

CONSTRUCTS OF WORK USED IN CAREER GUIDANCE

BY

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This report examines the various frameworks and constructs used to describe the world of work and assist individuals in relating themselves to it. Five main types are identified:

- 1 Constructs traditionally used to present employment data: occupation, level of work, sector, and contractual mode of employment.
- 2 Constructs developed to enable individuals to relate their own characteristics to the world of work: interests, values, and abilities and skills.
- 3 Constructs that describe work in terms of skill and competences, or that classify qualifications.
- 4 Constructs used by employers to differentiate internally between jobs.
- 5 Hybrid and multi-dimensional frameworks.

Different constructs are likely to be useful to different client groups, at different stages of the career guidance process.

The report reviews these constructs and frameworks in relation to the changes currently taking place in the world of work, particularly more flexible labour markets and more fluid organisational structures. It is suggested that the current frameworks do not pay enough attention to flexible career progression routes. While occupation is likely to remain a core construct, it needs to be supplemented by other constructs which provide tools for exploring career progression that cross-cuts occupational boundaries. New or improved forms of hybrid and multi-dimensional models seem likely to be particularly worthy of investigation in this respect. More attention is needed to constructs that will illuminate work contexts related to personal values and lifestyle choices, including contractual diversity and workplace culture. Broad sets of skills are becoming more important as ways of describing work: the relationship between existing skill frameworks needs closer investigation. A clearer strategy is required for the use of labour market information in career guidance, and in making such information more accessible. Research on which constructs and frameworks are used most by practitioners and found most useful by clients could be used to inform improvements to current career information systems.

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1 Introduction

The career guidance process uses a variety of frameworks and constructs to describe the world of work and to assist individuals in relating themselves to it. But the world of work is changing, with major shifts in occupational and sectoral balance; more varied forms of work in a more flexible labour market; and more fluid organisational structures and blurring of old job boundaries. The way individuals, especially young people, express their career interests and aspirations may also be changing and they may find established models of work difficult to relate to. It is accordingly timely to review whether the constructs currently used to describe work in career guidance and career decision-making are realistic descriptions, and of genuine assistance to those making choices about work and education throughout working life.

This report has the following objectives:

- To review the main constructs used for describing work in career guidance: the content of such frameworks, and their similarities and differences, with some indication of which are most widely used.
- To compare these constructs with those used by employers to describe types of work – for example, in recruitment and for advising existing employees on their career options.
- To identify the main issues in relation to whether existing constructs fulfil the need for (a) realistic descriptions of the changing world of work and (b) models to which individuals can relate themselves in the context of career guidance.
- To make recommendations on next steps in terms of possible research and wider consultation.

The project was conducted through desk research and through interviewing a number of expert researchers and practitioners. The draft report was discussed at a residential consultation event. The individuals consulted are listed in the appendix.

The report addresses its objectives through the following structure. In section 2, we summarise some of the main features of the changing world of work and their possible implications for career guidance. Section 3, the heart of the report, reviews the constructs of work we have found. These include constructs of employment (section 3.1); constructs which link individuals to work opportunities (section 3.2); skills and qualifications (section 3.3); models used by employers (section 3.4); and hybrid or multi-dimensional models (section 3.5). Section 4 relates these constructs to the views of practitioners and to career decision-making in general. The report concludes with a review of the issues raised by the project and areas which require further investigation (section 5).

2 The changing world of work

2.1 Changes in work

This project has been prompted by changes occurring in the world of work in the 1990s. It is not our intention here to repeat in detail all the issues currently under discussion in relation to the changing nature of work. There has been a plethora of books and articles on this subject. Some of these paint a revolutionary picture of the future of work (eg Bridges, 1995; Handy, 1994), with organisational 'jobs' disappearing. Others point out that changes in work are affecting some people much more than others, and argue that many in organisational employment are still largely unaffected by the increasing turbulence of the labour market (Jackson *et al.*, 1996; Brown, 1997). The RSA is currently running a project on the Future of Work and has provided a useful summary of such trends and issues (Bayliss, 1997). Regular statistical information on the UK labour market is available and used for detailed commentaries on trends – for example, those produced by the Institute for Employment Research at Warwick (eg IER, 1996), by the Institute for Employment Studies at Sussex, and by CREATE (eg Rajan *et al.*, 1997).

Although commentators differ in their views on the pace, extent and permanence of labour market changes, they tend to agree on the main features of change in the UK over the last ten years or so. These features include:

- A long-term increase in professional and managerial work, and a decrease in unskilled and semi-skilled work especially in manufacturing.
- A decline in employment in primary and manufacturing sectors, and an increase in service-sector employment.
- Reduced dominance of big firms, and more employment in small and medium-sized enterprises – plus an increase in self-employment – partly as a result of the contracting-out of services.
- Acceptance that the economy, and hence employment, is affected by global trends and global competition, with UK employers now trading internationally.
- Aging of the UK workforce, with the result that pensions and retirement will be major issues into the next century.
- A dramatic growth in female participation in work, related to a growing volume of part-time work, the vast majority of which is female. Women in the UK are increasingly well qualified and entering previously male occupations, although still not yet well represented at the most senior levels in employment.
- An increase in other alternative forms of working (temporary work, agency work, teleworking).
- Changes within major employing organisations as management structures have become more devolved, as new business functions have emerged, as technology has continued to affect the mix and content of jobs, and as hierarchy has been emphasised less and teamworking emphasised more.

There is a debate as to whether flexible working benefits the employer or the employee, or may be of benefit to both parties (Rajan *et al.*, 1997). Job security, or the lack of it, has been a key theme of the 1990s. The 'downsizing' of white-collar jobs in previously secure sectors and professional/managerial levels (eg in banking and the public sector) have led to a perception that work is generally less secure. Such changes, plus the concentration of unemployment and low-paid employment in some groups and some locations, have led to concern about the 'bifurcation' of the labour market into the 'haves' and 'have nots' (Brown, 1997) and the social costs of such divisions in society (Hutton, 1995).

The UK education and training system is also going through profound changes, with major expansion of further and higher education in the 1980s and 1990s, alongside the development of more flexible vocational training structures. More students are now mature in age, more study part-time, and a huge range of institutions now offer further and higher education. Recent governments have advocated skill development, and the associated concept of 'lifelong learning', as the route to economic health.

2.2 Implications for careers and for career guidance

These trends in employment and the workforce have far-reaching effects, but what are the more specific implications for careers and for career guidance? Some preach the 'end of the career' along with the 'end of the job', but more have sought to re-think or re-define the career in a more flexible way to encompass the kinds of work changes which individuals are likely to experience. Arthur and Rousseau (1996), Jackson *et al.* (1996) and Arnold (1997) offer comprehensive accounts of how careers might be changing. Watts (1996) has addressed attention to implications for public policy, and Collin and Watts (1996) to implications for guidance.

Some consequences for career have been widely discussed:

- The need for good career management skills to deal with the shifting labour market. This is connected with the notion of 'employability', seen by some as a personal survival strategy (eg Waterman *et al.*, 1994).
- The need for lifelong support for individuals through guidance, information and advice (eg Watts, 1996).
- The need for a changed 'psychological contract' between employer and employee, trading reduction in career security for other mutually desired outcomes, which might include employability and learning (Herriot and Pemberton, 1995).

Some less publicly debated consequences of employment change are:

- More fluid organisational and labour market forms blur old distinctions between occupations, especially at professional and managerial levels where jobs may be tailored around individuals' skills. This poses a challenge to the traditional place of 'occupation' in career guidance.
- Nearly all jobs now require interpersonal and/or IT skills, whereas such skills may have been seen in the past as not being required by certain groups (eg operatives in manufacturing).
- Getting a 'secure' job was the goal of much career guidance for young people. 'Security' in future may depend less on full-time employment and more on 'employability' (Kanter, 1989): having a strong skill set; building a good CV of work experience; and learning to use personal networks. So the thrust of early career education and guidance needs to change.
- As more school-leavers stay on in education, and do so for longer periods, the emphasis of much guidance will have to be on educational choices in relation to possible work avenues. Increased inclusion of work-experience elements within educational courses provides opportunities for exploring this relationship. Care is needed to avoid such exploration being too narrow: rigid early choices of 'occupation' may now be dysfunctional.
- Entry to work, even for the well-qualified, is more likely to be through transitory work experiences, even if later on more secure and well-paid work is thereby obtained (Purcell and Pitcher, 1996; Connor and Pollard, 1996).
- The least skilled are likely to have to take most responsibility for their own careers and development, while the most highly skilled are likely to be able to obtain more support from their employers (Hirsh and Jackson, 1996).
- With more varied contractual arrangements for work, and fewer families with a full-time carer at home, lifestyle choices are becoming a more important feature of career decision-making.
- Choices about education and employment will continue to sit together throughout working life. Decisions about work will often be influenced by the opportunities that work gives for skill development. Decisions about education will be influenced by the need to keep employment options open.

All these changes imply a diversity of career decisions made by individuals throughout their working lives. Tactical career decision-making skills will need to improve as individuals continuously review their employability and their employment (Brown, 1997a). However, individuals will also need to manage occasional discontinuous changes in career brought about by job loss or changing personal preferences. Our future models of guidance need to encompass both the occasional major career rethink and the almost continuous minor career rethinks that individuals will undertake. So divergent notions of transitions and options become key. Convergent models of occupational choice may become less relevant for many workers.

3 Current constructs and frameworks

This section looks at some of the main constructs and frameworks used to describe and classify work, including – but not confined to – those used explicitly in the career guidance process.

We have included constructs:

- Traditionally used to present employment data: occupation, level, sector, and contractual mode of employment (section 3.1).
- Developed specifically to help individuals relate their own characteristics to the world of work: interests, values, and abilities and skills (section 3.2).
- That describe work in terms of skills and competences, or classify qualifications (section 3.3).
- Used by employers to differentiate internally between jobs (section 3.4).
- That are pragmatic hybrid mixtures or multi-dimensional combinations of the above (section 3.5).

