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Editorial

This issue of BURISA is devoted to skills forecasting, a topic which has suddenly come of age. Normally economic forecasts predict future GDP or employment, factors which are fundamentally outside the control of anyone except national government. Skills forecasting predicts which skills which will be most necessary to particular industries or occupational groups. Industries and workers are more within the influence of local, and regional authorities. Assuming that companies are willing to invest in their workforce and training institutions are willing to adapt their course provision, it should be possible to ensure that the predicted skills are available to meet demand.

Skills forecasting has been driven by a number of forces. The first has been the drive to regional government. RDAs must put in place a skills strategy, and it is unlikely that skills forecasts would be reliable below regional level. RDAs are business led, which has resulted in more thought being given to the anticipation of business needs. Many institutions have also put considerable thought into the form that vocational training should take in the UK. Training and Enterprise Councils, though expected to be driven by business demand, have primarily been tasked with delivering training for the unemployed and the excluded, while further education in a bid to increase income is more driven by demand from students than demand from business. More recently the National Skills Taskforce

has taken a direct interest in skills forecasting and defined the fundamental difference between skills gaps and skills shortages. True skills shortages are when the skills needed by employers simply do not exist in the workforce as a whole. Skills gaps are when a company reports that it cannot recruit workers with appropriate skills, but those skills do exist in the workforce at large, who for some reason (pay, conditions, opportunities in other sectors) do not want to work for that particular sector. Thus there may be a skills shortage of IT staff, but there is a skills gap for nurses.

Much of the route towards skills forecasting has been led by Training and Enterprise Councils, who have been involved in all three contributions to this issue. Forecasts have in recent years commonly predicted the future profile of an area in terms of occupations or qualifications. All three papers try to go beyond this approach to identify future trends in 'real skills'.

First consultant Phil Smith, of BMG, discusses a project that identifies future job opportunities that result from gross job growth in the West Midlands. Net growth in employment creates additional jobs, but further job opportunities can be created as people retire, or move to another industry. Many 'skills shortages' in manufacturing are because of retirements amongst an ageing workforce, creating job replacement opportunities.

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CORPORATE SERVICES

Forecasting Employment Opportunities in Birmingham

Phil Smith, BMG

Abstract

This article explores the methodology, behind a Microsoft Excel based model to forecast employment opportunities, in Birmingham and Solihull. Although at an early stage in its development, the model aims to provide a comparison of the employment opportunities developing in Birmingham and Solihull and the employment undertaken by the areas residents. It also seeks to explore and contrast their qualifications with those in employment. The aim of the model being to provide policy makers with a means to improve training and education provision and ensure it more accurately meets the needs of local residents and businesses. Thus reducing unemployment and the conurbation's reliance on inward commuting. These are aims, which are compatible with a number of funding regimes including European Social Fund Objective IV and the Skills Development Fund.

Background

Econometric forecasting is now a well-accepted (and applied) technique within local economic development agencies (Training and Enterprise Councils in particular), for forecasting the net change in the numbers of jobs as a result of national and local economic conditions. It can be applied to groups of industries or to occupations and more recently has been applied to industries and the occupations employed in them. Unfortunately the results of such forecasting rarely match the intuitive view of local experts and/or recorded job opportunities within the local economy. This is for two main reasons:

1. Workers retire (and die) leaving their industries and occupations forever;
2. Workers change jobs, sometimes changing the location of their employment and/or their industry and/or their occupation.

The effects of such change are more dramatic in some industries and occupation than others, and are therefore, of greater significance in certain areas. For example engineers have a very high age profile and although their

absolute numbers are declining, shortages are apparent, as new entrants are not offsetting the numbers retiring. This problem is particularly acute in London and the South East, where education and training provision is sparse. Another example comes from the clothing industry (especially in the North West and West Yorkshire), in which there is constant high demand for 'overlockers and stitchers' as a result of the high numbers of workers leaving the industry.

Pioneering work by DfEE, Further Education Funding Council (FEFC) and the TEC National Council has sought to incorporate these factors into an econometric forecasting model while the two major occupational forecasters have developed their own methodologies.

In Birmingham, the Birmingham Economic Information Centre (BEIC: a joint venture between the TEC and City Council) have experimented with their own model for identifying employment opportunities, using vacancy data as the main input. More recently BEIC have formed a joint venture with Birmingham and Solihull TEC and BMG (a market research and information and communications agency) to develop local modelling capacity. Although at an early stage in development, an outline methodology has emerged, as have many of the challenging data issues.

The Birmingham approach

One of the initial problems facing BEIC was that the Birmingham City Council area is much smaller than the Travel to Work Area used for the 1991 census. The incorporation of Solihull into Birmingham TEC (now Birmingham and Solihull TEC) reducing the disparity, although much of north Worcestershire and Southeast Staffordshire are also within the 1991 Travel to Work Area.

For those unfamiliar with the city, the Birmingham City Council area is quite extensive but does not include the Black Country with its very different cultural and industrial base, the largely independent city of Coventry, or the affluent commuter area of Solihull, all of which supply and receive labour from Birmingham.

The inclusion of Solihull residents does, however, mean that the model will be including a significant proportion (overall 36% of Solihull residents work outside Solihull) who work outside of Birmingham and Solihull, largely in Coventry (as 7% of those working outside Solihull work in manufacturing of metals products, it is fair to assume that the majority will be working within the West Midlands conurbation). This rises to 16% of managers residing in Solihull, but working outside and 14% of clerical occupations.

Projection and geography

Overall this means that this sort of modelling in Birmingham and Solihull is much more reliable than for more 'balkanised' conurbations, such as Liverpool, London and Manchester. A further issue is that as a major conurbation Birmingham attracts large numbers of managers and professionals from much further afield; whilst many inner city residents are economically inactive. The consortium have therefore, decided that initial modelling should be based on employment in Birmingham and Solihull and the people who live there. Six models will be produced:

1. Birmingham employment (including employees and the self employed);
2. Solihull employment;
3. Birmingham and Solihull employment (derived from the two independent models);
4. Birmingham residents;
5. Solihull residents;
6. Birmingham and Solihull residents (derived from the two independent models).

Alternative data sources

Although Birmingham and Solihull represent a significant population (Birmingham is 1,021,000 and Solihull 204,000; not included are Tamworth with 72,000, Bromsgrove 85,000 and Redditch 77,000), it is not large enough for in-depth analysis of the Labour Force Survey (the sample for Birmingham is 3,988 households and for Solihull it is only 886). Therefore, the consortium is not able to develop a local model solely based on the Labour Force Survey. Alternative data sources that have been identified include:

1. The Census of Population;
2. The Annual Employment Survey;
3. The TEC's own Household Surveys (conducted by BMG).

Mixed datasets

The mixing of data sets of this nature clearly present the consortia with issues of compatibility, which are discussed in the section on data inputs; however, a further issue exists in that even with these data sets, not all data is reliable at the local level. The consortia's approach to this issue is via the application of two principles:

1. To use the best available data for each variable, i.e. to use regional data when local is unreliable and to mix and match data on employment and residence (i.e. assuming that Birmingham and Solihull does represent a Travel to Work Area) when no alternative exists;

2. To disaggregate data to the level at which it remains reliable, thereby mixing data at differing levels of disaggregation. This involves a hierarchical data structure, for example whilst some variables will only be output by Standard Industrial Cluster (SIC) division or sector i.e. manufacturing, others will be further disaggregated to 2, 3 and 4 digit SIC which involves a sector being broken down into its component elements i.e. Metalworking.

