

2013

LMIP WORKING PAPER 3

Considering Firm Surveys

Key Data and Methodological Requirements and Issues

Carmel Marock

connecting capabilities individuals & institutions connecting capabilities individuals & ins

connecting capabilities individuals & institutions connecting capabilities individuals & ins



LABOUR MARKET
INTELLIGENCE PARTNERSHIP

Published in 2013 by the Labour Market Intelligence Partnership (LMIP),
a research consortium led by the Human Sciences Research Council (HSRC)

Designed, typeset and proofread by COMPRESS.dsl
www.compressdsl.com

Disclaimer

The HSRC-led consortium has released these working papers to inform debate, encourage different thinking about social problems and stimulate the development of novel policies. These working papers do not themselves represent policy advice. The ideas, opinions, conclusions or policy recommendations expressed in these working papers are strictly those of the author(s) and do not necessarily represent, and should not be reported as, those of the HSRC-led consortium or DHET. The HSRC-led consortium and its funders take no responsibility for any content or syntax errors, omissions in, or for the accuracy of, the information contained in these working papers.

CONTENTS

ABBREVIATIONS AND ACRONYMS	V
INTRODUCTION	1
1. WHAT IS THE PURPOSE OF COLLECTING DATA?	2
2. WHAT IS LABOUR MARKET INFORMATION?	3
2.1 Labour market information and skills development	4
3. CURRENT DATA COLLECTION	5
3.1 Routine data collection	5
3.1.1 Statistics South Africa	5
3.1.2 Andrew Levy Employment	6
3.1.3 ManpowerGroup	7
3.1.4 Quantec	7
3.1.5 Adcorp	7
3.1.6 SAGRA	7
3.1.7 Professional associations	7
3.2 Ad hoc research	8
3.2.1 University of KwaZulu-Natal	8
3.2.2 Human Sciences Research Council	8
3.2.3 University of the Witwatersrand	10
3.2.4 SAGDA	10
3.3 Workplace Skills Plans and Annual Training Reports	11
3.3.1 Prescribed minimum data requirements for WSPs/ATRs	11
3.3.2 Employee data collected in WSPs/ATRs by selected SETAs	13
3.3.3 Other data collection amongst SETAs	14
3.4 Mapping available data sources against KILM	15
4. ISSUES WITH THE AVAILABLE DATA	18
4.1 LMI availability and quality	18
4.1.1 Quantitative vs qualitative data	18
4.1.2 The relationship between occupation and skills	18
4.1.3 Firm-level survey data	19
4.2 Collection of LMI through WSPs/ATRs	23

5. LMI AND SKILLS DEVELOPMENT IN OTHER COUNTRIES	25
5.1 Canada	25
5.2 European Union	25
5.3 United States	27
5.4 United Kingdom	28
6. IMPLICATIONS FOR THIS FIRM SURVEY	31
6.1 Survey design	31
6.1.1 Target group	31
6.1.2 Questions	32
6.1.3 Length of questionnaires	33
6.1.4 Survey administration	33
6.1.5 Field testing	33
6.2 Buy-in and participation	33
6.3 Other issues	34
7. INPUT FROM THE WORKING GROUP	36
7.1 What is the purpose of the survey?	36
7.2 How will buy-in and participation from firms be ensured?	36
7.3 What should the focus of the pilot survey be?	37
REFERENCES	38
ANNEXURE A DESCRIPTIONS OF THE KEY INDICATORS OF THE LABOUR MARKET	43
ANNEXURE B O*NET SKILLS QUESTIONNAIRE	47
ANNEXURE C NATIONAL EMPLOYER SKILLS SURVEY 2011	69
ENDNOTES	115

ABBREVIATIONS AND ACRONYMS

ABET	Adult Basic Education and Training
AET	Adult Education and Training
AFS	Annual Financial Survey
ATR	Annual Training Report
BEE	Black Economic Empowerment
BMR	Bureau for Market Research
CATI	computer-assisted telephonic interview
CEDEFOP	European Centre for the Development of Vocational Training
CEO	chief executive officer
CHIETA	Chemical Industries Education and Training
CIPRO	Companies and Intellectual Property Registration Office
COPS	Canadian Occupational Projection System
DHET	Department of Higher Education and Training
EAS	Economic Activity Survey
ESD	education and skills development
EU	European Union
FASSET	Finance, Accounting, Management Consulting and other Financial Services Sector Education and Training Authority
GDP	gross domestic product
GHS	General Household Survey
HIV/Aids	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
HR	Human Resources
HSRC	Human Sciences Research Council
HWSETA	Health and Welfare Sector Educational Training Authority
ILO	International Labour Organisation
ISCO-88	International Standard Classification of Occupations 1988
KILM	Key Indicators of the Labour Market
LEED	Linked employer–employee data
LMES	Labour Market Entry Survey
LMI	labour market information
LMIS	labour market information systems
MD	managing director
MDG	Millennium Development Goal
merSETA	Manufacturing, Engineering and Related Services Sector Education and Training Authority
MQA	Mining Qualifications Authority
NESS	National Employer Skills Survey
NQF	National Qualifications Framework
NSDSI	National Skills Development Strategy I
NSDSII	National Skills Development Strategy II
NSF	National Skills Fund