Each of these types of construct will be examined in turn to see how relevant they are to the changing world of work and how useful they might be to individuals making career decisions.

3.1 Employment constructs

3.1.1 Occupation

Job titles have been used for centuries to define particular types of work. A job title acts as shorthand for a typical set of activities normally expected in that job, and therefore for the skills it requires. Job titles may be specific to a particular organisation. An occupation describes a group of similar jobs across organisational structures.

Many countries use 'occupational classifications' which list what are essentially job titles in some structured form as a means of standardising the way in which employment data are collected and presented. The UK uses the Standard Occupational Classification (SOC), developed by the (former) Employment Department and the Office of Population Censuses and Surveys. It identifies and aggregates occupations by similarity of qualifications, training, skills and experience. At the most detailed level, it identifies 374 occupation unit groups, each of which is allocated to one of 77 'minor groups'. At the most general level, occupations are placed into 9 'major groups'. Figure 1 shows the 9 major groups and some examples of the minor groups they contain.

SOC is used as the standard system for the collection of almost all employment-related data: in the population census, in labour market surveys and databases (including NOMIS), in tracking first-destination data from education, and (sometimes adapted) by local labour market agencies (eg TECs).

There is clearly value in having a standard system for collecting data on employment by job type that also relates to job titles which the public might recognise. Guidance practitioners welcome the consistency which SOC offers in this regard. However, such systems, including SOC, have serious limitations in terms of their usability in career guidance:

- A simple list of job titles will always be out-of-date. To give just one example, call centres are growing rapidly and deal with a range of customer care, billing, support and sales functions. Call-centre operators are not reflected adequately in any of the current SOC occupations, and straddle major groups.
- As the shape of the labour market shifts, some parts of SOC become overpopulated (eg professional jobs and service-related jobs) and these need more frequent review.
- Job titles often disguise considerable variation in activities, depending on the organisational context. Simply using the job title can lead to inappropriate stereotyping by individuals, and so may reduce the options they perceive as being available to them. From employers' perspectives, using job titles alone to describe vacancies may reduce their field of potential recruits.
- For some uses, SOC codes are not detailed enough. For example, staff in the Employment Service concerned with placing individuals in particular jobs are considering adding an extra digit to SOC to make it a finer classification.

Figure 1 Examples of Standard Occupational Classification groups

Major groups	Minor-group examples
1 Managers and administrators	Specialist managers; Managers in transport and storing; Protection service officers
2 Professional occupations	Natural scientists; Engineers and technologists; Health professionals
3 Associate professional and technical occupations	Scientific technicians; Draughtspersons, quantity and other surveyors; Literary, artistic and sports professionals
4 Clerical and secretarial occupations	Filing and records clerks; Secretaries, personal assistants, typists, word processor operators
5 Craft and related occupations	Construction trades; Printing and related trades; Woodworking trades
6 Personal and protective services	Catering occupations; Health and related occupations
7 Sales occupations	Buyers, brokers and related agents; Sales representatives; Sales assistants and check-out operators
8 Plant and machine operatives	Textiles and tannery process operatives; Assemblers/line workers; Road transport operatives
9 Other occupations	Other occupations in mining and manufacturing; Other occupations in sales and services

- For tracking labour market trends, occupations are too detailed and so data are often presented at the level of the SOC major groups. Here the way aggregation is handled in SOC is a serious disadvantage. The SOC major groups essentially aggregate employment by socio-economic level: putting all professional jobs together, all craft jobs together, all 'operatives' together, and so on. But many careers progress up skill levels and into the managerial job group. So a career in engineering, for example, might straddle several SOC groups. Part of the problem is that SOC is combining the notion of work level (see below) with the notion of a skill area (eg construction, sales). For use in career guidance, it may be that data collected in SOC should be aggregated in a different way.
- 'Management' presents particular problems to occupational classifications. In flatter organisations with more project-based structures, management may be part of a job, but not the whole or most important part. Is someone leading a design team in a small firm acting as a manager or as a designer?

So, although occupational classifications have the power of using existing job titles, they do not reflect the world of work in a wholly accurate or helpful way. Being tied to a one-dimensional system also forces SOC to be conceptually rather muddy, as some groups lean more to level of work and others to sector (eg the groups covering manufacturing jobs) or skill/function (eg selling). Information collected using SOC probably needs re-interpreting to be useful for those involved in career guidance or career decisions. Indeed, labour market commentaries often slightly adapt the SOC modes of aggregation to reveal important features of labour market trends (IER, 1996). Those tracking the work destinations of those leaving education do likewise (Purcell and Pitcher, 1996). TECs vary in whether they simply follow the SOC major families in presenting labour market trends, or seek to highlight particular features by pulling out specific sub-groups of main occupational groups.

3.1.2 Level of work

Within most types of employment, jobs exist at a variety of levels. SOC, as we have already seen, places considerable emphasis on the economic and skill level of occupations. Incorporating job level into our constructs of work is indeed important. It should help individuals understand their chances of access to various types of work given their educational qualifications, skills and work experiences to date. It should also help to describe career progression.

However, as work becomes less rigidly structured, the notion of hierarchical level is becoming more difficult to deal with. Pay does not always relate to job level either. So will the socio-economic notion of 'level' wither away? This seems unlikely, given that the Office of National Statistics recently commissioned the Economic and Social Research Council to carry out a review of social classifications. An interim version of the revised social classification for use in the 2001 population census has now been published (Rose and O'Reilly, 1997).

Will skill type and level emerge as a more powerful and robust way of thinking about job levels? Reich (1991), for example, seems to be moving towards this view by arguing that three broad categories of work are emerging in the United States and other developed economies, based on different types of skill: routine production services; in-person services; and symbolic analytic services. If this view is correct, how should we classify jobs by skill level? Where qualifications are required (eg in many professions) they should be a good indicator of skill level, but in more volatile occupational groups (eg computer software) level is harder to define. It is interesting to note that the Management Charter Initiative (MCI) has dropped the traditional labels of 'middle management', 'senior management' etc. in the recent revisions to its management standards, as people found it hard to classify themselves in this way. It now uses more abstract skill-level indicators.

Job level is an important construct in describing the true nature of work and the labour market. Skill and qualification levels should be helpful to individuals in understanding their likely access to jobs of varied levels. These dimensions are discussed further in section 3.3.

3.1.3 Sector

Most employment data are collected by type of employer as well as by occupation. Employers are often broken down by size and by sector. The Standard Industrial Classification (SIC) is used in the UK to classify sectors of employment. As with SOC, SIC is a hierarchical system with 5 levels. At the most detailed level, specific products and activities are listed (eg tea processing; publishing of newspapers; retail sale of fruit and vegetables). As shown in Figure 2, nine main sectors are used.

Figure 2 Standard Industrial Classification: broad divisions

1 Agriculture and fishing	6 Transport and communications
2 Energy and water	7 Banking, finance and insurance
3 Manufacturing	8 Public administration, education and health
4 Construction	9 Other services
5 Distribution, hotels and restaurants	

Sectors are very useful in career guidance, in a number of respects:

- They relate to where one might actually look for a job, and so lead on naturally to more specific job-search activities.
- They are good for describing parts of the economy which are growing or shrinking: many employment forecasts are primarily sectoral. They are thus important in relating interests and skills to levels of opportunity. Passport (Morrisby Organisation, 1996) helps individuals relate interests to sectors. Careers services often report on sectoral trends when seeking to present local labour market information (eg the Career Forecast leaflet produced by Sussex Careers Services (1996), which describes how employment is changing in Sussex).
- There are strong similarities within sectors in the kinds of work found there. Sectors also have some common elements of culture and work patterns, pay levels etc., although there will also be differences between employers in the same sector. So sector may relate quite well to aspects of work values and work context.

It is interesting, given the formal emphasis on occupational choice, that several of the practitioners interviewed for this project encouraged individuals to think more about sector in relation to their values and interests than about occupation. This was particularly the case for mid-career changers, who were often looking for a change of environment.

Sectoral guidance and information may underplay some occupations found across nearly all sectors (*eg* secretarial work, marketing). There are also occupations (*eg* accountancy) where opportunities exist both within one key sector (*eg* financial) but also in many others (*eg* accountants in industry, the public services *etc.*). Defining work by both sector and occupational group gives much richer data than using just one or the other.

3.1.4 Contractual mode of employment

Employment information is also collected and presented to show contractual differences: *eg* employed full-time, employed part-time, in temporary employment, self-employed, or unemployed (short- and long-term). Although there are definitional problems with some of these categories, they serve reasonably well in reporting labour market trends. Shift-working is an important feature of work in some sectors. Flexibility in location of work is becoming gradually more prevalent.

Contractual aspects of work are important in informing people about the likely level of security of employment and availability of hours, pay, benefits *etc.* There are some labour markets (*eg* academic research, tourism, the performing arts) where permanent employment is difficult to obtain, and this may be a factor in career choices. The distinction between 'primary' (*ie* well-paid and secure) and 'secondary' (*ie* poorly-paid and insecure) labour markets has been made much of in the past. These differences remain important, but the distinctions are becoming more complex as increasing numbers of well-paid and highly-skilled jobs cease to be permanent or full-time.

There are also some individuals and groups looking for specific types of employment contract, *eg* parents of young children looking for part-time or term-time employment. Such groups need labour market information on where such work is available. This may for some determine their occupational choice, at least at some points in their working lives.

3.2 Classifications linking individual characteristics to opportunities

So far we have looked at some of the general ways in which work is classified, particularly for the collection of statistical employment data. We now turn to some very different work constructs which have been specifically derived to help individuals relate themselves to opportunities by using the same terms to describe individuals and environments. These include frameworks of **interests, values, abilities and skills**.

3.2.1 Interests

Interests refer to a person's preferences for particular work activities. One of the best-known interest frameworks in career development research is Holland's RIASEC model (Holland, 1985), which sets out six interest types: realistic, investigative, artistic, social, enterprising and conventional. Several psychometric instruments have been developed from this framework.

