic States. Although much of the evidence on social cohesion and growth is associational (Knack and Keefer, 1997) or not fully convincing as to causality (Easterly, 2000) there is evidence that strong institutions can lead to pro-poor growth (Ritzen et al., 2000) and that crime is associated with a decline in household wealth (Entorf and Spengler, 2000). This presents some preliminary evidence that although growth and social cohesion are mutually reinforcing, there is some causal relationship between elements of social cohesion and types of economic growth (at least for those countries which are already democratic).

Turning to education, in OECD and EU approaches to models of growth and social cohesion the importance of education beyond the creation of human capital is central. In securing sound institutions, governance and guarding against corruption increasing levels of

educational participation and political literacy are particularly important (Heyneman, 2003). This has been supported by work on levels of education which links education not only to qualifications and attainment but also to social outcomes. While research on the role of education in development has tended, historically, to focus most on the contribution to economic growth, interest in recent years on the social benefits of education has grown substantially. There is now a wealth of evidence on the benefits of education to health, population control, crime, equality and social cohesion generally. For economists these kinds of benefits are typically discussed in terms of externalities for instance benefits of a public character and which cannot be wholly captured by individual economic agents. In his pioneering work, *Education and development: measuring the social benefits* (1999), Walter McMahon sought to measure the social impacts of education across a range of domains. He distinguishes between various types of externality effects which may derive from education. Externality benefits may accrue to households and firms which benefit from higher levels of education and they can also accrue to communities in general. Benefits may take the form of market returns (economic benefits) or they may have a pure non-market character, such as improvements to human welfare in environmental quality, that does not (directly) affect the economy. However, most non-market benefits also have an indirect effect on the economy. Education effects on social and economic outcomes may either be direct or indirect as, for instance, when education-driven enhancements to social cohesion or improvements in population control bring economic benefits.

Using data for 1965 to 1995 across 78 countries, and with a time lag analysis, McMahon found strong evidence of both direct and indirect effects of education on a wide range of social indicators. Controlling for other relevant variables, and with a sufficient time lag, McMahon found that educational enrolment correlated significantly across countries with human rights, political stability and democratisation, both directly, in the case of the first two, and indirectly in all cases through economic growth. Increases in primary and secondary enrolment, after a 20 year time lag, correlated significantly with reductions in poverty, whereas development with stable or declining income inequality was related to the extension of secondary education to rural areas subsequent to the generalisation of primary education. McMahon also finds that rising levels of secondary education are strongly associated with diminishing levels of violent crime, an effect which is produced indirectly through lower unemployment and income inequality. McMahon deals only with the impact of quantities of education (as measured by years of schooling or measures of educational inputs). However, more recent work (Gradstein and Justman, 2001) has also investigated the effects of education quality (in terms of numeracy/literacy skills) and distribution on the level and distribution of social outcomes and has found substantial evidence of impact. This means that increases in the level of educational attainment (including VET), or of numeracy/literacy may have a compensatory affect on some of the negative socioeconomic issues which may be associated with economic growth.

3.3.1. Individual monetary and non-monetary benefits of VET

There is also growing evidence that there are non-monetary impacts of VET at the individual level, which may enhance social cohesion and growth through improved human capital endowments and increased participation in civil society. The private benefits of investment in VET (that is the benefits which accrue to the individual) are well documented in terms of labour-market returns. In particular, as Cedefop, Descy and Tessaring (2004, p. 247-255) point out, European Social Fund evaluations show that the private benefits of VET are particularly salient when programmes are concentrated on disadvantaged groups and offer work experience as well as training. Although it is disputed whether, in general, investment in VET is more favourable to individuals than investment in other types of qualification (in particular academic qualifications) across Europe, VET has been found to increase wage returns, reduce periods of unemployment and increase other non-pecuniary workplace benefits such as status at work. The broad review of econometric studies on the workplace benefits of VET by Cedefop, Pfeiffer (2001) finds almost universal support that VET increases wages, leads to improved promotion prospects and increases productivity in the workplace. These general findings of econometric studies for European countries have been extended by work which uses the ECHP (European Community household panel survey) by Bassanini and Martin (2005). Although this study does not comment on specific country effects, the pooled data from the ECHP produces some interesting extensions to this review. First, young and workers with good initial education qualifications are the major beneficiaries of VET in terms of wages. Second, older and poorly educated workers are the major beneficiaries of VET in terms of job security. This study suggests that wage rigidities for younger and well educated workers in Europe means that those workers who do not invest in VET (and increase their productivity) are more likely to lose their jobs than experience a wage cut. For less well educated workers wages are more flexible in a downward direction.

Outside of the workplace other non-pecuniary private benefits of VET (those benefits which accrue to the individual which are not easily monetarised such as improved health) and externalities of VET (spill over effects) have not been awarded as much attention. Broadly, although the social benefits of general education (being the summation of both private and external benefits of education) have been well documented, the benefits of specific educational activities (VET, adult education, training) have less often been considered. In this section of the report, we focus on longitudinal studies of the social benefits of VET from which we can more likely ascertain the persistence of VET effects over the life course. At present, the focus of these studies appears to be in countries such as the UK and northern Europe (probably as these countries have well established longitudinal studies).

In reviewing the studies on the non-pecuniary benefits of VET in Europe it is apparent that many studies focus on one form of social outcome such as intergenerational impacts, crime or health. Exceptionally, in the UK the Centre for Research on the Wider Benefits of Learning (CRWBL) has conducted both qualitative and quantitative study on the non-pecuniary benefits of VET (among other qualifications) over the life course. In a broad study of the wider benefits of VET (Feinstein et al., 2003) a longitudinal study (the *National child*

development study, 1958 – a birth cohort study of individuals born within one week in 1958 with over 17 000 respondents) is used to examine whether there is a relationship between the acquisition of vocational qualifications and (non certified) on-the-job training between the age of 33 and 42 and significant life-course changes. In ascertaining effect sizes, ordinary least squares and logistic regression techniques are used with controls for prior education, social class and gender. In general, adult learning (including VET) during this period is found to have positive and significant effects on social capital, political attitudes and health (smoking and exercise) although effect sizes are small. In some areas (drinking and depression) academic adult education has no effect. However, taking accredited vocational courses reduces alcohol consumption whereas non-accredited work related training increases it. This perverse effect of adult education could be connected to specific UK cultural practices. Although perusal of accredited vocational qualifications is associated with professionalism (albeit in an individualised fashion compared with practices in other countries) non-accredited workplace training is often seen as an escape from work, with heavy drinking commonly reported among staff following such events. Vocational accredited qualifications and work-related training also lead to beneficial changes in social and political attitudes – decreasing racism, authoritarianism and political cynicism. Participation in accredited vocational courses does not lead to increased political and civic participation. This may be linked to the market model of vocational education in the UK, which is premised more on individuals gaining qualifications to advance their careers rather than as part of an apprenticeship with social and political (as well as economic) outcomes. Heinz et al. (1998) use longitudinal data to suggest that the apprenticeship system in Germany provides enhanced opportunities for civic and political participation arising through occupational orientations, such as trade unions.