O*NET	Occupational Information Network
OFO	Organising Framework for Occupations
PIVOTAL	Professional, Vocational, Technical and Academic Learning
PSETA	Public Service Sector Education and Training Authority
PTR	PIVOTAL Training Report
QES	Quarterly Employment Statistics Survey
QLFS	Quarterly Labour Force Survey
SAGRA	South African Graduate Recruiters Association
SASCO	South African Standard Classification of Occupations
SDL	Skills Development Levy
SETA	Sector Education and Training Authority
SIC	Standard Industrial Classification
SMMEs	small, micro and medium enterprises
SOC	standard occupational classification
SSP	Sector Skills Plan
Stats SA	Statistics South Africa
UK	United Kingdom
UKZN	University of KwaZulu-Natal
UN	United Nations
USD	United States Dollar
VAT	value-added tax
WES	Workplace and Employee Survey
W&RSETA	Wholesale and Retail Sector Education and Training Authority
WSP	Workplace Skills Plan
ZAR	South African Rand

INTRODUCTION

This document provides a broad definition of labour market information, concentrating on the type of labour market information required to support skills planning. It provides an overview of what, where and how this information is being collected (including how often and using what methods) and also indicates where there are gaps. It includes examples of the way in which Sector Education and Training Authorities collect data, focusing on the extent to which Workplace Skills Plans and Annual Training

Reports support the collection of relevant data. Other instruments that are currently used to collect data are also considered. The document also provides an overview of how relevant labour market information is collected internationally and highlights what we can learn from these processes. The implications of this learning for the implementation of a firm-based survey are assessed, as are the questions that need to be addressed prior to the implementation of such a survey.

1. WHAT IS THE PURPOSE OF COLLECTING DATA?

The starting point for a critical examination of current labour market information collection is clarity on exactly what the purpose of such data is. In the context of the skills environment there is a need to understand how the information will be used: to amend or adapt policy, undertake skills planning to determine priority interventions and monitor progress against certain labour market targets. There is also a need to understand the broader policy framework that informs the collection of information.

It is suggested that one key purpose of collecting and analysing labour market information is to understand the impact of skills development interventions. This means that information needs to be collected against indicators such as the levels of expenditure on training; the effect that this has on productivity and/or equity; the effect of training on individuals' ability to access quality jobs; the way in which training supports progression, and the extent to which it is enabling unemployed people to access sustainable employment.

Another important purpose is the forecasting component of skills development policy and a consideration of how well data collection serves this purpose. Skills development is by definition a longer-term process; forecasting should therefore determine what skills will be in demand at some future point. In a dynamic economic and policy environment, current skills demand and short-term projections by employers is useful for immediate strategies to address these needs (short-term training programmes or importation of skills) but cannot support planning for skills demand in three, five or ten years' time. This is particularly the case in South Africa, where policy such as the National Development Plan aims to effect significant changes

to the structure of the economy, and, therefore, the labour market. There are, however, a number of difficulties with respect to accurate skills demand forecasting:

The demand for skills is determined by many factors. Major ones include: the advent of technology; the macro-economic state of the domestic economy and of the economies of trading partners; the amount of capital investment and its distribution between industries; changes in governmental policy; and the interactions of these factors. The changes in demand for skills reflect technological innovation, the strategies that firms and employers adopt, and the tastes of eventual consumers. Were it possible for economists to forecast the dynamics of these factors, it would be a way of forecasting skill demand. But to do so is extremely difficult. An important reason is because labour demand is sensitive to non-linear trends and exogenous factors, such as technological innovation, policy intervention, and economic cycles (Richardson & Tan 2008).

These authors highlight the challenges inherent in skills forecasting – and the depth and width of labour market information that will be required to support the monitoring of the indicators associated with forecasting.

This data may also be required for other reasons. These need to be understood and their implications for labour market information outlined in order to determine what data is available and where the gaps may be.

2. WHAT IS LABOUR MARKET INFORMATION?

Labour market information (LMI) is:

material and data about the supply and demand for labour within a certain labour market. LMI covers economic, social, demographic and labour force data. It describes the characteristics of the supply of labour: the people who are workers or potential workers in the market. It also provides information on demand: job opportunities in the market and the needs of employers. Future needs of existing employers and of new employers who will enter the market are also considered within LMI. Often, a wide range of information must be collected and analysed to describe important features of the labour market. LMI often gives historical, current and forecast information. As indicated previously, different users have different information needs (Skills & Learning Intelligence Module 2010: 5).