Guidance practitioners in the UK, however, are more likely to use and be familiar with 'home-grown' frameworks such as those used in JIG-CAL, Prospect and other computer-aided guidance systems. Some practitioners (*eg* University of Sussex Career Development Unit) have adapted these frameworks to better suit their own needs.

Recent developments include the framework used in the Passport inventory (Morrisby Organisation, 1996) which uses a classification based on CLCI employment sectors as well as specific work activities (see Figure 3), and the classifications of interests relating to higher education options used in Centigrade (Cambridge Occupational Analysts, 1997) and Course Finder (Morrisby Organisation, 1997).

Several interest frameworks incorporate ideas about the structure of interests. Holland's hexagonal framework, for example, reflects the varying degrees of similarity between interest groups. Other models contain hierarchical relationships. Saville & Holdsworth's Advanced Occupational Interests Inventory, for instance, consists of three interest levels – at the superordinate level are people, data and practical interests. Others use similar higher-level categories, and there has been some debate in the USA about the relative usefulness of the Holland model as compared with others, such as Prediger and Vansickle's (1992) framework which adopts things versus people and data versus ideas as the main dimensions.

Figure 3 *Employment classification used in the Passport series of interest questionnaires*

<i>Employment sectors (Stage 1 questionnaire)</i>	<i>Specific areas (Stage 2 questionnaire)</i>
Essential services	Health and social care; Education; Emergency and protection
Leisure and advisory services	Leisure, beauty and fitness; Food and catering; Legal, employment and advisory
Retail and business services	Retail (non-food) and retail (food); Business services
Government	Local government; Regional government; National government
Finance	Banking and building societies; Insurance; Stock market
Building and construction	Building internal; Building external; Civil engineering
Production and manufacturing	Manufacturing; Process/chemical engineering; Electrical and telecommunications
Extraction and energy	Mining; Water and sewerage; Energy production and supply
Transport	Road and rail; Air transport; Sea transport
Agriculture, fisheries and food	Arable and forestry; Livestock farming; Environmental protection
Communications	News and media; Design; Art

Note: Stage 3 questionnaires assess interests in precise work or training areas (eg manufacturing engineering, telesales).

Where hierarchies of interests are proposed, arguments abound as to which levels within the various taxonomies are the most useful in guidance. Day and Rounds (1997), for example, argue that general interests – for example, Holland's six types – may not have validity for all groups within society, and that interests assessed at the level of 'basic' dimensions, which lie at a level between specific occupational titles and general interests, are more useful. This is because they are more in line with the language people themselves use to describe their interests (eg writing, teaching) and because they can more easily incorporate flexible groups of tasks that cannot be described in one title. Clients would seem to be more likely to relate to interest frameworks based on specific activities than to the general dimensions which are assumed to underlie preferences for specific activities. However, it could be argued that the more general, latent dimensions are also helpful in broadening individuals' perspectives by linking preferred activities to others which are similar. Figure 4 shows the categories of general occupational themes and basic interests used in the Strong Interest Inventory (Harmon *et al.*, 1994).

Figure 4 *General occupational themes and basic interest scales used in the Strong Interest Inventory*

<i>General occupational themes</i>	<i>Basic interests scales</i>
Realistic	Agriculture; Nature; Military activities; Athletics; Mechanical activities
Investigative	Science; Mathematics; Medical science
Artistic	Music/dramatics; Art; Applied arts; Writing; Culinary arts
Social	Teaching; Social services; Medical service; Religious activities
Enterprising	Public speaking; Law/politics; Merchandising; Sales; Organisational management
Conventional	Data management; Computer activities; Office services

Some guidance practitioners in the UK are critical of these types of frameworks and doubt their validity in the British context. However, models of interests, operationalised in psychometric instruments and self-assessment check-lists, seem to be viewed as most helpful in the way they offer individuals cognitive frameworks to gain a broad understanding of their own work preferences and of similarities and differences between types of work. Although these frameworks have been criticised for not taking enough account of emerging work roles which may demand a wider range of interests (especially the increasing need for entrepreneurial activities within many occupations), this may be more of a problem for the proposed structure within a particular model than for the models themselves.

3.2.2 Values

Values frameworks describe the satisfactions sought in work environments. Relatively few of these types of frameworks exist to describe work, perhaps because it is possible to satisfy particular values in a range of different contexts, and also to satisfy a range of values in the same context.

Career Builder, a computer-aided guidance system, attempts a classification of values in relation to occupations, as does Prospect. One of the most comprehensive values frameworks is the American Minnesota Importance Questionnaire (Dawis *et al.*, 1982; see Figure 5), with occupations assessed in the same terms using Occupational Reinforcer Patterns; but this is little used in the UK. Similarly, Hackman and Oldham's (1980) job characteristics theory is well-known and used in research in the USA, though less used in guidance there; it is virtually unknown in guidance circles on this side of the Atlantic.

Figure 5 Work values assessed by the Minnesota Importance Questionnaire

Ability utilisation	Moral values
Achievement	Recognition
Activity	Responsibility
Advancement	Security
Authority	Social service
Autonomy	Social status
Company policies and practices	Supervision – human relations
Compensation	Supervision – technical
Co-workers	Variety
Creativity	Working conditions
Independence	

There are clear similarities between systems of work values and Schein's career anchor framework (Schein, 1993), but in some ways the latter is conceptually broader. According to Schein, career anchors consist of a mix of needs, values and skills which, as 'evolving themes' in career development, wed people to particular work roles (see Figure 6). Because of this developmental emphasis, this framework is likely to be most useful in guidance in mid-career and in analyses of organisational environments.

Recent empirical work in Denmark has found important values differences between individuals, even working within the same fields, in the centrality of career to their lives. The work has identified three sets of values systems: the careerist, the wage-earner, and the entrepreneur (see Plant, 1997).

Figure 6 Schein's career anchors

Security/stability:	Concern to stabilise the career; preference for stable, predictable work
Autonomy/independence:	Concern with freedom from organisational rules and restrictions
Technical or functional competence:	Concern for work which permits the use of particular skills
General managerial competence:	Concern to integrate the efforts of others and tie together different functions of the organisation
Entrepreneurial activity:	Concern to create something new, by own efforts; may involve risk
Service/dedication to a cause:	Concern to achieve something of value; unlikely to take a job with an organisation that was hostile to own values
Pure challenge:	Concern to solve seemingly insurmountable problems and overcome difficulties
Life-style integration:	Concern to make all major sectors of life work together in an integrated whole

The practitioners consulted in the course of this project often discussed values with their clients early in the guidance process. This may well be helpful in making individuals more aware of this dimension of career choice, but we seem short of contemporary UK models for linking work values with career options.

3.2.3 Abilities and skills

Interests and values should help individuals identify types of work to which they are attracted. Frameworks based on abilities and skills should help individuals identify what they are good at doing. Such frameworks are commonly used in computer-aided guidance systems to match individual characteristics (usually self-reported) to opportunities. Many frameworks exist, often based on long-standing psychological models of individual aptitudes and abilities. For example, in the USA, Occupational Aptitude Patterns have been developed to assess occupations along the same dimensions as the dimensions used in the General Aptitude Test Battery (Dawis *et al.*, 1982).

Many careers service companies now use the Morrisby Profile, which assesses intellectual aptitudes together with aspects of personality, dexterity, work style and interests, and provides occupational suggestions based on the inter-relationship of scores on each dimension.

There has been considerable emphasis in the UK on the necessity of what have been variously titled core, basic or key skills. These, however, are seen to be important for getting any job and are not designed to differentiate between jobs in the labour market. Also worthy of mention are various frameworks of transferable skills. The Headway computer-aided guidance system, for example, allows assessments based on skills developed in home-making and leisure activities.

Some frameworks use classifications which are also used to describe interests. Hopson and Scally (1989), for example, present an exercise which gives individuals the means of relating skills developed in a previous job to more abstract data/ideas/people/things dimensions. Helping people label their skills in this way can be effective in boosting their confidence.

As with interests, it is becoming commonplace for guidance services to develop their own skills frameworks to suit their needs. Figure 7 shows an example.

There are also numerous frameworks describing the skills needed in particular jobs which have been developed not specifically for guidance, but for recruitment, development or vocational training. Section 3.3 below looks at the relevance of such frameworks to describing work in the context of guidance.

Figure 7 Personal Skills Checker from University of Sussex

The University of Sussex Career Development Unit has developed a simple 'Personal Skills Checker' for students to use. This is one of a number of skills tools used for different purposes. In this case, skills in 10 main areas are self-assessed:

Working creatively	Organising
Handling numerical data	Carrying out research
Working with text	Relating to people
Practical competence	Influencing
Problem solving	Communicating

3.2.4 Validity issues

A central question in considering the types of constructs described in section 3.2 is validity, and in particular the extent to which any one framework can be equally valid in describing individual characteristics (whether it be interests, values or skills) on the one hand, and the world of work on the other. There is little evidence for the universal validity of, for example, Schein's career anchor framework: the dimensions were originally derived from a small sample of management students in the USA. As the content of jobs changes, there is no guarantee that even well-researched interest or ability frameworks will remain good descriptions of types of work. For instance, many jobs concerned with manufacturing now demand a high degree of team-working and hence of people skills. Other jobs, in a wide variety of office environments, now deal not with paper but with IT systems, and demand a different set of aptitudes than in the past.

Furthermore, many of the frameworks in this section, although designed to map on to each other, on closer inspection appear to lie more towards one end of an individual/world-of-work continuum than the other. The JIIG-CAL interest categories, for example, seem to be closer to occupational descriptions than do Holland's interest groups, and the Passport inventory is based on a classification of employment sectors. It may therefore be inappropriate to judge the validity of these tools solely in terms of individual psychology.