The CRWBL has also focused attention on specific areas of social benefit. The inter-generational impact of VET on child outcomes has been particularly important. In a recent study, again using the *National child development study*, Feinstein and Duckworth (2006) analyse the impact of mother's education on their parenting and children's outcomes. Staying on to study VET courses post-16 is found to have a significant effect on children's verbal ability and produces a more educationally stimulating home environment. However VET did not affect child self esteem, reading and mathematics scores. The authors argue that socioeconomic status is a more powerful influence on these factors than education. Again, in a marketised education system such as the UK, qualifications alone (or the skills associated with them) may not always be sufficient to produce social benefits. In longitudinal studies in other countries, intergenerational effects of VET are found to be more persistent. Gödde and Schnabel (1998) use data from the German Socio-Economic Panel (GSOEP) to show the effects of parental education on the wages of their children. Using an instrumental variable approach they find that incrementally all types of parental education (including VET and apprenticeships) have a positive impact on their children's wages. Jæger and Holm (forthcoming) hypothesise that in Denmark, and other Scandinavian countries, non-monetary assets such as VET qualifications (human capital) are more powerful forces in inter-generational mobility than economic capital due to the small (and relatively inefficient)

private sector in Scandinavian education. This means monetary investments in children's education are unlikely to yield substantial returns as compared to other countries in Europe (such as the UK). Using the youth longitudinal study a representative sample of 3 151 respondents, Jæger and Holm analyse whether parental possession of VET qualifications influences the educational performance of their children. Using latent class analysis, the authors demonstrate that if mothers hold vocational qualifications there is a much higher chance of their children attaining higher tertiary education. For fathers there is a significantly greater chance of their children attaining an apprenticeship if they themselves have an apprenticeship/VET. This analysis suggests that there might be different mechanisms by which VET has intergenerational social benefits across different education systems. Specifically, in market models of VET (such as the UK), VET has less of a socialisation function across generations (as apprenticeships have faded) and would have more of a function in terms of access to economic resources. So although mother's possession of VET may increase their parenting skills and their child's verbal ability, the marketised and individuated nature of the schooling system does not mean that these qualifications will be valorised in terms of increased school performance. In contrast, in social models of VET (such as in Germany, and to a lesser extent in Denmark) educational qualifications may be more important than economic capital.

As well as across generations, there are individual level benefits associated with VET. In terms of health we have already considered the CRWBL research (Feinstein et al., 2003) where evidence is strong that (for the majority of cases, but not in terms of depression) participation in VET leads to better health. This message is strongly reinforced in other European studies. Setter et al. (1998) show that in Germany although prevalence of smoking is strongly associated with those in lower level service occupations (hairdressers, shop workers, butchers) that even within these occupations, level of vocational education could positively effect smoking behaviour. Karvonen et al. (2000) show for Finland (using the longitudinal adolescent health and lifestyle surveys) that over a range of health-related behaviours (including smoking, coffee drinking and exercise) vocational qualifications were a protective factor in preventing youth from engaging in unhealthy behaviour. In each of these studies the mechanisms by which VET has an impact on health are slightly different.

In the CRWBL study, personal efficacy is thought to be most significant mechanism by which VET impacts on health, whereas in the Karvonen et al. (2000) studies it is suggested the status gains through VET increase the likelihood of healthy behaviours.

Finally, there is a role for VET in not only increasing individual, family and community benefits but also in reducing the pernicious effect of crime. Much of the research on VET and crime focuses on the role of VET in the rehabilitation of criminals. Willson et al. (2003) conduct a useful meta-analysis of the impact of vocational education programmes on the subsequent criminal careers of imprisoned offenders. Although they criticise the studies for lack of methodological rigour (in particular lack of adequate controls) the authors consider that those prisoners participating in VET have a significantly lower probability of committing crimes afterwards than those who did not participate. Although valuable, the impact of VET

on reducing the probability of reoffending by former offenders is only a small part of the function of VET in this area. More significant is the impact of VET in reducing the risk of entering a criminal career initially. A core message repeated across several countries and studies is that lack of VET is a risk factor in adopting a 'criminal career' for young people. Christoffersen et al. (2003) use a number of longitudinal profiles for Danish youth aged between 15 and 27 to establish that lack of vocational training opportunities are associated with higher risks of criminal activities. Loeber and Farrington (1998) also consider a longitudinal study of youth (selected on the basis of risk factors) to consider that lack of vocational opportunities within schools is one risk factor associated with delinquency. It must be noted that the Christoffersen et al. and Loeber and Farrington studies are based upon bespoke longitudinal studies rather than national studies. This is because questions on crime are rarely asked on national longitudinal studies (as survey designers wish to avoid drop out). Therefore, it must be remembered that conclusions raised as to the effectiveness of VET in addressing crime are based on non-representative samples.

3.3.2. Educational inequalities and social cohesion

Beyond the monetary and non-monetary impacts of VET reducing inequalities in levels of education may have an impact on growth and social cohesion. There are several reasons why educational inequalities may be negative for social cohesion. First, at the level of value formation, educational inequality might be expected to increase social distance between individuals and groups though creating divergent norms (Gradstein and Justman, 2001). This is facilitated by differences in symbolic resources between individuals in terms of cultural and social capital (Bourdieu, 1986). Differences in social and cultural capital between social classes mean that it is more difficult to mediate between forms of political expression and resolve conflicts. A useful way to think about this is to consider differences between societies with small scientific/technical elites compared to societies with a mass system of vocational education. In the former, elite values are used as a form of distinction and isolation to a greater extent than in the latter. If VET reduces educational inequalities between groups it may lead to shared societal norms, although obviously this depends on the nature of the provision. Second, educational inequality, like income inequality, contributes towards individual levels of stress as has been shown in studies on societal health (Wilkinson, 1996). Marked disparity of educational resources makes transactions with other individuals more difficult as knowledge and norms are not shared. Educational inequality might also increase resentment and encourage invidious comparison. The aggregated effect of such stress is lack of social cohesion. Third, there is a close correlation between social class and educational attainment. This means that increased differentials in educational qualification by social class might lead to increased competition in labour markets and other social arenas. Class conflict may be exacerbated by increased educational inequality. There is also a close correlation between educational attainment and political participation (Emler and Frazer, 1999). Increased educational inequality means that there will be increasingly unequal levels of participation in political and civic arenas. This skews democratic processes and outcomes towards individuals and groups who possess higher levels of education (Nie et al., 1996).