The second principle probably needs some explanation. Traditionally modellers have determined the level of disaggregation prior to model construction, rather than allowing data availability to determine the level of disaggregation for each variable. In constructing a SIC/Standard Occupational Cluster (SOC) matrix, the consortia have mixed 2, 3, and 4 digit SIC descriptions and 2 and 3 digit SOC descriptions. As a rule of thumb, the consortia will be looking for a minimum of 25 records to support any cell within the model. Although this appears to be illogical and very time consuming, it actually reflects the industrial and occupational composition for the local area. The level of disaggregation within engineering industries and occupations is high, reflecting the economy's traditional base (for example over 4% of all residents work as industrial plant and machine operators within the manufacturing of metals products), whilst for agriculture the data available does not permit a high level of disaggregation (as might be expected within a major conurbation; only 0.3% of residents work within agriculture, forestry and fishing)!

Project plan: first stage

The first stage of the project is to construct SIC/SOC matrices for the 6 base models, using Microsoft Excel. The residence-based models are relatively straight forward, and can rely extensively on the household surveys, the Labour Force Survey and the Census of Population. The employment-based models are a little more complex, mixing data from the Annual Employment Survey with the residence-based data sets. For this some assumptions will be inevitable.

Next stage

The next stage has yet to be defined clearly, as it involves forecasting the effects of economic change. Clearly the SIC/SOC matrices can be constructed as a time series, based on the quarterly returns of the Labour Force Survey, and therefore a simple forecast constructed. Unfortunately many of the changes within the Labour Force Survey reflect sampling error and not actual industrial and occupational change. The 1981 and 1991 Census of Population provide a much sounder basis for calculating industrial and occupational change, but not medium term economic effects. In addition, a simple forecast is unlikely to incorporate the effects of the trade cycle within

its outputs.

One possible solution is to apply outputs from the Local Economic Forecasting Model (the LEFM, constructed by Cambridge Econometrics and the Institute for Employment Research) to the matrices. As BEIC already uses the model for current Birmingham forecasts and the TEC are looking at extending this to Solihull, this possibility will certainly be explored. Alternatively a simple shift/share analysis of national, or regional forecasts may be adequate. A further alternative would be to commission bespoke forecasting from one of the econometric forecasters. Overall, however, the consortia believe that the econometric content of the model is less important to its overall reliability than industrial and occupational change and accurate local replacement effects. Previous work by Business Strategies Limited and the Institute for Employment Research highlight the importance of replacement effects caused by changes in place of work and occupation.

Retirement and mortality

Questions within the household surveys and the Labour Force Survey provide reasonable local data on people changing industries and occupations, unfortunately changing place of work is not adequately covered at the local level and the model will have to rely on some regional evidence. Of more concern is the modelling of retirement and mortality. The household surveys and Labour Force Survey can identify the age of workers by industry and occupation within the local area, but not local retirement and mortality patterns. For this regional and national data (even some national data is only reliable at the aggregate level and not by detailed industry and/or occupation) has to be applied to the local age profile. Overall, however, the addition of replacement effects to the overall employment change is possible at a local level. This does, however, represent a significant improvement on early local models, which relied entirely on disaggregation of national and regional models. A further level of analysis in the replacement modelling is to look at where the entrants to new jobs are coming from, enabling a more detailed identification of groups such as local residents, the unemployed and school leavers.

Messages for policy?

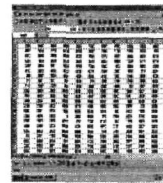
The models will now have produced forecasts of the change in employment by SIC and SOC and the replacement effects, i.e. the net demand for jobs by SIC and SOC. Having developed these forecasts, the issue now is can they be translated into messages, which will effect policy in relation to training and education provision? The consortium are now faced with 2 options for identifying existing skill levels:

Use FEFC destination data which tracks those leaving

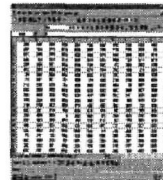
Further Education courses (which is robust at the national and regional level) to hypothesise the growth in demand for FEFC funded courses. For some industries and occupations (such as Construction) this has been shown to be a fairly robust methodology. However, for occupations such as senior management, FEFC destination data is far less appropriate.

Assume that current jobholders possess the qualifications required for their jobs (as expressed by NVQ level and SUPERCLASS), that is to apply current qualifications profiles to the model forecasts. As there is evidence that employees are becoming more qualified (especially at the higher levels) a refinement would be to forecast the effects of this on the current qualifications profile.

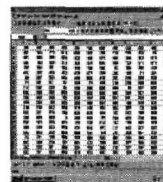
The Project Plan



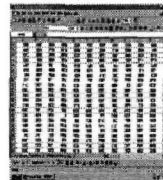
SIC/SOC Matrices



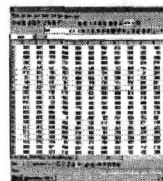
Employment Change



Job Change



Retirement & Mortality



Qualifications

SUPERCLASS

A problem with the use of SUPERCLASS is that it can only really be collected for higher level qualifications (i.e. single subject courses). As this stage is a long way off the consortia may consider alternative options to this and probably explore the use of both options as each has their strengths and weaknesses in terms of policy formulation. It does, however, need to be recognised that qualifications as expressed by NVQ level and SUPERCLASS code are not the same as skills, therefore, the model is not forecasting skills shortages but likely demand for workers with specific qualifications. One of the consortia members (BMG) is exploring qualitative research techniques to provide a template and coding system for generic skills (in management) and Business Strategies have identified 19 generic skills for their Gross Jobs Model of Wales. A further possibility occurs with the new social classifications, which could form the basis of analysis of generic skills by occupational groups.

Until the coding systems and data sets are established it is, however, unlikely to influence the Birmingham models

Data input variables

In order to describe the input variables to the model the data variables from the Labour Force Survey are used as an illustration, although the deficiencies of these data variables and this data set are discussed in this section and the following section.

For modelling purposes the main problems with these variables include:

- Residence can only be disaggregated to County (although specialist disaggregation is possible, for a limited number of variables, within the sub-regions, dependant upon sample size);
- Past residence (i.e. migration) can only be disaggregated to region;
- Place of work (i.e. Travel to Work patterns) can only be disaggregated to region;
- Only degrees can be disaggregated by subject.