It is puzzling that the validity of these frameworks is rarely questioned when they are used in computer-aided guidance systems. Although paper-and-pencil psychometric instruments for the assessment of values and interests, for example, are required to have documented evidence of validity and reliability, the self-assessment tools within computerised systems have no such requirement, and such evidence is rarely available for them. Yet profiles derived from computer-based assessments may be seen by clients to have more authority.

Practitioners seldom express concern about technical aspects of validity and reliability, though many are concerned with 'face validity', or how far particular frameworks appear to adequately cover the domain. Practitioners are also critical of the lack of transparency within many computer-aided guidance systems dealing with values, interests and abilities. Providing the user with no information about why a particular work type has been suggested can undermine confidence in, and level of active involvement in, the guidance process.

A further issue concerning the validity of these kinds of frameworks is the extent to which individual attributes are best described in terms which **distinguish** different kinds of attributes (eg interests, values and skills) or in ways which **cluster** attributes to form composite descriptors. Some of the 'skill sets' which employers use are in fact composite descriptions of skills, attitudes and personality traits, and it may be helpful to consider whether the discrete frameworks traditionally used by practitioners to describe individual differences could be supplemented by approaches which allow more clustering and integration of attributes. The Morrisby Profile uses this approach to some extent, and many computer-aided guidance systems take simultaneous account of different kinds of attributes in matching individuals to opportunities. However, more research and development work is needed to assess whether this is a sensible way to proceed.

3.3 Skills and qualifications for work

We have looked in the previous section at skills as part of an individual's characteristics; the emphasis in this section is on skills and qualifications as constructs which describe the requirements of work.

3.3.1 Skills and competences

As jobs change and become more fluid, with individuals moving more regularly and more flexibly between them, one can argue that skills become a more reliable and sustainable construct on which to base our descriptions of work. Indeed, many of the guidance practitioners to whom we spoke felt that clients needed to be encouraged initially to think about options in terms of skills rather than specific occupations. Each job requires a mix of skills, and skills of different kinds – technical skills, personal skills, business skills *etc.* Moreover, skills belong to individuals as well as being required by jobs (see section 3.2.3), so they potentially form a robust bridging construct in guidance between the individual and work options. Skills also reflect underlying knowledge gained through experience and training, and so have a progression dimension built into them.

Career management skills are of particular interest in career education and guidance. Some would claim that if individuals have skills to manage their own development and interaction with the labour market, they will be well placed to develop the other skills they need as and when they need them.

Skills have received enormous attention in recent years, so much so that it is a construct now fraught with multiple meanings, and different interpretations. The term 'competence' has been a buzz word of the 90s, not just in education but also in employing organisations (see section 3.4).

Even the words 'competence' and 'competency' have been used differently. A '**competence**' (plural: competences) is a specific behaviour associated with a desired aspect of work performance. So 'competences' have been articulated both to present the range of skills required for a particular job (a 'competence framework') and to describe each competence in terms of observable behaviour. Thus instead of just listing 'communication skills', a competence framework would describe the characteristics of 'good communication' in a particular work context.

This notion of competence has been widely applied within the education system, particularly in National Vocational Qualifications (NVQs) and Scottish Vocational Qualifications (SVQs). According to a recent report that reviewed the effectiveness of 100 of the most-used NVQs and SVQs, a substantial number of employers and training providers agree that competence-based standards are a good basis for vocational qualifications which meet the needs of employment (NCVQ/SCOTVEC, 1996). However, the same study also showed that many users found the language of competence standards to be often too complex, unclear or inappropriate.

A rather different branch of the competence movement has focused on the notion of '**competency**' (plural: competencies). Deriving from the work of Boyatzis (1982), the term competency is defined as 'an underlying characteristic of an individual which is causally related to effective or superior performance in a job'. Such underlying characteristics – for example, cognitive abilities – may affect skills required in many areas of the job. In practice, the notions of competences and competencies have become rather blurred and both have been used by employers in recruitment and selection. As Sparrow (1997) points out, benefits from the use of competencies have been reported in other areas too, such as career development, performance management and the management of change. Sparrow also argues that we need to distinguish between the individual competencies possessed by employees and the total capabilities and resources of the organisation: these latter he calls 'organisational competences'. In a context of rapid change, organisations will increasingly need to identify organisation-specific skills and competences. These will vary across organisations and industrial sectors. Sparrow also offers a 'meta-analysis' of organisational competences over time: emerging, maturing, transitional and core.

Skill and competence constructs are very important in describing work, but have not been used so much to classify work. Because each job requires so many skills, if to different degrees, skill frameworks may be more useful as descriptive material about jobs than as a classification system *per se*. Also, much emphasis has been placed on core/basic/key skills which by definition

are common across jobs rather than differentiating between them. In theory, skills could be used more to show what is special/different about jobs, but detailed skill frameworks rapidly become unwieldy and also require frequent updating.

One example of a developing framework is an analysis carried out by Tyneside TEC (Jones, 1997), which covers key skills (communication, numeracy, IT, team working, problem solving), employability skills (eg reliable and trustworthy, able and willing to learn), individual performance skills (occupation-specific skills; transferable skills, personal competencies) and organisational-performance skills (eg systems thinking). Although many of these skills are common to many jobs, the category of occupation-specific skills allows some discrimination between occupations.

Brown (1997b) takes the view that the language of skills should in future become the key 'mediator of meaning' in career guidance. Guidance, he argues, should aim to support career decisions by helping individuals choose work activities with an eye to broadening and deepening their skills base. Career development then becomes synonymous with skills development, rather than a sequence of positions or occupations. In an ongoing project, he and colleagues at the Institute for Employment Research are analysing work activities by levels of essential skills. Six types of skill requirements are being trialled initially:

- Communication skills.
- Information-processing skills.
- Technical or occupational skills, knowledge and understanding.
- Intellectual skills.
- Special skills.
- Skills associated with autonomous working.

Including technical, intellectual and special skills enables the framework to recognise disciplinary and occupational bodies of skills and understanding, and so begin to differentiate between occupations. However, the overall aim is 'richness of description' rather than analytical rigour, and the key criteria for evaluating the framework are client-driven: how far does it (a) help individuals look beyond traditional job classifications in identifying the skills required in changing labour markets, and (b) enable them to reflect on their own skills.

3.3.2 *Qualifications as frameworks for work*

Qualifications could in theory be used to describe work in at least three different ways: content of learning, job level, and sphere of work.

Where a qualification maps very clearly on to a particular job or small group of jobs, the **content of learning** for that qualification should be useful in career guidance to indicate the skills, knowledge and even activities required. This may work in some professions, although training often concentrates on technical skills and knowledge rather than on the full range of skills which will be needed in the workplace. The content of NVQ qualifications might be very useful to those making career decisions, and it would be helpful to know how often it is used in this way. An enormous amount of job analysis was undertaken in the course of developing NVQs: some of this might also provide useful information on what jobs actually involve and on how different types of work compare. In particular, some units within NVQs identify skills common within a particular sector, or type of organisational role (eg team member). Different levels of skill identified within the NVQ structure could also be helpful in describing the relationship between skills progression and career progression. There is a general issue here about whether the information embodied in the NVQ frameworks – based on extensive functional analysis of work in the UK – is adequately made use of in career education and guidance.

Qualifications might also be used to differentiate between **job levels** by giving an equivalent qualification level for the skill level the job requires (as suggested in section 3.1.2). The graduate/non-graduate distinction still survives to a considerable extent, and professional qualifications reinforce this in many areas of work. There are signs that, even though NVQs have been slow to gain momentum, their simple unifying model of levels (1-5) is of potentially wide applicability, across broader types of work, though it is not yet used in this way by employers to any significant extent. Relating level of qualifications to entry jobs is important for people entering the labour market for the first time. In many sectors, however, high-level work does not necessarily relate

to qualifications: for example, many managers still do not hold high-level qualifications (Thomson *et al.*, 1997). In such areas, skill level rather than qualifications *per se* would need to be the level indicator.

Qualifications could further be used to differentiate **spheres of work** according to the types of qualifications (including subjects of study) relevant to those areas of work. This is more difficult, as there are now such large numbers of qualifications in the UK, classified in different ways. Again, professional bodies define some areas of work (*eg* law, medicine, accounting, and to some extent engineering). NVQs and GNVQs use terminology much closer to specific types of work, as shown in Figure 8 (taken from NCVQ, 1997). The NVQ main area classification is more sectoral than occupational, although specific NVQs have a more occupational feel.

Figure 8 Classification of vocational qualifications

NVQs are grouped into 11 main areas:

- 1 Tending animals, plants and land, *eg* agriculture, horticulture, conservation, forestry
- 2 Extracting and providing natural resources, *eg* water, refinery operations
- 3 Constructing, *eg* building, highways, mechanical engineering, gas distribution
- 4 Engineering, *eg* electronic assembly, engineering machining, telecoms installation
- 5 Manufacturing, *eg* boat building, baking, glass melting, meat processing, steel making
- 6 Transporting, *eg* air cabin crewing, rail transport, vehicle maintenance
- 7 Providing goods and services, *eg* beauty therapy, catering, cleaning, field sales management, information systems analysis, retail, sport, telephone selling, warehousing
- 8 Providing health, social and protective services, *eg* terminal care, child care, fire services, guidance, personnel management, pest control
- 9 Providing business services, *eg* accounting, customer service, insurance, management, marketing, school administration
- 10 Communicating, *eg* book design, camera operation, journalism
- 11 Developing and extending knowledge and skill, *eg* training, museums

GNVQs are grouped into 14 broad areas:

Art and design	Land and environment
Business	Leisure and tourism
Construction and the built environment	Manufacturing
Engineering	Media: communication and production
Health and social care	Performing arts and entertainment industries
Hospitality and catering	Retail and distributive services
Information technology	Science

At present, NVQs are much more heavily used in some areas of the economy than in others. The most significant use of NVQs to date has been in: construction; engineering; providing goods and services; health, social and protective services; and providing business services.