The following set of criteria for assessing the quality of an information system is suggested:

Firstly, an information system is relevant if it is instrumental in the achievement of the objectives set for an organisation or for a country as a whole (economic and social objectives). The yardstick of the effectiveness of an information system – the second criterion – is whether it produces the planned outputs. Thirdly, a system is efficient if it produces outputs without wasting resources, for example with respect to the interaction of the various components of the system. All three criteria are related to the fourth criterion – the sustainability of the information system. The definitions of LMI and LMIS [labour market information systems] suggested here

imply that a relevant information system should provide those responsible for the formulation, monitoring and evaluation of labour market policies and programmes with adequate information. Policy-makers are important users of the information system, and the system should therefore also be an integrated part of the structure or cycle for labour and employment policy development (Sparreboom 1999: 3–4).

To ensure that a relevant information system is available for the formulation, monitoring and evaluation of labour market policies and programmes, the International Labour Organisation (ILO) has identified 18 Key Indicators of the Labour Market (KILM) against which information should be collected and analysed (Table 2.1). The KILM Programme was launched in 1999, and:

was originally designed with two primary objectives in mind: (1) to present a core set of labour market indicators; and (2) to improve the availability of [the data related to] the indicators to monitor new employment trends. The indicators were chosen in a collaborative effort involving the ILO Employment Sector and the Department of Statistics in consultation with experts from ILO field offices, the Organisation for Economic Cooperation and Development and several national representatives from Ministries of Labour and national statistical offices. The selection of the indicators was based on the following criteria: (a) conceptual relevance; (b) data availability; and (c) relative comparability across countries and regions (International Labour Organisation 2011: 1).

Table 2.1 The 18 Key Indicators of the Labour Market (KILM). (Detailed descriptions of these indicators are given in Annexure A.)

	Participation in the world of work
1	Labour force participation rate
	Employment indicators
2	Employment-to-population ratio
3	Status in employment
4	Employment by sector
5	Employment by occupation
6	Part-time workers
7	Hours of work
8	Employment in the informal economy
	Unemployment, underemployment and inactivity indicators
9	Unemployment
10	Youth unemployment
11	Long-term unemployment
12	Time-related underemployment
13	Inactivity
	Educational attainment and illiteracy indicator
14	Educational attainment and illiteracy
	Wage and compensation cost indicators
15	Average monthly wages
16	Hourly compensation costs
	Labour productivity indicator
17	Labour productivity
	Poverty, income distribution and the working poor indicator
18	Poverty, income distribution and the working poor

2.1 Labour market information and skills development

It is suggested that, depending on the agreed-upon purpose of the information, not all of the KILM will be directly relevant. However, on the understanding that the LMI will minimally be used to understand the impact of skills development and for skills forecasting, a core set of indicators is proposed as being most relevant.

Through an analysis of [labour market] indicators over time it is possible to

understand labour market changes and to make interpretations about the supply and demand for different types of skills. In other words, labour market analysis can be used to identify signals about labour market and skills trends based on real data or observations (Sparreboom & Powell 2009: 3).

The ILO has identified the following labour market indicators as having direct relevance to skills development (Ibid.: 4):

- *Employment trends (by occupation, sector, status in employment and geographical area);*
- *Unemployment trends;*
- *Trends and levels of educational attainment/skills development in the labour force;*
- *Wage trends;*
- *Productivity trends; and*
- *Contribution to GDP [gross domestic product] by different economic sectors/geographical areas.*

The 11 indicators listed in Table 2.2 are therefore considered to be critical to an analysis of skills development requirements.

Table 2.2: The 11 KILM critical to an analysis of skills development requirements. (Detailed descriptions of these indicators are given in Annexure A.)

3	Status in employment
4	Employment by sector
5	Employment by occupation
6	Part-time workers ¹
7	Hours of work
9	Unemployment
10	Youth unemployment
11	Long-term unemployment
14	Educational attainment and illiteracy
15	Average monthly wages
17	Labour productivity

3. CURRENT DATA COLLECTION

In this section we consider current routine and ad hoc data collection mechanisms, as well as some of the complexities and issues that need to be taken into account when reviewing the data.

3.1 Routine data collection

Aside from the data collected by Sector Education and Training Authorities (SETAs) through Workplace Skills Plans (WSPs) and Annual Training Reports (ATRs) (covered in detail in 3.3 'Workplace Skills Plans and Annual Training Reports'), the following organisations, both public and private, routinely collect LMI relevant to skills planning in South Africa:

- Statistics South Africa;
- Andrew Levy Employment;
- Manpower Group;
- Quantec;
- Adcorp;
- South African Graduate Recruiters Association; and
- Various professional associations.