Important Data Variables from the Labour Force Survey	
NAME	Description
AGE	Age of respondent
SEX	Sex of respondent
CID	County level indicator
REG3	Region of residence 3 months ago
REGONE	Region of residence 12 months ago
INECACA	Basic economic activity (ILO definition)
OWNBUS	Whether doing unpaid work for own business
RELBUS	Whether doing unpaid work in relatives business
INDM92M	Industry in main job
SOCMAIN	Range of occupations
NSTAT	Employment status in main job
FTPT	Whether working full or part time
EMPMON	Months of continuously employed (employees and self employed)
CONMPY	Year started working with current employer
CONSEY	Year started as continuously self employed
REDIND	Whether industry made redundant from is same as previously stated
REDOCC	Whether occupation made redundant from is same as previously stated
REGWK	Region of place of work
TOTUST	Total usual hours worked excluding lunchbreak (no overtime)
SOCSEC	Occupation in second job
INDM92S	Industry in second job
NSTAT2	Employment status in second job
NSOLO2	Self employed with or without employees in second job
SOCLAST	Occupation in last job
INDM92L	Industry in last job
SOCM3	Occupation three months ago
INDM923	Industry three months ago
SOCONE	Occupation twelve months ago
INDM92O	Industry twelve months ago
SUBJCT1	Subject of degree
HIQUAP	Highest qualification

Fortunately the household surveys use Post Code geography for residence, allowing a far higher level of disaggregation; past residence and place of work rely on the individuals responses and is normally available at Post Town level. Unfortunately past experience has shown that the individuals responses are not particularly reliable, and although better than the Labour Force Survey, are far from ideal. In terms of qualifications the highest NVQ level is recorded and the SUPERCLASS code of higher level qualifications and all vocational qualifications. Therefore, the household surveys can address some of the deficiencies of the Labour Force Survey and to supplement the data from it.

Input data sets

As has already been indicated the input data sets include:

- The TEC's Household Surveys
- The Labour Force Survey
- The Census of Population
- The Annual Employment Survey
- The merits of each data set, and their application within the model, are now considered.
- The TEC's Household Surveys:

The TEC undertake a comprehensive survey of local residents on a bi-annual basis. The most recent survey included interviews with 2,000 Birmingham residents (plus a further 1,612 inner city residents) and 897 Solihull residents. All interviews are completed using personal interviewing techniques, at the residence of the respondent; with no proxy interviewing being permitted. All questionnaires are coded in a specialist-coding department and data processed using SPSS, later output to Microsoft Excel for model construction.

Although the main purpose of the survey is to inform TEC strategy and to provide an analysis of performance against the Lifetime Learning Targets, many of the questions are similar to those used in the Labour Force Survey. By using Post Code geography and SUPERCLASS some of the problems with the Labour Force Survey have been addressed.

The main limitations of the survey

These are:

1. A lack of continuity between the data variables used between the bi-annual surveys; although there is continuity on many of the main data variables important to modelling;
2. Because the survey was not developed for modelling, not enough attention was devoted to all data variables, for example although occupations were coded to SOC 3 digit, this was not always possible as the interviewers had not been briefed that this level of detail was essential;

3. Although a large sample it does not lend itself to detail disaggregation across all variables.

The Labour Force Survey - limitations

The Labour Force Survey is a quarterly survey and therefore, produces a very good time series for analysis. At the aggregated UK level this provides robust data, however, due to the method of sampling by region this produces data that is potentially unreliable for sub-regions (particularly Solihull). The Labour Force Survey also suffers from three important design faults, which potentially cause it to be very unreliable in relation to questions on occupations, these are:

1. 59% of interviews are conducted using telephone interviewing techniques, for more complex questions, such as occupations and qualifications this is far less reliable than personal interviewing;
2. 30% of interviews utilise proxy-interviewing techniques; this means that other household members are asked to comment on other peoples information, including exact occupation, earnings and hours worked. This is a highly unreliable method of collecting such data;
3. The interviewer, and not a specifically trained occupational coding department, codes occupations.

This means that for questions related to occupations the Labour Force Survey has been shown to be highly inaccurate at SOC 3 digit level. As a result of these inaccuracies the Labour Force Survey is used to predict trends from the Census of Population and not as an independent source, for the purpose of econometric forecasting and the development of the Replacement Demand Model.

The Census of Population - limitations

Although the Census of Population provides a very robust sample (being based on the 10% analysis of the total population) it suffers from:

1. Only being conducted every ten years and data not being released for approximately 2 years after its completion;
2. Relying on self-completion making some questions highly unreliable (especially these related to occupations);
3. As a result of the Poll Tax the response rate in some inner cities is very low; this could have a significant impact on the results for Birmingham.

The Census of Population will, however, be used as the base calculation for industrial and occupational change, supplemented with data from the household surveys, the Labour Force Survey and the Annual Employment Survey.

The Annual Employment Survey - limitations

Unlike the other data sets this is a survey based on employment sites and is therefore, invaluable in development of the employment-based models. At a local level some problems can exist, when significant local employers have not participated in the survey. A further issue is that it is composed of employment sites (that is sites where PAYE returns are made from) and understates employment in non head office operations, attributing the employment to a regional, or head office. In central London, for example, the Survey overstates employment, attributing employees working across the country to central London. The local consortia approach means that modellers have direct access to local knowledge and expertise and are able to adjust model inputs, prior to construction.

The main limitations, however, are that it tells us very little about the actual people employed at these employment sites. For this residence-based data sets have to be imposed on employment-based data. This is a significant issue, especially for managerial and professional occupations, as it involves making the assumption that the profile of Birmingham and Solihull's (or the region's) resident managers and professionals is similar to that for managers and professionals working in Birmingham and Solihull. Obviously we can only hypothesise how this will affect the data, but we believe that it will reduce the qualifications level for managers and professionals working in Birmingham and Solihull, as the better qualified tend to commute long distances into the city.

Benefits of the Birmingham approach

Early work on replacement modelling was fraught with methodological problems, with inexpensive consultants offering models of limited rigour and whose methodology was far from clear. This meant that some early attempts had little resonance with the views of local experts and contained outputs that really couldn't be translated into policy. Unfortunately this set back the development of this sort of modelling and gave the impression that it could be achieved on a 'shoe string'. The consortium-approach in Birmingham involves all members discussing the methodology and verifying the robustness of its inputs and outputs. In addition, much of the data is already held by the consortium members, or they have direct access to it, this means that they have control over the data inputs and the quality of the data inputs.

By allowing the data to dictate the level of disaggregation, the models reflect local economic contours and therefore have the highest level of disaggregation for those variables that are most important to the local economy. This also facilitates more in-depth studies of particular sector and/or occupations, without interfering with the

overall integrity of the model. In fact, the more specialist data input into the model, the more robust the overall model becomes.

The main drawback of the consortia approach is the time it takes to reach decisions and to actually construct the models. Sub-contracting elements to specialist forecasters could assist in model development; although the consortia are anxious not to lose overall control of the models produced. By working on the models themselves consortia members are both increasing their understanding of model construction and of the local economy. This knowledge will prove invaluable in the policy formulation stage and therefore, some delay is probably desirable.