VET may provide individuals with access to political resources, both in terms of civic skills associated with general education and through participation in employee organisations. It must be noted that VET also has an important role in reducing other social inequalities – not least by increasing labour-market participation by previously excluded groups.

Research by Cedefop, Green et al. (2004) has shown that cross-sectionally there are correlations between levels of educational inequality and social cohesion including aggregate crime levels. More recently (Green et al., 2006) and more convincingly in terms of causality it has been shown that educational inequality has an impact on social cohesion over time using cross-sectional time series analysis for several OECD and non-OECD countries. Moreover, there is an institutional relationship between educational inequality and the structure of education in regional groups. Although the causality of the relationship is not clear, those countries (particularly the Nordic countries) with comprehensive education systems and socially supported access to lifelong learning and vocational training appear to have lower levels of educational inequality. This position is supported by Gradstein and Justman (2001) who develop an econometric model to argue that decentralisation of schooling and the introduction of privatisation in schooling (and, implicitly other forms of education such as VET) decreases social cohesion by increasing the social distance between groups. Further, Gradstein et al. (2005) argue that not only do decentralised schooling systems reduce social cohesion, but separate schooling for immigrant groups increases social polarisation. As we have argued in the analysis of immigrants and social exclusion above, it is better to integrate immigrants into mainstream VET provision.

In the following section this analysis is elaborated using new data on educational inequality for European countries to analyse educational inequality and social cohesion for these countries alone. We also consider whether there is a relationship between enrolments in vocational education and education inequality more generally.

3.4. Modelling social cohesion, growth and VET

In our earlier research for the third research report (Cedefop, Green et al., 2004) we considered that there may be a cross-sectional relationship between educational inequalities and social cohesion at the aggregate level. For this research report we extend this analysis in two dimensions. First, we will consider the temporal dimensions of educational inequality and social cohesion by constructing a cross-national panel dataset of educational inequalities, educational level, GDP/capita and social cohesion measures for 1960-95. We use the updated Thomas, Wang and Fan dataset for the measure of educational inequality (education gini) and the ACLP dataset for our measure of social cohesion (Alvarez, Cheibub, Limongi and Przeworski – details can be found in Przeworski et al., 2000). This enables us to test hypothesis concerning the relationship between education, educational inequality, real GDP/capita and social cohesion over time. Second, we use measures of national vocational education, being enrolments at ISCED3 (from OECD) to test whether there is a relationship between educational inequality and participation/inequality in VET.

3.4.1. Results of modelling: inequality, growth and social cohesion

Using the latest dataset on educational inequality from Thomas, Wang and Fan (Thomas et al., 2001), the Deininger and Squire (1996) income inequality dataset and sociopolitical indicators from ACLP (Przeworski et al., 2000) we created a panel dataset of European country measures of educational inequality, social cohesion indicators and income inequality from 1960 to 1990. This dataset includes 17 countries (Belgium, Bulgaria, the Czech Republic, Denmark, Finland, France, Greece, Hungary, the Netherlands, Poland, Portugal, Romania, Spain, Switzerland, Turkey, West Germany and Yugoslavia). Using these data we considered whether there is a relationship between educational inequality and social cohesion using a fixed effects cross-sectional time series model. We provide estimates for the following variables: *edgini* (educational inequality); *gini* (income inequality); *GDP* (real income/capita).

We consider three outcome variables – civil liberties, political liberties and unrest from the ACLP dataset. Unlike economic growth (which is easier to operationalise), social cohesion cannot be directly observed, so it is important to choose measures which might be indicative of this underlying societal property. Political and civil liberties are important indicators of what Ritzen et al. (2000) refer to as being indicative of the rule of law. According to Ritzen et al., civil and political rights are enhanced by social cohesion which enables politicians to put into place the political and institutional structures necessary to enhance those rights. This analysis is supported by Heyneman (2003) who considers that civil and political rights are the most important indicator of social cohesion, and are one area where education can have a particularly strong impact. However, social cohesion does not necessarily manifest itself in terms of the formal legal and institutional structures of a country. Hence we also consider unrest which is more representative of disputes and public dissatisfaction.

Political liberty is ranked on a seven point scale through an index derived by Freedom House (a non-profit making institution which publishes regular surveys of liberties). We have reversed this scale so that higher scores indicate greater political liberty. In our new scale, 1 indicates regimes where political rights are non-existent and there is severe oppression, 6 represents regimes where there is political corruption, violence and political discrimination against minorities. Regimes ranked 7 have free and fair elections and there is self-government or genuine participation for minority groups.

Civil liberty is also ranked by Freedom House on a seven point scale which we have reversed. Regimes ranked 1 on this scale have no freedom and no developed civil society. Regimes ranked 6 have deficiencies in some civil liberties, but are still relatively free. Regimes ranked 7 have freedom of expression, assembly, education and religion.

Unrest is an aggregated scale of riots, strikes and peaceful demonstrations. Przeworski et al. (2000, p. 192-193) argue that this variable is often called ‘mobilisation’ in the literature on the transition to democracy and ‘unrest’ in the literature on political stability. We aggregate these events to form a meaningful scale variable. Riots are defined as the number of demonstrations or clashes of more than 100 citizens involving the use of physical force. Strikes are the number of strikes of 1 000 or more industrial or service workers that involved

more than one employer and were aimed at national-government policies or authority. Peaceful demonstrations were defined as any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing their opposition to government policies or authority, excluding demonstrations of a distinctly anti-foreign nature.

Table 6 shows the estimate for the outcome measure civil liberties. As can be seen, there is a significant negative relationship between educational inequality and civil liberties with greater inequality leading to a reduction in civil liberties (significant at the 10 % level). We also find that a relationship between educational inequality and political liberties (Table 7) with greater educational inequality being associated with a reduction in political freedoms (significant at the 10 % level). However, in terms of more general types of unrest (riots, strikes and demonstrations – civil disorder) we do not find a relationship between educational inequality and this variable (Table 8). This is contrary to our finding for a wider group of world advanced industrial countries (Green et al., 2006). The lack of a significant effect could be due to the small sample size in this analysis of unrest, but this issue demands further investigation.