Other classification systems are used in other parts of the education system. Higher education uses more traditional discipline labels (*eg* arts, natural sciences, engineering/ technology). Courses in FE are classified by the Superclass system, which has 23 'hierarchies' of subject: some are conventional disciplines (*eg* politics, economics, law, social sciences); some are sectoral (*eg* transport services); some represent common business functions (*eg* sales, marketing, distribution).

Although qualifications provide some useful insights into types of work, there remain problems with using qualification structures as a mapping device between individuals' skills and career decisions:

- It is difficult to relate academic disciplines (as used in HE) with sector-specific vocational classifications (as used in NVQs), so we often have to run these two classifications side by side.

- Current NVQs are concentrated in some sectors and at intermediate levels of work. They therefore fall far short of representing all the kinds of work existing in the UK labour market.
- Even vocational qualifications cannot reflect the diversity within fields of work. For example, MCI has recently revised its qualifications structure for management. One of the changes has been to recognise that senior managerial roles may be 'operational' and/or 'strategic' and that this role variety will be reflected in differing requirements for skills and knowledge.

So the level of qualifications approximating to the skill level required in a job might be a useful way of thinking about levels of work in the future. It seems much less likely that any of the existing classifications by subject of qualifications would be useful classifications for work.

3.4 Classifications developed by employers

Employers, especially large ones, need to classify the work they contain. In some of their current approaches we may find ideas which would also be useful in looking at the labour market as a whole.

Job descriptions were traditionally the way employers communicated externally and internally the kinds of work they were talking about. **Job titles** are still used in recruitment, but are now more often explained with reference to skills or personal attributes or experience/qualifications required. Inside employing organisations, job titles are often still used but may have become relatively meaningless as descriptors of job content. Certainly the same job title may be applied to very varied job content between different organisations. Some of the commonest job titles – 'secretary', 'supervisor', 'salesperson' – now vary enormously in the activities they cover and the skills they require.

Some employers use **job analysis** procedures to describe the content of jobs and the demands placed on workers, and many view carrying out some form of job analysis as a critical stage in employee selection and development. A range of techniques is available (for a review, see Spector, Brannick and Coovert, 1989), and they differ in the extent to which they are **job-oriented**, describing the equipment used, work output *etc.*, or **worker-oriented**, describing worker attributes, such as communication skills or leadership qualities. Other contextual aspects of jobs are commonly identified, such as type of contact with other workers. One well-established job analysis questionnaire developed in the United States is the Position Analysis Questionnaire (PAQ) (McCormick, Jeanneret and Meacham, 1972) which assesses jobs along six dimensions (see Figure 9).

Figure 9 Dimensions of the PAQ

Information input
 Mediation processes (*ie* mental processes of reasoning *etc.*)
 Work output
 Interpersonal activities
 Work situation and job context
 Miscellaneous aspects

UK job analysis tools have been lacking, but recent developments include the Job Components Inventory (Banks, 1988) and the Work Profiling System (Saville & Holdsworth Ltd., 1995). The latter is a computer-based system which links tasks performed to the individual attributes – abilities, skills, team style and personality – needed to perform those tasks effectively. This is a welcome attempt at a comprehensive approach, but linking tasks to particular personality attributes has always been problematic.

Because each job is analysed individually, job analysis is cumbersome and expensive. Developments in IT should make it easier to pool the results of job analyses to arrange jobs into families (see below), but employers rarely do this in a systematic way.

Job evaluation systems also analyse jobs along specific dimensions. These dimensions have traditionally focused on scale of responsibility (eg size of budget, number of people managed), but are now looking more at competence levels.

Grade level and organisational location (eg department, function, unit) have also been used inside employing organisations to define work types. However, organisational structures are becoming less helpful as ways of defining work. Job grades/levels are getting broader, new functions are emerging, and there is a strong trend to break down old functional boundaries. Frequent re-organisations argue for ways of classifying work which are more independent of formal structures, and for frameworks which encourage employees to consider and adapt to lateral rather than vertical career moves.

So what new constructs of work are emerging, in major employing organisations? At least four types can be distinguished:

- **Broad levels of work** – eg operators/clerical, supervisory/junior management, professional (often at two or three levels of expertise and experience), middle and senior management – fit with ‘broad banding’ within employing organisations. They are potentially compatible with the broad levels of qualification being established in the UK, although they are more differentiated at the professional/managerial end of the workforce.
- **Broad clusters of jobs with similar skills and areas of knowledge**, sometimes called **job families**, are replacing old functions. Job families may be the closest we now have to a way of indicating natural career paths in the organisation. An individual may progress within a job family, or make a significant career move between families (eg from production to commercial). As organisations adopt a process view of their operations, job families will often reflect key business processes (eg sales, production, distribution). Such job families map well on to occupations which are transferable between employers (eg finance, personnel) as well as covering those which tend to be more sector- or employer-specific.
- Sometimes different kinds of jobs exist even within the same level of the same job family, especially at professional and managerial levels. For example, a professional in marketing could be working on business strategy or dealing with a specific product. Some organisations use the term **role** to differentiate the way someone is working in an area. For instance, we might see a professional (level) design engineer (job family) leading a project team (role). Roles often indicate people and business skills required, whereas job family relates to technical skills.
- Employers are certainly using **skills and competences** to describe work (see section 3.3.1), but most often to advocate generic workforce behaviours (in promoting corporate values) or to specify desired managerial behaviours. Comprehensive attempts to profile all jobs by competences have not usually succeeded. Skills are not used directly for job classification, as by definition each job requires a large number of skills. However, it is skill similarity or difference that lies behind the notions of job families and roles, and even of levels of work.

The trend seems to be towards broad indicators of level and business function (or job family), with occupation being the combination of these two dimensions. Sometimes the concept of role is used in addition to these. Skills are often used to describe the attributes of a type of job, but not as a classification system *per se*.

3.5 Hybrid and multi-dimensional models of work

So far we have looked at frameworks based on particular constructs of work. We have seen that employers in describing work do not expect a single construct to give them all the information they need, and that there is more power in combining constructs.

Some of the frameworks used in career guidance have responded to the inadequacies of using any one construct by forming ‘hybrid’ frameworks which take some items from one construct and some from another. Other frameworks deal with two or more dimensions at the same time and describe work by their combination.

There seem to be two main reasons why hybrid and multi-dimensional models emerge. The first is that the sequences of jobs that form ‘careers’ are not easily classified in just one way. The

second is that those involved in guidance often want to help individuals see the relationship between their own skills, qualifications *etc.* and work options, and that single-dimensional models are inadequate for this purpose.

Some specific examples of employers' frameworks are outlined in Figure 10.

Figure 10 Examples of employers' frameworks

- A public utility is currently classifying several hundred senior management positions for succession and individual career planning purposes. The two constructs which appear to differentiate between such jobs most powerfully are: job focus and job role. Focus relates to the business process with which the job is primarily concerned (*ie* job family): eg commercial; distribution; engineering; finance; purchasing; legal; security. Job role defines in what way the post/person works on this aspect of the business: eg business unit management; direction setting; development; managing major change.
- A major international manufacturing group is moving to a level and function model. Grades are being simplified, moving from 17 levels to 4 broad work levels for all managerial and professional jobs. One level above these will define executive jobs, and one broad level below will contain all sub-professional jobs. The definitions of business functions are changing also, in an evolutionary way, to follow an emergent supply-chain model. Core functions are seen as procurement, manufacturing (which includes quality and engineering), selling, and distribution. Supporting functions include finance, HR, and R&D.
- The Royal Bank of Scotland's technology function has defined 8 aspects of work it covers, relating to the types of system or technology they are working with. Jobs will be grouped into these 8 families, even though project teams may cut across them. Career progression will most often be within job family. Three broad levels within each family are defined (which relate to pay) and are described in terms of required competences.

3.5.1 Hybrid frameworks

Looking first at the 'career' problem, the difficulty here is that the labour market works along several dimensions, and 'careers' (as distinct from jobs) cannot be defined in a single way. Some natural career paths are defined by occupation, so that an individual may easily move from one employer to another within that occupation (*eg* professional accountants, secretaries). Other career paths exist within a sector, so that it is difficult for individuals in some job families to move sectors (*eg* production occupations in manufacturing, buying in retail). Yet other careers are closely related to an academic knowledge base, and are best described by reference to academic discipline (*eg* occupations using scientific knowledge).

As a result, attempts to produce a single classification of careers tend to lead to hybrid frameworks. Figure 11 outlines three examples.

Figure 11 Hybrid career frameworks

The CLCI library framework has hybrid main categories including: industrial sectors (*eg* manufacturing industries; armed forces); occupations (*eg* finance and related work; medicine and surgery; teaching); disciplines (*eg* sciences); and what might be seen as interests (*eg* animals, plants and nature).

JIG-CAL, although seen as an 'interest' framework, actually defines interests in terms of work areas which include interests (*eg* practical work; helping people) but also sectors (*eg* farming; banking), occupations (*eg* sales), skills (*eg* using languages), and subjects of study (*eg* biology).

VT Southern Careers has started at the other end of the problem by looking at how their clients express interests. Their user-driven categories – 16 occupational areas – turn out to be hybrids too, *eg* hairdressing (occupation), engineering (occupations and sectoral), motor vehicle work (occupational), nursing and healthcare (largely sectoral), and working with animals (interest). This framework is applied to labour market information, and job opportunities in these occupational areas are then mapped on to skills required (from surveys of local employers) and training options.

3.5.2 Multi-dimensional models

Some of the frameworks described earlier in this report have a multi-dimensional aspect to them in that they assess either several dimensions of personal attributes (eg the Morrisby) or several dimensions of jobs (eg Saville & Holdsworth's Ltd.'s Work Profiling System). Some guidance instruments, including many computer-based ones, are extended to map between these several dimensions of personal attributes and job attributes respectively. As we will discuss in section 4 below, practitioners do not have great confidence in systems which purport to do this, especially where the logic by which the mapping is conducted is not transparent to the user. The Americans have done much more empirical mapping between individuals and occupations than has been done in the UK, based on the characteristics of real people in different kinds of jobs. This can be seen in the large databases maintained over many years by the University of Minnesota.