This sort of modelling is particularly appropriate to an area like Birmingham, which suffers from a high level of mismatch between the job opportunities being created and the skills of the local residents. The model can therefore, be adapted to look at the opportunities being created for specific groups, such as local residents, the unemployed, or school leavers. This is particularly important in policy formulation, as it enables policy makers to work with the identified employment flows and not against them. For example the model may identify a large 'demand' for managers, but that these opportunities are being filled by professionals and clerical occupations, although school leavers and the unemployed rarely move directly into management they do find clerical jobs. Policy makers may therefore, want to target clerical training for school leavers and the unemployed. Another issue for Birmingham is the low value added nature of much of its production; the model would facilitate direct sectoral contrast with other areas enabling a more strategic approach to inward investment and business support.

Future developments

A further development will be the incorporation of variables into subsequent household and employer surveys, to further refine the model. In many cases these will simply require minor changes to the existing questions and not involve any additional costs. The model therefore, will provide continuity and an analytical framework for future labour market research in Birmingham and Solihull.

Forecasting Skills in Wales 1997 to 2007

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Abstract

*The aim of this short article is to provide a brief overview of the results from the forecasting element of the recently completed **Future Skills Wales Research Study**¹ [FSW].*

Introduction

The Future Skills Wales Research Study is the largest and most comprehensive project yet to have been undertaken in Europe aimed at identifying and analysing the skills which will be required by a national or regional economy. It is also unique in that both employers and residents were interviewed. In the case of residents not just those in employment but the unemployed and others seeking work, were also part of the study.

In the case of FSW the combination of the results of surveys on current and future requirements is set against the forecast for the economic conditions which are expected to prevail in the future. The approach was to combine the results from the survey material with the outputs from the Business Strategies econometric model. The project involved telephone interviews with 5,000 employers, and home interviews with 6,000 residents, as well as forecasts of employment by sector, occupation and qualification.

Approach

Information from employers can give a picture of the current and the projected needs as they perceive them to be. However, this approach must also take on board the supply side factors and the perceptions or expectations of employees and those seeking work. Matching the needs of employers with the needs of employees, as well as those seeking work, allows for better planning and use of resources.

The FSW study has followed this methodological approach. The project was started using survey responses to generate an initial set of skill needs. The FSW project

shows the key or generic skills that are currently needed in particular occupations, the relative importance of vocational skills (in the form of formal qualifications) and job specific skills. The extent to which employers expect that those skill needs will increase or decrease, how rapidly this is likely to occur, the extent to which additional vacancies will arise because of turnover and, finally, who is most likely to take those vacancies (employed or unemployed) is calculated. This has resulted in forecasts for both net, and gross, employment opportunities.

¹ Future Skills Wales Research carried out by Business Strategies Ltd. and Mori and commissioned by a partnership of organisations in Wales including the Welsh Office, Welsh TECs, CBI, TUC, Unitary Authorities, FE/HE Institutions.

Qualifications and vocational skills

The relationship between the supply and demand for skills is the qualifications that are typically held by people in particular occupations. However, while new entrants are expected to have higher qualifications, older employees in place are more experienced and so formal qualifications are less vital. This is important in balancing experience/skills with qualifications to carry out tasks. There is for example an exact link between qualifications and some occupations e.g. Doctors or Teachers. However, Sales Assistants may have varied qualifications unrelated to their current occupation. ***What is of interest to the employer and employee is that certain subjects may be associated with say, problem solving skills, attention to detail or a willingness to take initiative.*** Here lies the framework that might be built upon i.e. a consideration of the link between qualifications and occupations on the one hand, and an examination of the link between skills and qualifications. Qualifications may be a signalling device that tells employers that someone has the capability to obtain a qualification, but the intrinsic application and ability value needs to be ascertained. 'Generic' or 'Transferable' skills can be assessed from these relationships, which can then be used to build a more complete association between the ability to carry out a job task or function.

Job specific skills

Employers determine the requirement of the employee to work on a task in a traditional or expected way-Job Specific Skills. These are not necessarily transferable between jobs or sectors. FSW asked employers about the relative importance of job specific skills, but not what these particular skills are. This leaves us with the Generic Skills upon which the FSW project concentrated.

Future skill needs in Wales 1998 to 2007

The difficulty in the forecasting process is to analyse how the skill needs of today will alter in the future. The starting point for the FSW project was the current occupational structure of employment as it is now, and as it is expected to be in the future. The following process was followed. If we assume for example, three occupations and three types of skill, the survey evidence recorded the percentage of respondents saying a particular skill is important or very important to that occupation, e.g. Literacy, Initiative or Product Knowledge. The relative importance of different skills is therefore calculated per level of employment in a particular occupation for which the skill is set for example Managers, Secretaries or Skilled Engineers. The next stage is to measure the occupational demand and its structure and which skills rise or fall in importance.

Occupational change affects the demand for skills, as do changing skill needs within occupations. In some cases when skill needs within an occupation change substantially then that occupation itself changes. Within Wales increases in the number of Managers, Technical and Associate Professionals, Personal Service Occupations (restaurant and bar staff) and increases in Sales Staff have been evident, whilst decreases are expected in the number of Secretarial staff, Skilled Engineering and Other Skilled Trades, Machine Operators in manufacturing as well as Unskilled Workers. These occupational changes will determine the skill sets for the future.

Skill sets

The FSW project produced a number of very important messages that will determine actions necessary in the future to plan for skills. The following is a brief overview of these results for Wales as a whole. As discussed earlier future skills needs have been driven partly by occupational change. In addition, not only net changes in occupational employment levels, but also estimates of the total numbers of people switching jobs and the number of people out of work who may move into jobs, have been calculated. Combining the results of the employers surveys with the BSL forecasts for occupations and job opportunities gives for a more robust ranking of the changing importance of skill sets than the survey evidence alone could have provided.

Tables 1 and 2 set out some of the survey results that show the range of skills considered in the study as well as differing attitudes to their present and future importance on the part of employers and residents.

Table 1 Skills rated as currently very important in a job by category of respondent

Skills	Employ-ers %	Working Residents %	Diff
Communication	88	82	6
Ability to Learn	81	68	13
Team working	81	75	6
Showing initiative	80	73	7
Ability to follow instructions	79	74	5
Literacy	76	59	17
Numeracy	71	51	20
Problem solving	66	59	7
Organising own learning	58	50	8
Job specific	57	60	-3
Management	50	35	15
Leadership	45	41	4
Basic IT	39	26	13
Formal qualifications	24	23	1
Advanced IT	16	11	5
Welsh Language	11	9	2
Foreign Language	4	2	2

Source: FSW Employers Survey and Residents Survey

Employers rate all skills, with the exception of job specific skills, as more important than residents. Communication skills were the most widely cited by working residents as being 'very important', followed closely by team working skills and the ability to show initiative. Formal qualifications, numeracy, literacy, and basic IT skills were not so highly rated by residents. Full time workers were more likely to rate all skills (except communication skills) as very important to their job than part time workers. The skills important to the self-employed were broadly similar to other employees.