For vocational education the implications are that if investment in this type of education leads to a reduction in general educational inequality, then over time there could be an increase in general civil and political freedoms in European countries, or more realistically, that equity in education contributes to the maintenance of civil and political liberties. We also find that when educational equality is taken into account there are no significant effects (at the 10 % level) of economic activity (real GDP) or income inequality on these variables. This means that it is plausible that educational equality (rather than necessarily income inequality) is a key mechanism in maintaining social cohesion. A plausible mechanism for this in terms of rights is that reducing educational inequalities strengthens systems and institutions against abuses of rights and corruption.

Table 6: Inequality, GDP and civil liberties

	Civil liberty
Edgini	-12.555 (1.57) †
Gini	-0.025 -0.24
GDP	0 -0.06
Constant	9.597 -1.62
Observations	43
Number of group (country)	15
R-squared	0.12

Absolute value of t statistics in parentheses

† significant at 10 %

Table 7: *Inequality, GDP and political liberties*

	Political liberty
Edgini	-20.126 (1.85) †
Gini	0.036 -0.25
GDP	0 -0.7
Constant	8.626 -1.07
Observations	43
Number of group (country)	15
R-squared	0.23
Absolute value of t statistics in parentheses † significant at 10 %	

Table 8: *Inequality, GDP and unrest*

	Unrest
Edgini	-26.298 -0.98
Gini	0.259 -0.73
GDP	0 -0.31
Constant	1.973 -0.11
Observations	56
Number of group (country)	15
R-squared	0.06

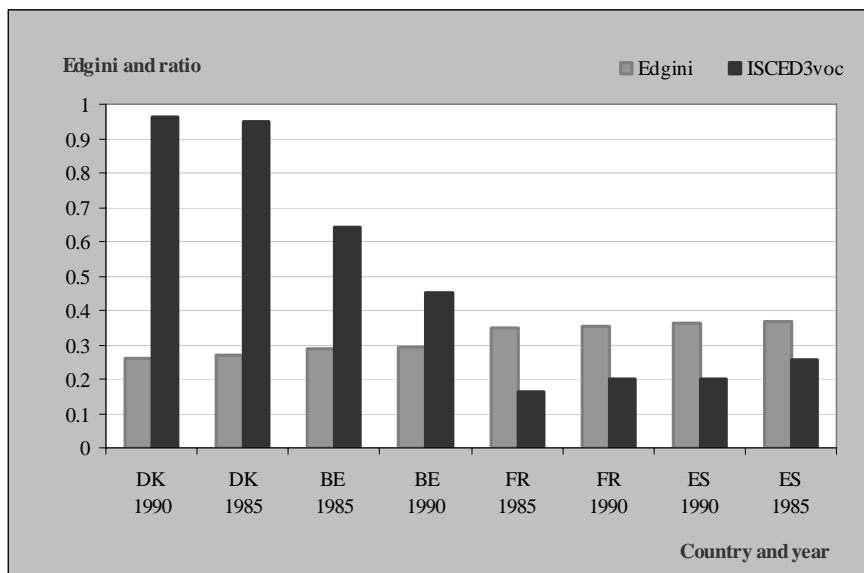
3.4.2. VET and the education gini coefficient

As there is currently no time series data available for 1960-90 on equity in VET (in terms of access by initial qualifications, for example), we consider the correspondence between the level of vocational enrolments and general education inequality. If there is an association between VET and education equity we may assume that VET can be used as a lever to influence the level of educational equity. To explore relationships between educational inequality, social cohesion and vocational enrolments for European countries we considered, first, whether there was any relationship between proportions of vocational enrolments and

educational inequality. In Figure 3 we provide an indication of the correspondence between these two statistics for the countries in our dataset using historical OECD data for 1985 and 1990. We calculate the ratio of those who have received vocational qualifications at ISCED 3 as opposed to those who receive qualifications in academic or other areas and compare this to the edgini for each of these years. This gives a very crude indicator of the general vocational orientation of education systems. The combined dataset meant that we have data for Belgium, Denmark, Spain and France for both 1985 and 1990. The correlation between what might be called the vocational orientation of these countries education systems and educational inequality was highly significant with a correlation coefficient of -0.93 (significant at the $p < 0.01$ level). This means that there is a negative correlation between vocational orientation and educational inequality. Although we cannot specify causality, there is an association between high vocational enrolments and low degrees of educational inequality. Tentatively, this might mean that systems whereby vocational qualifications are seen to have status (as enrolments are high relative to academic enrolments) are less generally unequal in terms of the edgini.

As can be seen in Figure 3, Belgium and Denmark have relatively high numbers of individuals obtaining vocational qualifications in both 1985 and 1990 at ISCED 3 whereas Spain and France have relatively low numbers. Belgium and Denmark also have relatively low levels of educational inequality (< 0.3) as opposed to Spain and France (> 0.3), at least as measured by the education gini coefficient.

Figure 3: Qualifications at ISCED 3 as a proportion of all qualifications and educational inequality



It must be noted that these are not a strong tests of the relationship between vocational qualifications and inequality as they are cross-sectional. If vocational graduations have an effect on inequalities and social cohesion then we may expect a time lag between changes in the output of educational systems and social and economic effects. In McMahon's (1999)

study of the social outcomes of education, for example, there is a time lag of around 10 to 20 years between changes in output of the education system and an impact on social indicators. However, these results indicate that there may be some relationship between general educational equity and system characteristics. The vocational orientation of an education system over this time appears to be connected to educational inequality. Although simple generalisations concerning the prevalence of vocational against academic qualifications in inequitable education systems cannot be made (especially with a small sample of countries) in as much as vocational qualifications can redress earlier inequalities in education then they may have a role to play in improving general educational equity.

3.4.3. Social cohesion and VET – summary

Theoretically, VET has a key coordinating role in terms of social and system integration in maintaining social cohesion. Although growth and social cohesion are not necessarily mutually exclusive, VET may promote both by maintaining strong participation in institutions and reducing general educational inequality. As our earlier discussion of vocational socialisation and social exclusion has shown there is strong support for the contention that VET can be used to promote value systems favourable to social cohesion (although this is highly path dependent on a countries culture, institutions and the nature of VET). In this section we find that educational equality is associated over time with greater civil and political liberties and we find some evidence that VET is associated with general educational equity. However, the test we use to measure this is fairly crude and greater research effort needs to be conducted to produce time-series data on vocational enrolments and equity.