There are other multi-dimensional models which describe the world of work in terms of two or more of the constructs we have been examining. Figure 12 gives two quite different examples.

Figure 12 Multi-dimensional models of work

Dutch researchers have proposed a two-dimensional model for describing work and labour market trends (Wijers & Meijers, 1997). The 14 **sectors** are based on basic human needs to which work is addressed (eg food; clothing; housing; transport; leisure; environment; healthcare). The 9 **types of work** used as the second dimension represent groupings of work tasks designed to solve particular parts of the 'problems of the production process' (eg R&D; production; logistics; admin; leadership). The resulting 126 work fields are proposed as containers for more descriptive material about interests, experience and capabilities.

Collins in the UK, in an unpublished paper, has proposed a two-dimensional model of work. The first dimension represents the **level** of entry to vocational training: it has 5 categories representing increasing levels of qualification. The second dimension represents work **fields** classified into 6 categories related to the JIG-CAL framework, based on a hybrid model of work types: practical/technical/scientific; living things/life sciences; office/sales/business; art/craft/design; helping others and meeting people/talking/entertaining. Each of the resultant 30 categories acts as a container for descriptions of work.

The interesting feature of the Dutch model is that it is based on a theoretical framework which seeks to explain as well as describe the jobs present in the labour market. The 'sectors' are broader versions of familiar industrial sectors, but based on their derivation in basic human needs. The 'types of work' dimension bears a striking resemblance to the updated versions of the 'function' we saw in the business-process-related models of 'job family' described in section 3. The model is in essence a 'sector by function or job family' framework which could have considerable heuristic value (eg in career education programmes).

The Collins model is an attempt to relate both interests and level of qualifications to types of work existing in the labour market. The levels are rather biased towards the lower end of the labour market, and school qualifications required for entry, as the model was designed for use in schools, but could easily be modified in these respects for use elsewhere.

It is interesting that guidance practitioners seem to use hybrid and multi-dimensional frameworks so widely. Even those not accustomed to using formal models at all, including managers who work in guidance for adult redeployment, are implicitly drawing on hybrid models of careers in the labour market and a multi-dimensional view of work (especially by sector, function and level). These approaches are similar to the way employers themselves are seeking higher-level multi-dimensional models to cope with the endless variety and shifting nature of occupations. The consultation event held to discuss the findings of this project revealed strong support for and interest in such a multi-dimensional view of the nature of work. This raises issues about helping users to 'cut through' information on work by varied dimensions and so links with future ideas on labour market information (see section 5.2).

Indeed, we may need to think of 'occupations' not as comprehensive lists of all possible jobs, but as illustrative and sometimes ephemeral examples of types of work. So classification systems shift from being containers for occupational lists towards being higher-level descriptors of key dimensions of work and the labour market. The next section starts at the other end of the problem and looks at the implications for work constructs of the changing nature and context of career decisions.

4 Relating constructs to career guidance and decision-making

In the previous section we have looked at some of the ways in which the world of work is currently described or classified that might be relevant to career guidance. Many of these are formally defined frameworks which are incorporated in information systems used in the guidance process to present work or educational opportunities, or to help individuals map their attributes on to these opportunities.

It is important to note that these constructs may or may not correspond with constructs which reflect individual clients' own perceptions of work. Such constructs can be derived from techniques based on personal construct theory (Kelly, 1955; see Edmonds, 1979); other approaches which use predetermined 'meta-constructs' (such as interests, skills, values *etc.*) to trigger individuals' thinking have been embodied in materials intended for career education (eg Law, 1973; Law and Munro, 1994). Because our main concern is to review 'objective' constructs and frameworks, we will not dwell on these, but they are frequently used by guidance practitioners to stimulate thinking about work. They show that the power of these underlying 'meta-constructs' may be greater than their embodiment in particular lists or classifications. It would be useful to explore which constructs and meta-constructs, based on the experience both of clients and of the world of work, guidance practitioners find most useful in these respects, and whether more of these could be incorporated in information systems than is currently the case.

4.1 Views of researchers and practitioners

In this brief project it was possible to seek the views of only a small number of researchers and of people involved in career guidance (in higher and further education, with schools and with adults). There is a need to know more about the experience of such people in developing and using constructs of work. However, some strong themes emerged from those interviewed in the course of this project and from the discussions at the consultation workshop:

- Researchers are not convinced that the current range of instruments for helping individuals look at the world of work are still valid in the light of changes in the labour market. For example, the impact on job content of technology and the many new kinds of service-sector jobs are not reflected in the standard frameworks.
- Practitioners from a number of sectors feel that too much emphasis is placed on 'occupational choice', especially in the guidance process for young people.
- Values and/or interests are often a start point in guidance but more often move on to work activities or likely sectors for employment than to specific occupations. The logic sequence suggested by one university guidance practitioner was 'what matters to you, where you want to do it and who you do it with'.
- Finding a good fit of values and lifestyle with work context or culture is seen as important. Sector combined with work context (small/large employer) and contract (full- or part-time, permanent or temporary) indicate different work cultures. There is increasing awareness of lifestyle choices both among young entrants to the labour market and among those facing or considering mid-career transitions.
- There is a growing emphasis in all sectors on individuals researching their own options, and although several practitioners said that there was 'plenty of labour market information about', it is not easy for an inexperienced individual to get hold of this information or interpret it. More attention is needed to help individuals develop conceptual tools which will help them to identify and sift the information relevant to them. This may be particularly important in relation to soft and subtle information about organisational context and culture. They need labour market intelligence, not just labour market information.
- Practitioners vary enormously in their use of standard instruments and packages for assessing individuals and mapping their interests and skills to work options. There tends to be enthusiasm for using instruments to stimulate thinking or discussion, but little confidence in mechanical 'matching' of individuals to work choices.

- Researchers are concerned that constructs and instruments may not be interpreted consistently by practitioners. This is even more of a problem where sophisticated tools are used directly by individuals with very little discussion or support through the guidance process.

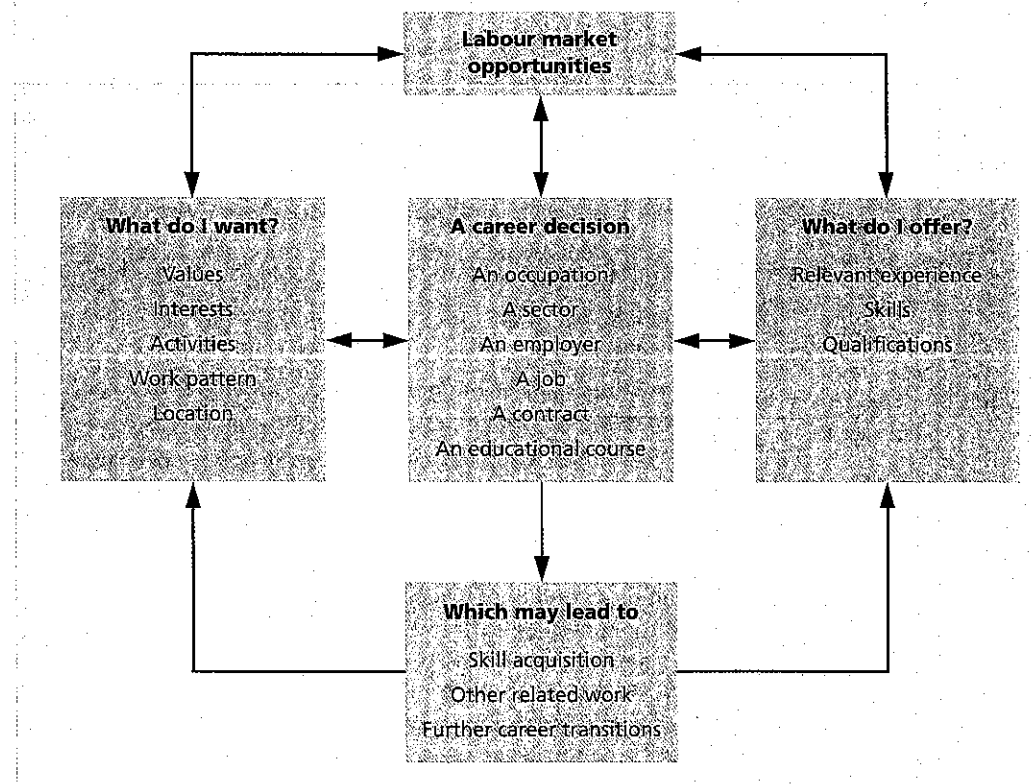
4.2 Varied needs for career constructs

In evaluating whether existing approaches are likely to meet needs for ways of describing work in the context of career guidance and career decisions, we need to be alert to the varied contexts in which such constructs or frameworks may be used.

Figure 13 shows the relationship between some of the constructs we have examined and the career decision-making process for individuals. Although a very simplified model, it highlights:

- The different kinds of career decision the individual may take, only some of which involve a fundamental choice of occupation.
- The need to be able to relate work preferences to the skill and qualification requirements of employers and, more generally, to the level of opportunity in the labour market.
- The need to consider the future implications of choice, which may involve such notions as development, progression and further, often unforeseen, transitions.

Figure 13 Constructs and career decisions



Some of the 'meta-constructs' (occupations, values, interests) have been exhaustively analysed by the frameworks examined in section 3; others have received less attention. Some 'meta-constructs' (eg interests) have several different frameworks in use. There are inadequate 'mappings' between the different elements on the diagram.

The model cannot show the true diversity of the career decision-making process and its relationship with guidance. The practitioners interviewed were forceful in their view that **different client groups** may need different types of information and find different frameworks useful in their career decision-making. Young people in the early stages of thinking about

careers may value broad frameworks which portray differences between occupations – as, for example, interest frameworks do – while those in mid-career may find the language of transferable skills more useful as they try to relate the skills developed in one field of work to new opportunities. Qualification levels will also affect the types of constructs and frameworks needed, as will levels of pre-existing knowledge of the labour market. Hasluck (1997) identifies varied client needs for labour market information.