Table 2 Changing importance of skills; percentage of respondents saying skills will be more important in the future

Skills	Employ	Working
	-ers	Residents
	%	%
Basic IT	47	53
Understanding customer needs	45	-
Ability to Learn	41	47
Communication	41	45
Product knowledge	39	-
Organising own learning	38	44
Showing initiative	38	45
Team working	38	43
Literacy	34	29
Problem solving	34	39
Management	33	36
Ability to follow instructions	32	35
Numeracy	32	28
Job specific	31	39
Advanced IT	29	37
Formal qualifications	27	31
Leadership	27	38
Welsh Language	19	18
Foreign Language	16	15

Source: FSW Employers Survey and Residents Survey

Both employers and residents believe that the skills needs of individuals are set to increase significantly in the future. Residents put a slightly greater emphasis than employers on an increase in the importance of most skills.

Stock of jobs

In terms of the softer generic skills, Communication skills are currently ranked first in *importance* in Wales, but these are expected to be replaced by Understanding Customer Needs in the future. Ability to Learn rises in the rankings, as does Team Working Skills, whilst the Ability to Follow Instructions falls away. Basic IT Skills are of greatest *increasing* importance despite its overall ranking expected to remain the same as currently recorded.

Future job opportunities

In terms of skills weighted by job opportunities for those not currently in work in Wales, the Ability to Follow Instructions is currently perceived as being ranked first in *importance*, but falls away in importance in the future as the Ability to Learn emerges as the most important future skill. The Ability to Learn was also of the greatest *increasing importance*. Understanding Customer Needs also increases significantly in importance.

Conclusion

The Future Skills Wales approach to outlining the skills needed for a rapidly changing economy in Wales gives those in economic development a sophisticated tool on which to base their future plans. It has demonstrated that it is possible to integrate detailed skills survey information within a systematic economic forecasting framework. It has produced new evidence for the relationship between generic skills and qualifications, while indicating the degree to which such skills may be transferable between different occupational groups.

In terms of skill strategies in the light of real needs in the market place, the results of the Future Skills in Wales project can also be used by employers in planning their business strategies and by individuals in developing their careers.

The Capital's Future Skill Needs

Trevor Carr, London Skills Forecasting Unit

Abstract

This article describes the role of the London Skills Forecasting Unit and the techniques that it was to assess current and future skills needs. It identifies the five new indicators of a sectors ability to adapt and change, and examines a number of sectors in more detail.

London Skills Forecasting Unit

Last summer, the London Skills Forecasting Unit was established through ESF (European Social Fund) Objective 4 funding and support from London's seven TECs to provide a focus for the analysis of skills information across London. The Unit was set up to examine the nature of change in skills and occupations required in the workplace, and to consider ways in which employers and employees can adjust to rapid changes in the labour market. It is already providing information that can inform the planning of publicly funded education and training in London. It is looking at the wide range of skills that extend across traditional sectoral and occupational boundaries, and forecasting the changes in skill needs for the capital.

An important part of the Unit's brief is to use labour market intelligence to encourage workers, especially the most vulnerable, to adjust their skills in line with industrial change.

The London TEC Council provides the home base for the London Skills Forecasting Unit. The Unit's programme will include annual reports, sector studies, the development of new forecasting techniques and some work on the measurement of key skills attainment by the capital's employees.

Forecasting techniques

It can be argued that traditional forecasts do not reflect skills. It is possible to forecast occupational profiles but occupations may not reflect the skills of people in those occupations. Managers for example may have a wide variety of different skills depending on their experience, industry, and the type of company in which they work. It is also possible to forecast a profile of qualifications in a particular area, but qualifications do not reflect the wide range of skills applied to a particular job. A degree in marketing may for example say nothing about the knowledge of languages that an international sales representative brings to the job.

The London Skills Forecasting Unit is tackling this problem both indirectly and directly. If, for the moment, it is assumed that one cannot forecast future skills requirements, including for example the projection of new skills requirements which cannot be recognised from past trends, then it may be possible to examine the degree to which companies and industries have the flexibility to adapt to market change. This theoretical position has led the Unit to consider employment projections alongside softer qualitative data derived from sector studies and from the annual surveys of employers and workers that have been conducted by London TEC Council every year since 1995. The surveys identify company strategies for dealing with skills shortages and market change. It is thus possible to examine the different strategies adopted by growth industries like IT, and in more traditional areas such as manufacturing (see below in more detail). This approach suggests that where it is not possible to forecast skills requirements directly it is possible to predict whether particular industries will become more or less competitive.

There are however some areas in which it definitely is possible to forecast future skills requirements directly. One which is reported in this article is the Construction sector study. Construction is one sector for which there are specific sectoral forecasts of output available. These can, as described below, be crosscut by the skills used to erect particular types of buildings to produce a volumetric forecast of employees with particular skills.

Dissemination

The London Skills Forecasting Unit is working hard to ensure that its research and information reaches the widest possible audience by using a range of different media to get the message across. The first annual report has already been published as a book, but is also available on the Unit's website (www.skills-unit.com). The Unit's work has been presented at a launch event and through appearances at seminars and conferences. The launch event, held at high profile central London venue, enabled the Unit to reach many policy makers and opinion leaders in the capital. Business, local and central government, and education and training providers have received and are using the findings of the first annual report, with 3,000 now distributed. The web site has been used to present the key tables from the report and raise awareness of the Skills agenda. The web-site received 1200 "hits" in its first five days of full operation. The techniques and the findings of the Skills Forecasting Unit's work have also been presented to the National Skills Task Force.

The First Annual Report

The London Skills Forecasting Unit's first publication, in December 1998, was a baseline study of skill needs in the capital. The purpose of this first annual report was to provide an audit of where we are now. It does, however, take some steps towards developing new indicators to refine our knowledge of future skills needs. The results found in this first report are summarised below, followed by an outline of the Unit's work that naturally evolves from this initial overview.

The report covered eight sectors, which make up the majority of London's workforce. They are Financial Services, Business Services, Public Sector, Hotels and Catering, Retail, Transport, Manufacturing, and Construction; and two Occupational Groups: Personal and Protective Services, and Sales-related Occupations. Government statistics and data from other recognised national forecasting agencies were used in the compilation of information about employment trends in London sector-by-sector. Two other major sources of data were the London TEC Council Surveys. Each year the London TEC Council conducts a survey of 5,000 employers in the capital. In a parallel exercise it also talks to 13-14,000 workers and residents in London. From these two surveys a mass of information is collected.

Most significantly, for the Skills Forecasting Unit, the Employer Survey gives an insight into the skills gaps and shortages, as evidenced through vacancy levels, high labour turnover, and through employers' own perceptions of skills gaps within their staff. In addition, to the indicators of growth or decline for occupations or sectors, there is data on the willingness, or not, of employers and employees to raise skill levels, through employers' support for, and employees' participation in training and educa-

tion respectively.

The development of the first annual report drew in material supplied by London's seven TECs to give sub-regional trends. Sector studies that had been commissioned on specific industries in the London area in the last two to three years helped to complete the picture. All of this collated information contributed to the sectoral and occupational review, but the national statistics, even where the regional information is robust, do not actually give any year-on-year data about workforce skills.

The first annual report attempted to go beyond the sectoral/occupational information generally available by using some extra indicators to unearth the skills issues. This approach was intended to give *value-added* over and above the usual method of forecasting - which works by projecting past trends into the future - to one using signs evident in the business world and seeing how these inter-related with the labour market, in the level of demand for skills.