4. Conclusion

4.1. Social inclusion, cohesion and VET: towards a conceptual model

Table 9: *Social Cohesion regimes with respect to VET*

Regime type	Solidarity	Specialisation	Social democratic	Social welfare
Conception of integration	Group solidarity/cultural boundaries	Separate spheres/independence	Consensus	Equality
Source of integration	Moral integration	Exchange	Citizenship rights	Equity
Ideology	Republicanism	Liberalism	Social democracy	Social justice
Discourse	Exclusion	Discrimination/underclass	Exclusion	Inequality
Models of the new political economy	Integration	Skills Networks	Partnership	Inclusion
VET orientation for social inclusion	Values	Employment	Socialisation	Clientism
VET orientation for social cohesion	Targets/planning	Endogenous growth	Democratisation	Equity
Closest national exemplars	France	US/England	Germany	Norway

In Table 9 we adapt the categories of social exclusion first posited by Silver (1994) to create a conceptual model of various social cohesion regimes. We include Silver's categories of solidarity and specialisation regime but drop his category of 'monopoly' it does not particularly exemplify modern European welfare systems in favour of social democratic and social welfare regimes. However, it should be noted that there are similarities between the social democratic and social welfare regimes in terms of their democratic orientation. Heuristically, though, we separate them to distinguish between possible alternative policy

objectives. We consider models of the new political economy and the orientation of VET in each regime.

In the first column, we give a model of a social cohesion regime orientated towards solidarity through moral integration with the state. This typifies a French republican model of social inclusion. In terms of social inclusion, this model is orientated around value integration into a national polity which includes (for social cohesion) national targets and planning. This system prioritises values education through VET. As discussed in Section 1.3.2, the role of VET in promoting cultural values (particularly citizenship) has been a particularly important part of civic-republican traditions. Our second social cohesion regime is liberal and relies on a narrow conception of solidarity in terms of separate market/state, public/private spheres. In terms of social inclusion, employment is the priority of VET. Although social cohesion is not a priority, models of endogenous growth provide empirical and ideological support to market mechanisms for enhancing social cohesion. Again, this relates back to our discussion in Section 1.3.2 of the British system of vocational education which focuses on competence and employability rather than broader forms of citizenship. The third model – social democracy – is based on democratic participation and social partnership. In terms of VET for social inclusion this means that socialisation is particularly important. For social cohesion, socialisation as an active citizen is relevant in terms of democratisation. This typifies the German (statist or social) model of vocational education. The last column in the table indicates a social welfare model, guided by principles of social justice, which may well be socially democratic. In terms of social inclusion, ‘clientism’ means that VET is orientated around the needs of specific excluded groups with the aim of delivering a relatively high minimum standard of education and training. With regard to social cohesion, equity is an important social principle. This mirrors our earlier discussion of the Nordic systems of vocational education where combating inequality is seen as being of major importance.

Although the above models are abstractions of reality (and do not describe well transitional countries or those undergoing rapid reform of VET such as Poland or Portugal) they provide a useful way of considering the relationship between VET, social exclusion and social cohesion. Within each system, VET has a specific function of what might be thought to be a particular regime. These are somewhat determined by the conceptions and sources of integration in each model. So in the solidarity model, for example, it makes some sense that the aims of VET should be towards the adoption of certain values (with respect to exclusion) and towards national targets (with respect to cohesion). It also means that the difficulty of policy borrowing within regimes is apparent. For example, it would be difficult for policy-makers in England to transfer VET methods of combating social exclusion which were based on equity, rather than market principles.

However, this model also represents a useful way for thinking about the modernisation of VET for social exclusion/cohesion within the EU. As our conclusion (below) will show, the nature of participation of the socially excluded in VET and the difficulties of targeting VET towards social exclusion are two major findings of this report. Examining the conceptual model shows the tensions involved in resolving these issues in existing welfare regimes. In

terms of participation in VET (perhaps in aspects of governance) by the socially excluded the social democratic model would seem most suitable in terms of adaptation. In other regimes, it is clear that mechanisms for participation might be different. For example, within a liberal model, networked (civil society) forms of participation might be more appropriate whereas within a social welfare model this may involve a more active conception of the welfare 'client' for VET.

Similar issues are found in issues around the difficulties of targeting VET. In solidaristic regimes, problems with targeting would not necessarily occur if it is believed that all citizens should receive a national model of VET, although this may create its own forms of exclusion. In such systems, securing access to VET for excluded groups may be a policy priority. This may also be an issue in social-democratic systems where excluded groups may not be active participants in decision-making processes over VET.

As this model shows, even when broad principles of social exclusion and cohesion in VET are reasonably clear (that vocational socialisation benefits inclusion, that inequality is bad for cohesion) their implementation into national models presents a further difficulty for policy-makers given the histories and assumptions made in particular social cohesion regimes. This does not, though, mean that this task is not possible – but policy borrowing needs to be complemented by putting in place the democratic and inclusive structures to modernise VET for inclusion and cohesion in Europe.

4.2. Findings and policy considerations

This contribution has considered the micro and macro social benefits of VET with regard to social exclusion and social cohesion. What we have found is that the correspondence between VET and these societal features is not necessarily deterministic. VET cannot be considered to be a social panacea in combating problems of exclusion or lack of social cohesion. This should not, perhaps, be surprising given the corresponding literature on VET and economic growth where a deterministic relationship is not always found. However, this does not mean that we should dismiss the role of VET as being inconsequential in combating these issues and there are many significant ways in which it can contribute.

In terms of social exclusion, although VET arguably has a large role in increasing labour-market participation (a narrow form of inclusion) when wider issues of social inclusion are considered (such as citizenship) it is arguable whether models of VET premised on competences and employment alone can deliver the types of social inclusion desired by EU Member States. We have shown that social exclusion is much broader than employment and that it is best defined by outcomes (for example, in terms of income or other social categories). It is telling that within the competence movement in VET there has been a rediscovery of socialisation in the incorporation of soft and key skills into a competence framework. However, these soft and key skills are so abstracted from workplace environments that there are serious doubts as to whether they may deliver the types of

socialisation necessary to combat exclusion and enhance cohesion. There are other models of VET which may be more suitable for combating social exclusion in its wider sense. We have commented positively on the German speaking countries systems of VET with regard to socialisation. It may not be appropriate to integrate these models of VET into other countries educational systems as the above discussion of social cohesion regimes implies. A more general point is that the origins of these systems provide an indication of the types of policies that countries may decide to follow. As Thelen (2004) explains, the origins of the strong German system of vocational education were not (initially) concerned with social partnership. Rather, there was a desire on the part of the state to protect the interests of artisans and craft workers against the interests of the growing industrial unions. This led to the construction of VET systems of mutual benefit to artisans, industrial unions and employers. The reactionary protection of the artisanal sector led to a VET system of benefit to all parties, which eventually became a strong social partnership.