The **kind of decision or transition** to be made is also an important consideration. Guidance practitioners work with people facing a wide range of different types of career moves, including initial occupational choices, decisions about educational opportunities, significant shifts in occupation, choice of employers, changes in contractual state (*eg* from full-time to part-time), or moves from one job to another within the same organisation. Within these different types of decisions, geographical considerations will vary – some clients will need detailed information about local labour markets, while for others national data will be required.

Linked to the above is the need to consider the guidance purpose for which the construct is to be used. Within career **education**, the aim will be to help individuals acquire an understanding of the world of work and the skills to manage their careers. For these uses, frameworks that **describe** the world of work in broad terms, and also relate paid work to broader forms of work (Law and Storey, 1987), will often be as useful as those which **discriminate** between opportunities. Descriptive material is likely to be particularly important in career education programmes which aim to help people re-examine and ‘re-frame’ out-of-date knowledge (Law, 1996). In individual career **guidance**, on the other hand, the purpose is more likely to be helping individuals with specific choices or decisions, and information often needs to be more specific, detailed and able to discriminate between opportunities. Different information frameworks again may be needed in career **placement**, where individuals are matched to specific vacancies: here detailed occupational titles may be helpful, and are indeed used for this purpose by the Employment Service.

We also need to consider guidance purposes in a broader way. Practitioners who view the aim of guidance as **empowering and encouraging individuals** to explore opportunities themselves may view information needs differently from those who see their role as more of an expert advisor. If clients are to be encouraged to research their own information, one might argue that there is a pressing need for access to information systems which link different frameworks (*eg* skills, qualifications and occupations) and do not require specialist knowledge. More ‘fluid’ computer-aided guidance and information systems, which use hypertext, keywords and other devices to link material laterally, would be beneficial. More generally, the information needs of guidance practitioners are likely to vary from those of their clients.

Labour market information is collected for a variety of purposes, only some of which relate to career guidance (Cambridge Training and Development Ltd., 1996; Hasluck, 1997). National labour market information is used to track social and economic change and to inform public policy, as well as to inform individuals’ career decisions. For such purposes it is important to use consistent classifications for work: hence SOC and SIC.

There is growing interest in **‘tracking’** the work destinations of individuals leaving educational institutions or holding specific qualifications. Again, serious ‘tracking’ would require the varied agencies and employers involved to adopt common definitions for both qualifications and work types. VT Southern Careers (1996), for example, has argued that adopting a common convention for describing types and levels of work would allow decision-making processes for individuals, groups and whole cohorts to be monitored over time, as well as offering students and parents a more coherent and comprehensive picture of opportunities.

Graduates are a group whose early careers have become more diverse, and they need to be tracked for quite some time before they become established in the labour market. Taking first-destination data as indicative of career prospects for this group can be very misleading, as longer-term studies have shown (*eg* Connor and Pollard, 1996). Tracking by type of contract (full-time, part-time, temporary) as well as by occupation and sector is helpful here. Graduates themselves are not changing their longer-term expectations very sharply, but are increasingly becoming aware that their early years in employment are likely to be difficult (Purcell and Pitcher, 1996).

We should be wary of assuming that the standard frameworks we might use for collecting labour market information (especially SOC and SIC in the UK) should always be replicated in the way labour market intelligence is presented to practitioners and clients (see section 5).

4.3 The dimensions of choice and how we see 'careers'

The emphasis in the guidance literature, reflected in this review so far, has been mainly on choice of occupation, and how individual interests and values may assist this choice. Decisions related to other **dimensions of working life** have received less attention: for example, choice of type of organisation or employer, the decision to apply for a particular vacancy, or, indeed, decisions concerning whether to work at all, or whether to work full- or part-time. As Figure 13 suggests, when we take decisions about 'career', we may be taking decisions not only about occupation or organisation but also about other things – for instance, whether we want to stay with the same employer for a long time, what kind of contract fits with our lifestyle and how this may change, the organisational level at which we are aiming, and how important progression is to us. For many, particularly those contemplating mid-career moves, these will be the key decisions, and information about how organisations and employers differ in terms of culture and HR policies will be needed.

Classifications of **organisational career systems** exist (see eg Sonnenfeld and Peiperl, 1988), as do check lists for analysing other features of organisations, such as structure and culture. These usually require 'insider' knowledge, however, and they may be of more use in organisational career interventions than in guidance offered to prospective employees.

Another drawback with the frameworks we have considered so far is that they are largely static, failing to take account of work histories and how **careers develop over time**. The notion of career is helpful in capturing this cumulative experience, since it carries with it the idea that a choice made about a job or educational opportunity at a particular point in time is likely to affect subsequent transitions – one thing leads to another. It also carries with it some notion of **progression**, whether 'objective', as in movement along an occupational or organisational career path, or 'subjective', where the individual's own sense of development or coherence in a series of work roles is paramount.

There are a number of abstract frameworks which distinguish different types of career. Kanter's (1989) three career 'forms' – bureaucratic, professional and entrepreneurial – come into this category, as do the models of career patterns described by Driver (1982) and Nicholson and West (1988).

The familiar way of viewing careers has been as ordered forms of progression within organisations and/occupations. Organisational career patterns are now becoming more blurred and complex, and less clearly bounded, leading to the notion of the 'boundaryless career' (Arthur and Rousseau, 1996). There are many occupational careers which are still quite highly structured with clear progression routes (many professions, for example), though movement from one employer to another is increasingly common within such careers. But there are also new career patterns forming that link jobs requiring similar skills and knowledge which are easy to move between (for example, in the sport and leisure sectors, in customer-care occupations, and so on – ie what we might call 'job families'). The concept of one kind of work experience or skill giving an individual the ability to move to another kind of work – a kind of 'ticket to travel' – is more important than ever before. Any descriptions of career in these terms need to be regularly updated as career paths accommodate to changes in work and in the labour force. Well-established notions of transferability and career paths are being adapted and restated in newer and more fluid models of career, which propose that the individual is continuously 'selling' themselves to the labour market (Waterman *et al.*, 1994). The idea of 'Me plc' may help individuals focus on which skills are really critical to 'selling' themselves in particular types of work, and how their current skills relate to their future aspirations.

Any objective frameworks of career have difficulty in taking account of the diverse patterns of career development which many people have experienced by mid-career. As one guidance practitioner put it: 'if you ask people to trace the steps they took which led to their current job,

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Any objective frameworks of career have difficulty in taking account of the diverse patterns of career development which many people have experienced by mid-career. As one guidance practitioner put it: 'if you ask people to trace the steps they took which led to their current job,

few work trajectories would be predictable from initial entry points'. This reinforces the need, recognised by many careers advisers, to provide clients with work constructs which open up options that they might not otherwise have considered.

Given that it is generally accepted that guidance needs to help individuals develop the skills not only for initial occupational decision making but for lifelong career management, it would seem that our current frameworks are too heavily weighted towards early choices of occupation. The increasing tendency to interleave periods of employment with periods of education (full- or part-time) argues for a definition of 'career' which has learning as well as work at its heart (Collin and Watts, 1996) and which incorporates a strong but flexible element of progression.

In the next section we summarise the conclusions of the review of work constructs (from section 3) in the light of these changing concepts of career.

5 Conclusions and key issues

In this section we pull together our broad conclusions and highlight some areas which may need further research or development.

5.1 Constructs of work: current strengths and weaknesses

In this paper we have reviewed a number of different kinds of work constructs and specific frameworks which embody them. We have also looked at the changing context for career guidance. What can we conclude about whether our current available constructs and frameworks for the world of work meet our needs?

To answer this question, we need to pull together what this paper has shown about our needs for constructs of work:

- Work constructs should be able to reflect the complex and changing labour market but be simple and easy to understand.
- They should help individuals to relate themselves to the world of work, and recognise that different people at different career stages have varied needs.
- Frameworks need to accommodate the need to 'zoom' in and out: to be able to take a broad overview (when individuals are exploring all their options), but also to differentiate between types of work at a more detailed level (when individuals are seeking work or training).
- We need constructs which relate to careers over time as well as to work at a particular point in time. For this, notions of progression, career paths, and skill/personal development are important.
- Constructs of work need to take account of more flexible and less front-loaded education systems and to help individuals understand the relationship between qualifications, learning, and work options.
- Our constructs need to relate in a practical way to the ways in which labour market information is collected and labour market intelligence is presented.

How far do the constructs and frameworks reviewed in this paper meet these criteria?

- The most widely used descriptions of work – **occupation** and **sector** – are fairly easy to understand, although the standard frameworks are not especially simple. The standard sectoral classification (SIC) is quite robust as sectors change slowly, although some of the divisions (eg the public sector) are too broad to be helpful in career choice. Any occupational classification based on lists of job titles is more vulnerable to labour market change, and with careers increasingly crossing occupational boundaries, occupation in this sense may now be a less sufficient basis for career decision-making than in the past. The UK standard occupational classification (SOC) needs frequent updating to reflect new job titles. In addition, and more importantly, its method of aggregation into broad socio-economic job groups does not reflect likely career groups.
- Some of the hybrid and multi-dimensional models (in section 3.5) and those emerging from employers (section 3.4) come closer to linking work with careers. Some notion of **job family** (based on key organisational functions) within sector may be a more robust career construct than occupation. At a more detailed level, the concept of **work role** might be helpful in expressing the variety of work likely within a sector and job family. The concept of job family in this functional sense needs further exploration.
- **Work level** is important, especially in helping individuals map between their level of skills and qualifications and the demands of employers. Here the emergent qualifications levels in the UK (as used in NVQs) are promising, although employers would need to extend their range of application, particularly at the top end to deal with the full skill range of professional and managerial work.
- If work by sector, job family and level can be described by **skills**, then we can relate work to the notions of progression and development so central to careers. There are no highly developed frameworks for skills which are widely accepted in the UK, and it seems likely that skill information is better seen as illustrative and descriptive rather than a potentially exhaustive classification system, particularly as it is so volatile.