The First Annual Report - the new indicators

Five indicators of a sector's ability to adapt to change were used: learning environment, skills gaps, VAT turnover, previous occupations of the long-term unemployed, and high labour turnover. Most of these indicators derive from data which has been collected on an annual basis, allowing them to be projected into the future within a suitable econometric framework.

Collectively, they were intended to present an overall picture of the ability of companies and their workers to adapt to change, and were to be viewed within a broad understanding of the industry's direction as provided by the sectoral research. These new indicators are defined here.

1. *Learning environment* was a measure developed by reviewing companies' willingness to provide training to their employees, and employees' willingness to participate in training activity. It was seen as a proxy indicator for a company's willingness or resistance to change. It is often an acknowledgement, by companies, of their own changing needs and a desire to remain competitive, that they need to train their people in new skills, or update old ones.

2. The second indicator looked at *skills gaps* in existing staff. The London TECs annual survey of employers asks 5,000 companies about skills gaps in their organisations. The use of this information provided a powerful comparative indicator across sectors reviewing employers' perceptions of skills problems in their own workforce.

The report presented tables showing employers' perceptions of their staff's average skill level across five areas:

IT, numeracy, literacy, management and communication. Juxtaposed with this table was employees' self-perception of their own competence in the same skills. It brought some interesting contrasts with employees in Financial Intermediation rating themselves relatively highly in IT, whereas Financial Intermediation employers identified 50% of employees as having a skills gap in IT. It should also be noted that requirements/judgements about skills levels will vary from sector to sector.

3. The *VAT turnover* indicator summarised company registrations and de-registrations and was used as an indicator of turbulence or industrial change within sectors. The number of VAT registrations and de-registrations of companies is a proxy indicator of sector changes which may result in the demand for new skills or signal the demise of other skills or crafts.

4. The statistics on the *previous occupation of the long term unemployed* were interpreted within their sectoral context, and provided a measure which indicated the capacity of those previously employed in the sector to acquire new skills, or update their old skills in order to return to employment. The percentage of "long-term unemployed" in a sector is indicative of workers' capacity to adapt to the changing demands of the sector. The lower the percentage, the greater the propensity for change. The bleakest example of the use of this indicator was related to manufacturing where people formerly employed in the sector made up 47% of those who were still unemployed after 2 years.

5. Finally, an indicator was developed out of data on companies reporting *high labour turnover*. It was appreciated that high labour turnover can only be a proxy indicator of skill needs, as it exists for a number of reasons, often associated with poor pay and working conditions. However, through more detailed analysis within sectors, skills issues can be revealed.

The following sections highlight how the results of the first year's work have identified

- future skills requirements of particular sectors
- economic and training implications of demographic change in London
- the vulnerability of certain sectors in the face of market change

Hotels and Catering

Using inferences from the new indicators just described, and the various sources mentioned above, the report gave a summary list of the range of skills that are in demand for each sector.

The Hotel and Catering sector provides a good exemplar. The relevant chapter in the report identified two distinct

types of skills in demand: firstly, occupational/ technical skills - in basic cookery, waiting skills and enhanced food preparation skills; secondly, key skills - in customer care, IT, management and supervisory skills and management skills. The report also took advantage of local studies, which delved, deeper. West London TEC's sector study in this area helped make sense of two converse trends happening at the same time: de-skilling - the experience of chefs in some of the larger chain restaurants; and upskilling / multi-skilling where employees in the hotel and catering industry are expected to perform a range of tasks, for example, combining reception and housekeeping.

Ethnic minorities and labour markets

The first annual report also looks at the representation of ethnic minority community through each of the employment sectors in the study. Ethnic minorities are under-represented in the financial services sector, but when we turn to retailing, an estimated 34% of the proprietors of private businesses in retail were people from ethnic minorities. The same percentage was evident for proprietors in the Distribution, Hotels and Catering sector; and turning to the workforce as a whole, over 15% of Bangladeshi and Chinese work in this sector, compared to 4% of the white workforce. People from ethnic communities were more highly represented in the public sector than in any other sector. Particularly high proportions of Black British and Black Caribbean were to be found in both the public sector and in transport.

The Skills Forecasting Unit will develop some of these trends in the second annual report later this year. From the statistics in the previous paragraph, we see the Hotel and Catering sector has one of the largest proportions of ethnic minorities in the workforce, but it is notable for employing a large proportion of part-time labour and providing little training. This sector is expected to have the highest net growth in employment, of all sectors, through to 2002. These trends taken together suggest the importance of training for the ethnic communities of London, as they figure so highly in a sector that provides few training opportunities. Equally the future of the Hotels and Catering sector in London is likely to be critical for the ethnic minority communities, which will form the majority population of some boroughs.

The integration of skills information from surveys and other studies, with socio-economic information on ethnic minorities, and economic forecasts, has thus provided valuable insights on the particular skills requirements for important communities within the London economy

Manufacturing

Companies must be able to adapt to change in the market, but the outlook for manufacturing is gloomy. Against some positives - London manufacturing is expected to grow by 1% by 2001, its productivity is 20% higher than the UK average, and particular success stories - such as the growth in hi-tech manufacturing - the general trends are down-beat. The report has suggested an overall picture in which manufacturing employers and employees are the least interested in training, and yet manufacturers report high levels of recruitment problems due to applicants' lack of appropriate skills.

Only 31% of manufacturing companies provided training to their employees, while 70% of employees were not interested in training. This is in a sector where 15% of employers identified skills gaps in their existing staff. At the same time, almost half of the long-term unemployed in London are ex-manufacturing workers - an indication that former manufacturing employees and their companies may find it more difficult to adapt to change and compete in a rapidly changing marketplace.

These statistics add substance to the newspaper headlines that have reported on the demise of manufacturing nationally and in the capital. In spite of being an exceptionally wide sector, the report was able to decipher clear trends with skill deficiencies at craft and technician level, and a need for production, purchasing, sales and marketing managers.

The study of the Manufacturing sector provides a clear indication of the importance of examining a sector's ability to react to change. A sector in which recent economic conditions, such as the high value of sterling, have lowered competitiveness and which is suffering from high levels of skills shortage has least interest in investing in skills development. Likely future macro-economic pressure on the industry, and its employees, only serves to emphasise the need to change its outlook. Manufacturing companies are competing in world markets and often increasing the technology used, but the changing skill needs are not being met, because of the continuing under investment in training and development amongst a workforce that has lower levels of formal education and training than its counterparts in most developed countries.

Key skills

The specific skills gaps which are repeated across all sectors include IT, management, and customer service skills. The impact of such shortfalls in capability as well as trends towards multi-skilling, and flexible working should not be underestimated. The evidence from the first annual report was that employers saw the weakness of employees in relation to key skills being as significant as the problem of technical/occupational skill deficiencies. The Skills

Forecasting Unit is to look, with the assistance of other organisations, at the development of a tool for measuring key skills capability in the workplace.