Because of the nature of social exclusion, similar institutional processes have not occurred in the design of vocational training systems to benefit these groups. The socially excluded do not form a viable political group – their background characteristics and interests make them too disparate. However, when their interests are represented in civil society, it may lead to VET systems that mitigate social exclusion. As discussed, racial equity in apprenticeships in the US was forced by affirmative action and coordinated groups acting in civil society. In Norway, sharing of responsibility for vocational integration by employers for immigrant apprenticeships by the sponsor scheme is another example of how group interests may be represented in civil society. Where groups are not involved or integrated in VET – such as disabled people across the five country case studies (particularly in Poland) – there are poor outcomes in the ability of VET to tackle social exclusion. These small examples imply that consumer orientated design in vocational education for the socially excluded (using focus groups and other feedback techniques) needs to be reconsidered in terms of more active, democratic participation by the socially excluded in creating VET which meets their needs. As Cedefop, Vranken and Frans (2001, p. 169) state in their review of targeting VET, there is often a cultural clash between trainers and trainees over the objectives of training (trainers emphasise skill outcomes and trainees gaining a job or increasing wages). Participation by socially excluded trainees in the governance of VET may be one way of resolving this clash. This would need careful handling by training organisations, but in other areas of the welfare state (particularly housing and communities) there are models of how the socially excluded can be democratically involved. A future research agenda might posit as to whether, and how to extend these mechanisms to VET.

A cautionary note on targeting VET and the usefulness of bespoke programmes for social exclusion should be raised. As has been seen throughout the country case studies, targeted programmes for immigrants and the disabled are often not truly vocational, but rather focus on language/cultural skills or rehabilitation. As important as these are for the groups concerned, the wider functions of VET in terms of socialisation must not be forgotten. It could even be (cynically) argued that these bespoke programmes are a method for native and (to a lesser extent) non-disabled workers to maintain their position in the labour market by

rationing access to VET as in previous times (Roediger, 1991; Thelen, 2004). Additionally, social exclusion is not just concentrated in those groups with specific racial, class or disability profiles. As seen in our above analysis there are groups of individuals in work and dual parent families who (on the basis of our analysis from EVS/WVS) can be considered to be socially excluded (Table 1). Targeting VET on the basis of client class, race, family type or disability means that clients who do not necessarily need VET to combat their social exclusion will benefit whereas clients who do not fit the profile would not. Even supposedly homogenous groups of the socially excluded are actually heterogeneous with regard to skill and qualification needs. For example, immigrants and the disabled have been found to be very heterogeneous groups with regard to their skills. More evidence on these arguments is required, but it should certainly not be assumed that targeting VET is the optimum method of addressing social exclusion. Perhaps thinking in terms of tailoring (modifying mainstream VET to meet the needs of excluded groups) rather than targeting VET is more appropriate. For example, the continued success of ALMP across Europe may require that the specific skill needs of unemployed groups are met (for example, those of illiterate adults or women returners to the labour market) (Cedefop, Descy and Tessaring, 2004, p. 177). This does not mean that separate forms of ALMP should be created for these groups, rather that existing programmes can be modified appropriately to meet the skill needs of trainees. The emphasis on tailoring by skill is substantially different from targeting by social characteristic and more appropriate in terms of the modernisation of VET. In terms of our discussion of disabled people and immigrants, targeting often implies separate tracks of VET with little participation by client groups in the design of VET. For us, a tailored approach means not separating disabled people and immigrants from other trainees and involving them more fully in the design of VET to meet their needs. To some extent, the distinction between targeting and tailoring may be semantic, but differences between VET which is aimed at differentiated clients by social characteristics (targeting) and that which is designed to meet the needs of clients in an inclusive training environment (tailoring) are meaningful.

Enhancing social cohesion, value formation, institutional integrity and reducing inequalities are areas where education – and VET – can make a contribution. With regard to the latter, we found that in European countries educational equality was particularly important in maintaining civil and political rights. On the basis of current evidence we cannot conclude that there is a strong association between vocational enrolments and/or vocational equity and general educational equity. However, from the vocational and professional socialisation literature there is strong evidence for a value socialisation mechanism for VET and social cohesion.

4.3. Further research

In data and modelling terms, there is a need to reconstruct time series data on educational equity, VET and social cohesion over considerable periods of time. This would enable researchers to test more robustly considerations of VET, equality and social cohesion.

Additionally, a concentration of econometric and statistical effort in modelling these factors appears necessary. If data were available, this would not be a particularly onerous task. This would enable policy-makers to make informed decisions considering the future roles of equity in VET in delivering social cohesion. There is also further work to be done in considering the dynamics of social exclusion. In the above analysis, although we have used cluster analysis to identify groups of socially excluded individuals this has been performed at one point in time and with a dataset which although comparative lacks detail on many additional indicators of social exclusion. Using longitudinal data would enable researchers to examine the dynamics of social exclusion in terms of duration of social exclusion and levels of exclusion over time. More significantly, this would enable researchers to gain a better purchase on the causal relationship between VET and social exclusion. There is also the need to obtain better data on facets of social exclusion such as memberships, health and political participation.

However, the issues raised in terms of research by this report are not just about the need for further statistical or econometric analysis. A concrete issue for political scientists and institutional theorists is the ways in which the socially excluded have (and could) influence the nature of and delivery of VET through truly participatory mechanisms. This report has intimated that this could be an important factor in the ability of VET to tackle social exclusion in the future.