- Our frameworks for **qualifications** by level appear promising, but the same cannot be said for current frameworks for subject of study. Conventional academic disciplines often do not relate at all to work, and there is no reason why they should. Our current groupings of vocational qualifications are largely sectoral but different from SIC – this is not particularly helpful. Some of the information contained within the definition of NVQ units could be used more widely in career education and guidance to illustrate skills required in different types of work.
- There is evidence that **work context and culture** may be becoming more important constructs for individuals to consider, as they relate to individual values and lifestyle preferences (including varied contracts of employment and self-employment). Although clear classifications exist for contractual variations in work, we do not have highly developed models of the 'context' in which work takes place – patterns of work, workplace culture, social aspects of work, *etc.* Further work is required to explore whether classification of these aspects of work is helpful, or whether better general illustrative material would meet the practical needs of career education and guidance.
- We do have well-developed constructs of **work interests**. However, researchers doubt the continued validity of specific frameworks and instruments based on these constructs. We lack very clear and well-accepted models for mapping between interests (and values) on the one hand and broad work options (*eg* sectors and job families) on the other. If individuals are to take more responsibility for their own career research, this is a major area needing attention.
- **Labour market information** in the UK is predominantly collected and presented by sector and occupation. If hybrid or multi-dimensional models of work are better for career decision-making than occupation alone, then we need to look again at how LMI is reported. We have seen some innovative approaches to this (for example, the occupational-area format of VT Southern Careers) and such approaches should be more widely piloted. Labour market intelligence also needs to help individuals map between work opportunities and individual skills and interests.

5.2 Key issues and areas for research and development

We cannot escape the need for constructs in presenting the world of work. In face-to-face work, guidance practitioners can use constructs in an open-ended way (*eg* sectors, interests, skills). But to be incorporated in information systems, they have to be defined and applied in a standardised form. The selection of the constructs for such systems is a matter of considerable policy importance, because it could have a significant influence on the flexibility, adaptability and efficiency of the workforce.

This project, including its consultation meeting, points to some specific areas which merit further investigation:

1 Clusters of work types and multi-dimensional models

With the growth of boundaryless careers, occupation is likely in some respects to grow in importance as a way of mapping careers that more regularly span movement across different organisations and different forms of work contract (Arthur and Rousseau, 1996). It is also, however, likely to become less sufficient as a means of mapping more flexible career patterns, as they increasingly cross-cut occupational boundaries too.

This has two practical implications for career education and guidance:

- We need ways of 'clustering' occupations which reflect career options and progression better than the existing grouping of SOC codes do. Practitioners and labour market experts should explore alternative ways of aggregating SOC data which map more satisfactorily on to broad areas of career choice.
- The construct 'occupation' as the primary description of types of work needs to be supplemented by other constructs which provide tools for exploration of more flexible forms of continuity and progression. These may include hybrids of occupation/sector/interests as already used in guidance, or multi-dimensional models of work (*eg* covering

sector, job family and level). Both hybrid and multi-dimensional models deserve closer investigation to see whether new or improved forms of such models might offer better constructs of broad areas of work for use in career guidance. They would also link naturally with computer-based guidance and labour market information systems.

Good start points would be current hybrid models (both formal ones and the many used informally) and emergent employer-based constructs (eg job family) which might form part of a multi-dimensional approach.

2 Work context and psycho-social aspects of work

Lifestyle choices appear to be increasingly important, linked to the increasing diversity of contexts in which work takes place, including contractual diversity. Workplace culture is seen as a key issue by employers who are aware that it affects their competitive performance. One might argue that changes in work context have been much greater than changes in work activities over recent years. There is a need for more fundamental research on the many existing constructs for workplace culture and how to help individuals relate these to other work factors (eg sector, contractual options) and their own personal values and lifestyle choices. Practitioners and individuals need to be able to access more relevant descriptive material on workplace culture as it varies by sector and employer. Career education and guidance has a crucial role to play in equipping individuals to be alert to such factors.

It is over 35 years since Samler's (1961) plea for more information and materials describing these features of work. Perhaps the lack of progress is in part due to the need to collect information about organisational context and culture as well as psycho-social aspects of occupational demands and satisfactions. This type of organisational information is constantly changing and less amenable to public scrutiny. More recent research interest in emotional labour – or aspects of work activity which involve managing the experience and display of feelings (Hochschild, 1983) – and in the role of emotion in career development (Kidd, 1998) may stimulate more activity in this area.

3 Helping individuals relate themselves to work

Central to career decisions is the idea of some kind of matching or mapping or comparison between a set of constructs and information about self and a set about the world of work. This mapping presents a number of practical and theoretical challenges.

Although there are well-researched constructs for self, the models for mapping between self and work are still far from simple and clear. Some constructs, such as skills, apply fairly naturally to both individuals and work, and hence can be used to map between the two. Other constructs are more easily applied to individuals than to work (eg values) or the other way round (eg occupation). We may need to identify some useful intermediate constructs to assist the mapping process. 'Job families' and 'work culture/context' are two possibilities. If better intermediate constructs were available, the mapping process would seem less like a leap in the dark. Current computer-aided guidance systems place too great an emphasis on occupational choice as the 'output'. Future systems need to help individuals explore varied facets of self and work, and the relationship between the two.

Language is a problem in several ways. Individuals bring their own language to the guidance process, and they may not use the same words or terms for skills, interests, values and work as are used in the frameworks they are offered. Guidance tools and LMI systems need to have a 'thesaurus' facility, to help individual users overcome the language problem by defining terms and accessing related key words. We also need to be able to combine such individual constructs as skills, interests and values into a more holistic view of the person, rather than a fragmented one.

There is also a 'translation' job required between the language used by employers and that used in the guidance process. This is crucial if individuals are to be well-equipped to understand what employers are looking for and how to present themselves to the labour market. This aspect of 'translation' would be assisted by increasing the regular contact between employers

and those involved in guidance, so that the ever-shifting language of the labour market is reflected in the support given to individuals. There is still a lack of fora in the UK where such ongoing contact can take place.

4 The use of skills as descriptors of work

There is a strong argument in a more fluid world of work to think of skills supplanting or at least supplementing occupations as the dominant construct for highlighting both similarities and differences between types of work. Moreover, as skills exist at varied levels and can be acquired over time, the notion of skill is also attractive in describing development potential, career paths and career progression. However, there are considerable challenges in using skills in this way. These include the temptation to define work in terms of very long lists of skills which individuals then find too complex. There are also a baffling array of competing UK frameworks for skills produced in education, by government and by employers. Skill language needs to cover technical and sector-specific skills as well as the generic and personal skills to which much more attention has so far been given.

In the UK, more than in some other countries, the term 'skill' has been used rather rigidly. It may be more helpful to look at 'skills' in a more flexible way, embracing some aspects of values and attitudes.

It is unlikely that skills lead easily to classifications of work, but there may be an opportunity to build a more consistent approach – at least within public agencies and the world of education – to defining broad sets of generic and personal skills which individuals will get used to seeing and understanding. To some extent key and basic skills are a start in this direction. More in-depth work and consultation on the relationship between existing skill frameworks would be a useful next step. The next generation of computer-based guidance and information systems may also help users to scan more flexibly on varied skill language.

5 Labour market information / intelligence

In a continuously shifting labour market, where the decisions made by individuals have considerable economic significance, the free availability of comprehensible labour market intelligence becomes a crucial role of the state. In spite of all the labour market data available and technical reports published, there is a marked shortage of well-structured labour market commentaries, to give individuals a clear background view of the labour market or parts of it.

There are two schools of thought on the future of labour market information. One – the 'neat and tidy' school – wants clean, standardised constructs to be used for work, for individual attributes and for LMI. Some giant 'look-up table' then helps individuals take better informed career decisions. The other school of thought – the 'bucket of data' school – see increasing on-line availability of diverse sources of labour market information as offering a browsing facility in which we can all find what we want to look at. In between lie the 'mix and match' school who seek to develop simple constructs (like the VT Southern Careers occupational areas) on to which all other kinds of data can be hung.

The increased use of computer networks by the population as a whole, and the development of powerful database systems and user-friendly ways of accessing data, have far-reaching consequences for labour market intelligence in the next century. Computers potentially deal with the need for frequent updating, which has always been a problem with paper-based labour market information. They also lend themselves to multi-dimensional constructs through database technology. In addition, they can handle multiple coding of the same constructs through explicit cross-referencing systems (such as those being developed in the USA) and keyword searches. Labour market commentaries and 'softer' information (eg descriptions of work contexts) can be provided on-line, as well as factual and statistical information.

The DfEE, TECs and careers service companies have been paying more attention recently to the provision of labour market information for career guidance. A clearer strategy for the provision of LMI is now needed, fully geared to increasing direct computer access to individuals and making information far more user-friendly.

6 Lessons from practice

Last but by no means least, we found virtually no research on which constructs and frameworks are used most by practitioners and are found most useful by their clients. There also seems to be a lack of learning from the frameworks which practitioners have developed for themselves, and the ways they may help their clients map across from personal characteristics to work options. There is a place for research into current practice looking at such issues as:

- 1 Which constructs of work do different kinds of clients find most helpful?
- 2 Which constructs and frameworks do guidance practitioners find most useful in working with individuals at different stages of the guidance process and different stages of career development?
- 3 What are the most useful strategies for helping individuals map between themselves and the world of work, and what intermediate constructs, if any, are needed?
- 4 If clients are to be encouraged to research their own information, which kinds of systems and frameworks would best help them to do this?

Such investigations would feed into most of the issues listed above, and give a clear practical steer to the development of future guidance approaches and future information systems.

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