A new study - Construction

This major study on Construction in the capital – to be launched in April 1999 - is innovative in its methodology. The central part of the report is a completely new model of construction demand, which reclassifies construction activity into a number of key skill clusters.

Construction is one sector for which there are specific sectoral forecasts of output available. They are projected spending of construction client demand compiled by DETR. This spending forecast forms the basis for detailed models compiled by Construction Forecasting and Research Ltd, and by Business Strategies Ltd., in conjunction with the Construction Industries Training Board.

The London Skills Forecasting Unit commissioned the construction firm MACE, with support from EDAW, to produce a skills forecast from these spending forecasts. The forecasting model was developed by establishing, from a survey of construction firms, the skills that they would need to put up each particular type of building. The numbers of operatives with each skill are then aggregated across building types, according to the mix set out in the spending forecasts. This has produced a direct volumetric forecast for specific skills such as cladding, ducting, refrigeration, and demolition.

A gap analysis enabled the threads of the study to be drawn together and establish where the opportunities exist, in terms of job creation and improved training.

The Construction industry is looking to the increased standardisation of building components, so competence's related to working with standardised and pre-assembled modules are essential. Multi-skilling and flexibility across a number of different tasks are seen as fundamental skills requirements. The demand for employees offering installation and assembly skills is growing, as is the need for those offering the finishing trades – joinery, electrical, and decorating. Meanwhile, IT and other new technological developments are increasingly affecting work on-site both in terms of new construction and maintenance.

The future

The Skills Forecasting Unit is already looking towards the main issues to be examined in the second annual report at the end of 1999. An assessment of the voluntary sector in terms of the employment opportunities it provides and the skills levels of its workforce will be undertaken. The fast growing, but yet to be clearly defined cultural industries sector, will be appraised. Work will continue on indicators that get to the heart of business needs.

At the same time consideration is being given to another sector with specific output forecasts that could be turned into direct skills forecasts. Retail output is forecast for necessities and comparison goods, and yet the different economic cycles of these two businesses are being drawn together. Supermarkets now sell designer clothes, which requires somewhat different customer skills to selling vegetables. Furthermore the influence of IT at the checkout is set to grow further. These and other issues suggest a skills analysis of the sector is overdue.

The Skills Forecasting Unit will continue to influence the regional and national skills agenda. It has already given evidence to the National Skills Task Force, and the Unit has provided material for the London Development Partnership which is evolving a skills strategy for the capital. The London Skills Forecasting Unit will maintain its links with other Skills Observatories in Europe, and will continue to exchange information with a growing number of projects on skills developing in the regions.

As indicated earlier in the article, over the next 15 months the Unit is looking to take the issue of skills forecasting further by commissioning a feasibility study on a new methodology. And finally, the Skills Forecasting Unit will be working with partners to monitor the most pervasive of the skills issues reported – the weakness in key skills.

The London Skills Forecasting Unit expects its analysis of the skill needs of the capital to be right, and hopes that employers, employees, and education and training providers will use our findings to meet the challenges of plugging the skill gaps, and minimising the skills shortages in all sectors. We want the skills deficits of the capital's workforce to be much lower than we predict. We want to be wrong!

Conclusion

The work of the London Skills Forecasting Unit has demonstrated the importance of re-examining the qualitative data provided by surveys and sector studies in the light of economic forecasts as evidenced in studies of manufacturing and ethnic minorities. At the same time it has begun to demonstrate how it may be possible to project specific skills demand for very particular sectors through the construction study and the potential for work in the retail sector.

Employment Projections for the Thames Gateway

Paul Hadfield, Skills work.

Introduction

Skillswork is a £32 million SRB programme established to fund skills training, business development, educational attainment and access to employment projects within the five inner boroughs of London's Thames Gateway sub region. The Thames Gateway comprising the London Boroughs of Barking & Dagenham, Bexley, Greenwich, Havering, Hackney, Lewisham, Newham, Redbridge, Tower Hamlets and Waltham Forest plus the districts of Dartford and Thurrock.

The intention being for the Skillswork scheme to enable the people of some of Europe's most deprived boroughs to directly benefit from some of the most significant developments in the UK which are all taking place within the Thames Gateway sub region. These including the Millennium Dome in Greenwich, the Woolwich Arsenal, Canary Wharf phase 2, the Royal Docks Exhibition Centre, Channel Tunnel Rail Link (CTRL) stations at Ebbsfleet in Dartford and Stratford in Newham and the Blue Water retail complex also in Dartford.

As part of the process of baselining the current position and helping establish priorities for the use of the Skillswork Partnership's resources a projection of employment opportunities within the Thames Gateway for the coming seven years and beyond was commissioned.

Aims

The key aims of the study being, to establish a picture of the employment opportunities which are going to occur as a result of these developments, and to map a critical path related to the progress of development at the key sites, estimating potential employment and occupational projections for each major development.

The study, which was carried out on behalf of the Skillswork Partnership by London East TEC, being centred around using existing published documents, including planning frameworks, site impact assessments and employment projections based on standard land use estimates and forecasts of occupational structures for indus-

trial sectors.

Employment projections

The employment projections being calculated by estimating jobs per development from total site area compared against published estimates. Temporary construction sector jobs being calculated by area and value spread over construction time. Jobs generated through gradual occupancy being estimated over the initial letting period, and total jobs by occupation being calculated from current and future occupational structures data.

An in house model being constructed in Microsoft Excel, by LETEC staff, to enable updating of information and the future running of impact scenarios using any of the Cambridge Econometrics, IERLEFM or Business Strategies Limited local economic forecasting models.

The aim being to identify the number and type of jobs which would be created by the 130 plus individual development projects identified within the sub region in the short, medium and long term.

Findings

Among the findings of the study were that despite in 1995 there being 63,000 business units in the Thames Gateway employing 675,000 people or around 9.2% of the London total, 120,000 people are unemployed and actively seeking employment, 60,000 of whom are concentrated in the four boroughs of Lewisham, Hackney, Greenwich and Newham.

The developments likely to occur between 1998 and 2007 should create in excess 155,000 jobs within the Thames Gateway as a whole. With a large share of these initially being in Greenwich and in the longer term around a quarter in the Ebbsfleet and Dartford area, 46,000 new jobs being created by 1999 and 70,00 by 2003 across the Gateway.

60% of these new jobs will in the short term (end of 1999) be in the Construction, Hospitality/Leisure, Cultural and Technology sectors with 86% in the long term likely to be in Industrial, Office Administration and Retail sectors.

Sectors and skills

New jobs created in the key sectors by 2003 being Construction 9,800, Hospitality/Leisure 6,200 Cultural 3,000 and Technology 2,000 with 33,500 in the Office, 9,500 in retail and 8,700 in the industrial sectors.

By 2007 office administration jobs are expected to account for 53% of employment in the sub region as against 29% at present while the Manufacturing sector is likely

to continue to contribute around 11% of jobs.

In the long term(2007) 41% of the jobs being created will be in the managerial , administrative and professional category with around 38% of new jobs in this category by 2300.

Occupationally unskilled jobs being estimated to account for only 5% of all new jobs likely to be created by 2003 declining to virtually zero by 2007. A serious issue given that 41% of the work force currently have only basic literacy or numeracy skills.