Annex: results from cluster analysis

Figure 4: Cluster analysis of social exclusion for England

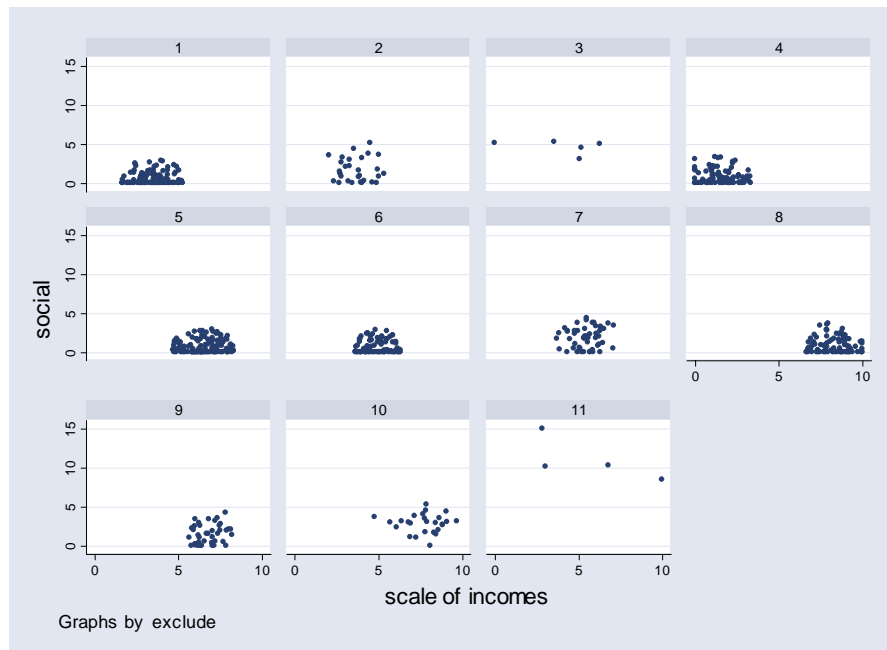


Figure 5: Cluster analysis of social exclusion for Poland

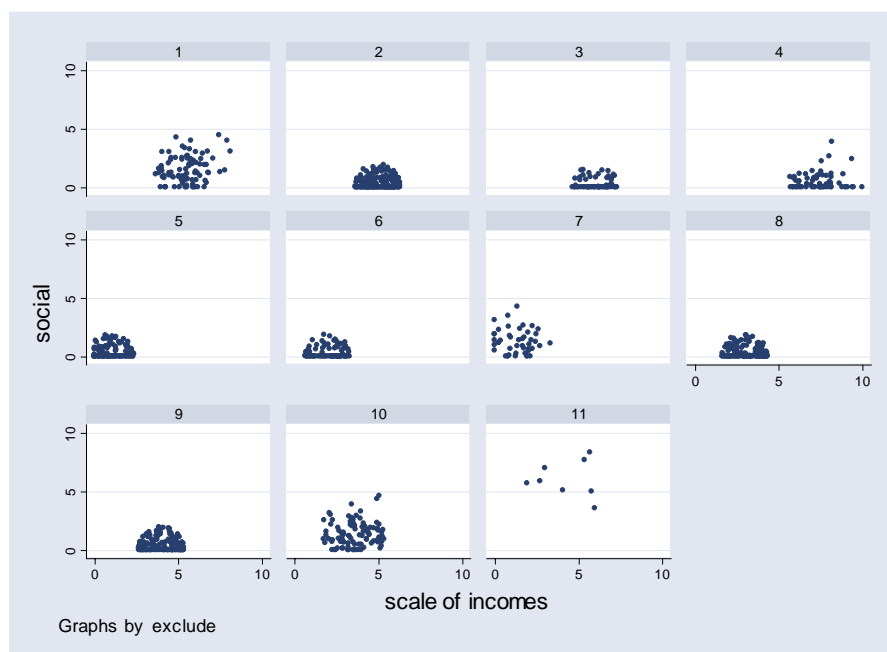


Figure 6: Cluster analysis of social exclusion for the US

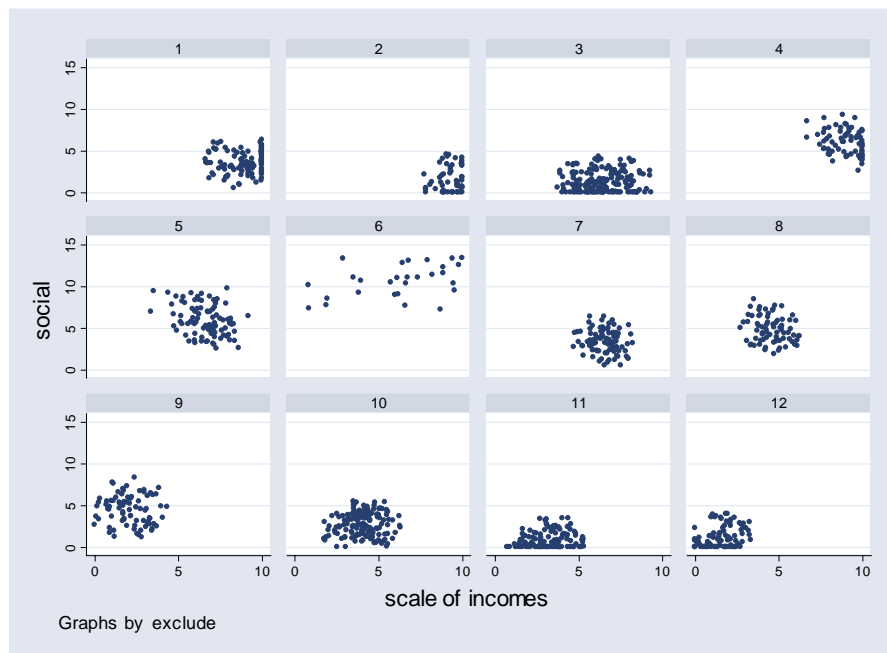


Figure 7: Cluster analysis of social exclusion for Portugal

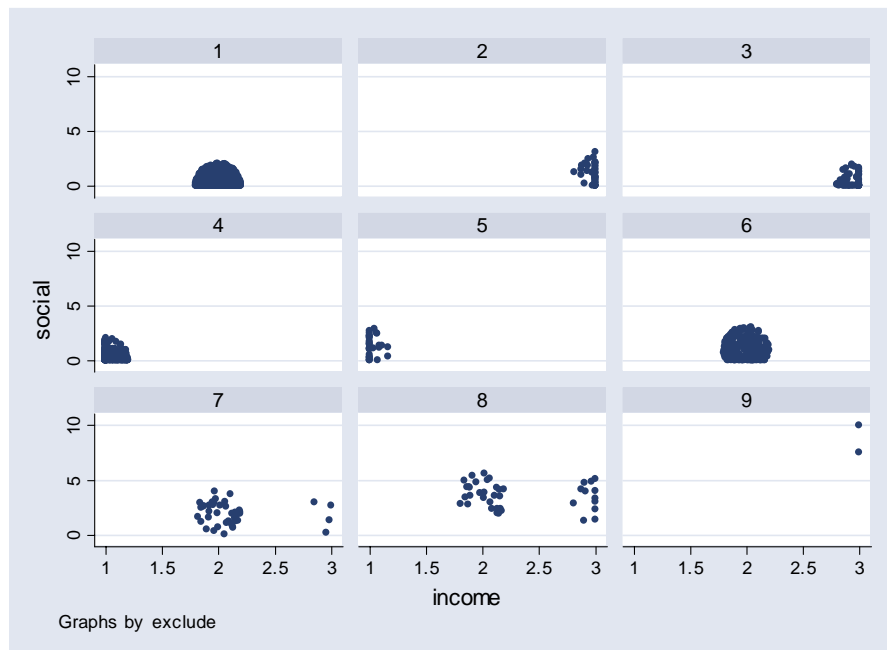


Figure 8: Cluster analysis of social exclusion for Norway

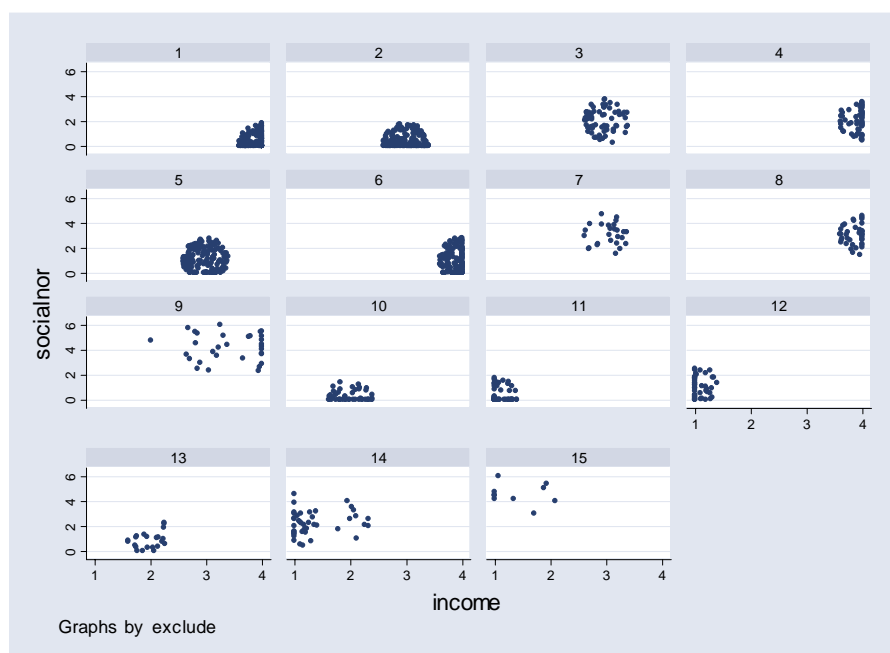


Table 10: Descriptive statistics for clusters

Country	Group	Social capital	Income	Excluded/ most excluded	Description of excluded groups
Norway	1	0	4	<i>Excluded</i>	<i>No formal network</i>
Norway	2	0	3	<i>Excluded</i>	<i>No formal network</i>
Norway	3	2	3		
Norway	4	2	4		
Norway	5	1	3		
Norway	6	1	4		
Norway	7	3	3		
Norway	8	3	4		
Norway	9	4.3	3.4		
Norway	10	0	2	<i>Excluded</i>	<i>No formal network</i>
Norway	11	0	1	Most excluded	Low income, no formal network
Norway	12	1	1	<i>Excluded</i>	<i>Low income</i>
Norway	13	1	2		
Norway	14	2.3	1.2		
Norway	15	4.1	1.4		
Poland	1	1.5	5.5		
Poland	2	0	5	<i>Excluded</i>	<i>No formal network</i>
Poland	3	0	6	<i>Excluded</i>	<i>No formal network</i>

Poland	4	0.3	7.4		
Poland	5	0	1	Most excluded	Low income, no formal network
Poland	6	0	2	<i>Excluded</i>	<i>No formal network</i>
Poland	7	1.4	1.2		
Poland	8	0	3	<i>Excluded</i>	<i>No formal network</i>
Poland	9	0	4	<i>Excluded</i>	<i>No formal network</i>
Poland	10	1.3	3.5		
Poland	11	6.3	4.4		
Portugal	1	0	2	<i>Excluded</i>	<i>No formal network</i>
Portugal	2	1	3		
Portugal	3	0	3	<i>Excluded</i>	<i>No formal network</i>
Portugal	4	0	1	<i>Excluded</i>	<i>No formal network</i>
Portugal	5	1.1	1	Most excluded	Low income
Portugal	6	1	2		
Portugal	7	2	2.1		
Portugal	8	3.4	2.3		
Portugal	9	9	3		
England	1	0	3.6	<i>Excluded</i>	<i>No formal network</i>
England	2	1.4	3.5		
England	3	4.6	3.8		
England	4	0.4	1.6	Most excluded	Low income