Growth points

The Stratford CTRL station should alone create 15,000 new jobs by 2007. Tower Hamlets will by 2003 account for 31% of total employment in the sub region an increase from 16% in 1995 due to the impact of the next phase of the Canary Wharf development.

The research giving a real feel for what is likely to occur within the Thames Gateway area and flagging up the issues which all the agencies involved in training and human resource development need to be addressing to prevent skills shortages and bring about sustainable local employment.

A copy of the report can be obtained from Paul Hadfield at Skillswork Royal Arsenal Gatehouse, Beresford Square, Woolwich London SE 18 telephone 0181 316 7099.

Information on the Thames Gateway Employment Model is available from Roger Morphy at LETEC, Boardman House, 64 Broadway, Stratford E7. Telephone 0181 432 0000.

Labour Market Information - Either too much or too little?

Pat Hayes, Chief Executive of the Skillswork Partnership

As the Chief Executive of an SRB Partnership whose primary role is to fund the delivery of skills training and improve access to employment, accurate labour market information is of crucial importance to me.

As a result, I receive large numbers of requests to fund research projects, the establishment of skills observatories, and increasingly the development of web sites. These coming from local authorities, universities, FE colleges, TECs and even the voluntary sector.

Most of these requests are well intentioned, though a few are perhaps driven by the desire to find some core funding to support existing research staff, and in principal what they are proposing to offer is generally useful.

The growth in interest in this area of work does however seem to be fuelled by the advent of the internet and its associated technology. Every organisation in the employment and research fields now appear to feel they should be establishing some sort of interactive internet based information source.

The concern for agencies like my own being, that soon we could still have an overall shortage of accurate labour market data but, be in a position that what we do have is available from a myriad of possible sources in lots of slightly different forms. Public money being wasted on unnecessary duplication of provision and there being no one source for the full set of available data.

The primary concern to organisations like my own being, to ensure that the data being collected and disseminated electronically or otherwise, is actually meeting the needs of those who need the information for the planning of training and other investment. Is it being collected and presented with the needs of these users in mind?

One of the main issues practically with those organisations wanting to construct web sites or establish skills observatories (perhaps BURISA could offer a prize for anyone who can establish a common definition of what one of these is) being, that they seem to want to cater to an over large range of potential audiences rather than focussing on a particular client group and its information

needs. At the same time wanting to use their information resource as a branded product.

One organisation I was recently talking to, stated enthusiastically that they aimed to make a web site designed with the sub regions FE sector in mind accessible to the public, with no apparent consideration of whether the information they would be providing would be relevant, or of interest to the general public.

My suspicion in this instance being, that what the public want is access to lists of actual job vacancies rather than data on long term trends designed to help colleges plan courses.

Similarly, a local authority recently approached us seeking funding for a research project to provide labour market information to a consortium of community groups, but were completely thrown when asked if they knew what sort of information community groups actually needed, and whether anyone else was already providing it in an accessible format.

Of course, there is still a shortage of really up to date and responsive labour market information and a lack of authoritative sources which can be easily accessed, and this is an area that needs substantial investment in the coming years by a range of agencies.

At present many organisations are generating and jealously guarding their own information, either because they question the quality of that being produced by others, or wish to retain/reaffirm their own independence as a repository of knowledge.

The current uncertainty around the future of TECs, the establishment of various forms of regional government, and the changing role of agencies like the Employment Service, add to the confusion.

Those of us engaged in the employment and research industries, do however need to pause for breath and think what we actually need, at what level it is best held and collected, and who else we are seeking to provide it to before allowing the technology to lead us off into cyber space.

The importance of all the main social partners having access to the right data to enable them to plan for the future, being too important to leave to chance.

Events

SEPTEMBER 1999

Association for Survey Computing

**The University of Edinburgh, Scotland, UK
Third International 3-Day Conference of the
Association for Survey Computing
22nd-24th September 1999**

Contact: The Secretary, ASC, PO Box 60, Chesham, Bucks. HP5 3QH. Tel or Fax: 01494 793033. E-mail: asc@essex.ac.uk. Website: <http://www.assurcom.demon.co.uk>.

There will be eleven themes covering a wide range of topics that cover all aspects of Survey and Statistical Computing. There will be six invited speakers and forty-four other papers.

SEPTEMBER 1999

AGI Conference 1999

**Olympia, London
28th-30th September 1999**

Further details on the website: <http://www.agi.org.uk/pages/agiconference/agi99.htm>

Website News

LGA Census website:

www.lga.gov.uk/lga/2001census

It is intended to use this site, plus mailings from LGA to Chief Executives and Statistical Liason Officers, as the main route to conducting 2001 Census discussions within local government in England and Wales.

Editorial continued from page 1:

but no net growth. In trying to move beyond the standard occupational classification Phil uses DfEE Superclass, a very narrow skills-based classification that is the nearest thing the UK has to a standard description of skills.

Second Gary Lawson, of West Wales TEC, describes the Future Skills Wales project. This combines bi-annual forecasts with survey data from employers and the workforce. The survey information on employers and employees perceptions of skills needs is combined with expected trends in occupations and qualifications to suggest the skills which will be in the greatest demand. Whereas the Birmingham project has concentrated on job-related skills defined by occupations and qualifications, the Welsh project has concentrated on 'generic' or 'key' skills, which are 'transferable' between industries/occupations. This approach can suggest that number of trainees required for customer service or team working. The need for such 'key' or 'transferable' skills has become a major theme of training policy in recent years.

Thirdly, Trevor Carr presents the work of the London Skills Forecasting Unit. This work uses more soft information and combines different approaches. On the one hand the unit's forecast for the construction industry takes the direct approach by using skills profiles for particular types of buildings to turn forecasts of future construction activity into skills forecasts that cut across building types. On the other hand he suggests how it may be possible to forecast different sectors can react to changes in their markets through developing innovation and new skills.

The papers demonstrate the variety of solutions being adopted for skills forecasting in different regions of the UK. They suggest the advantage of skills forecasting in allowing industries and regions to anticipate the skills their workers need to remain competitive. Almost every region in the UK is developing such projects, and they are likely to form a regular facility for RDAs. As these papers indicate, this is a new area of research and an accepted toolkit has yet to be developed. Government needs to provide some guidance in this area to ensure that regional forecasts are consistent and can be built into a national framework such as that provided by the National Skills Taskforce.

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Contributions

Contributions may be anything from a "newsy" paragraph to a full-length article of up to 2,000 words. If supplying material on a 3.50 disk, please give details of the disk format used and, in any event, provide printed A4 hardcopy. Graphics are welcomed and should be provided on separate sheets.

MATERIAL FOR THE NEWSLETTER TO:

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PUBLICATION DATE	COPY DEADLINE	
	ARTICLES	SMALL ITEMS
139: 16.07.99	30.04.99	28.05.99
140: 17.09.99	25.06.99	23.07.99
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BURISA aims to promote better communication between people concerned with information and information systems in local and central government, the health services, utilities and the academic world through its regular newsletter and periodic conferences and workshops.

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