England	5	0	6.5	<i>Excluded</i>	<i>No formal network</i>
England	6	0	5	<i>Excluded</i>	<i>No formal network</i>
England	7	1.3	5.5		
England	8	0.5	8.3		
England	9	1.3	7		
England	10	2.8	7.6		
England	11	11	6.3		
United States	1	3.6	8.9		
United States	2	1.3	9.4		
United States	3	1.1	6.5		
United States	4	5.9	9.2		
United States	5	5.9	6.8		
United States	6	10.6	6.4		
United States	7	3.5	6.5		
United States	8	4.8	4.5		
United States	9	4.2	2		
United States	10	2.5	4.1		

United States	11	0.5	3.3	<i>Excluded</i>	<i>Little formal network</i>
United States	12	1.1	1.5	Most excluded	Low income

'Most excluded' groups are indicated in bold

'Excluded' groups are indicated in italics

Note: Cluster analysis is a technique of data reduction and so some researcher discretion is used in the allocation of groups to certain categories. However, 'most excluded' groups were based on the lowest mean income category for each country. In cases where there was more than one group with the lowest mean income, the dispersion of income (standard deviation) was used to ascertain the group which appeared to have low dispersion of incomes around this mean. 'Excluded' groups were based on those which did not have any or substantive (in the case of the US) social networks. In the case of Norway, an additional 'excluded' group (group 11) was included (on the grounds of low income). This was a pragmatic decision to increase the N of the excluded groups to enable the logistic regression analysis by vocational qualifications.

List of abbreviations

ACLP	Alvarez, Cheibub, Limongi and Przeworski [dataset]
ALMP	active labour market programmes
CRWBL	Centre for Research on the Wider Benefits of Learning
Edgini	educational inequality
EVS	European values survey
GDP	real income per capita
Gini	income inequality
ILO	International Labour Organisation
NDDP	New deal for disabled people
VET	vocational education and training
WVS	World values survey

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