3.1.1 Statistics South Africa

General Household Survey

The General Household Survey (GHS) has been conducted annually by Statistics South Africa (Stats SA) since 2002. The survey collects information on a variety of subjects including education, health, the labour market, dwellings, access to services and facilities, transport, and quality of life.

The survey was introduced to address a need identified by the Government of South Africa to determine the level of development in the country and to measure, on a regular basis, the performance of programmes and projects that were implemented to address these needs. The survey is specifically designed to

measure multiple facets of the living conditions of South African households, as well as the quality of service delivery in a number of key service sectors. The GHS covers six broad areas, namely education, health and social development, housing, household access to services and facilities, food security, and agriculture (Statistics South Africa 2012: 1).

The key labour market indicator that can be extracted from the GHS is the data related to education. The latest available report (as of October 2013) is the 2012 GHS (Statistics South Africa 2013a).

Quarterly Labour Force Survey

The Quarterly Labour Force Survey (QLFS) was first conducted in January 2008 and is specifically designed to measure the dynamics of the South African labour market, producing indicators such as data on employment, unemployment and inactivity. It measures a variety of issues related to the labour market, including the official unemployment rate. It is published quarterly and the latest available report (as of October 2013) covers the second quarter of 2013 (Statistics South Africa 2013b).

Quarterly Employment Statistics Survey

The Survey of Employment and Earnings was a quarterly survey with a sample of just over 10 000 enterprises, both public and private. It excluded very small enterprises (those with a value-added tax (VAT) turnover of less than ZAR300 000 per annum). The survey was discontinued in 2005 and replaced by the Quarterly Employment Statistics Survey (QES) (Statistics South Africa 2013c) to bring South African data collection in line with ILO definitions and concepts. The QES focuses on employing businesses in the formal sector only, covering a

sample of approximately 20 208 VAT-registered private and public enterprises in the formal non-agricultural sector. The survey collects the following information for eight of the nine Standard Industrial Classification (SIC) sector classifications (agriculture is excluded):

- The number of persons employed in the organisation;
- Gross earnings paid;
- Bonuses paid;
- Overtime payments; and
- Severance, termination and redundancy payments paid to employees for each month of the reference quarter.

Not all data is sourced directly from employers – data on the mining and quarrying sector, for example, is provided by the national Department of Mineral Resources. Stats SA reports a current 86.8% response rate.

Annual Financial Statistics

The Annual Financial Statistics survey (AFS), previously published as the Economic Activity Survey, contains estimates of financial data for the following industries (Statistics South Africa 2012):

- Forestry and fishing;
- Mining and quarrying;
- Manufacturing;
- Electricity;
- Gas and water supply;
- Construction;
- Trade;
- Transport;
- Storage and communication;
- Real estate and other business services (excluding financial intermediation and insurance, but including activities auxiliary to financial intermediation); and
- Community, social and personal services (excluding government institutions).

The AFS is designed to provide information on selected income and expenditure items, capital expenditure on new and existing assets and the book value of fixed and intangible assets at the end

of the financial year for the South African-based activities of the enterprise (ibid.).

Census

In the past, a population census was conducted every five years, but because of a lack of capacity within Stats SA, the interval was extended to ten years; the most recent census was held in October 2011 (Statistics South Africa 2011).

3.1.2 Andrew Levy Employment

The private-sector organisation Andrew Levy Employment publishes the Andrew Levy Wage Settlement Survey Quarterly Reports (Andrew Levy Employment 2012). The reports are focused on providing employers with wage and labour market information. The surveys cover the following (Andrew Levy Employment 2013):

- Labour market analysis;
- Pertinent legislative changes;
- Current economic indicators, for example, the Consumer Price Index and the Consumer Price Index excluding interest rates on mortgage bonds;
- Average level of settlement by union and sector;
- Average minimum wage and wage ranges;
- Outsourcing and retrenchment patterns;
- Non-wage demands and management counterdemands;
- Outcome of centralised bargaining agreements; and
- Industrial action monitoring – analyses of man-days lost to strikes.

Most of the information in the Wage Settlement Report comes directly from subscribers to the survey, who forward the outcome of their negotiations in the form of a comprehensive questionnaire to Andrew Levy Employment. Data is submitted when wage negotiations are completed (ibid.). Andrew Levy provides a confidentiality guarantee, so it is unlikely that the source data would be shared, though it would be useful to consider what data analysis is possible. We have requested information on the manner in which Andrew Levy Employment gains access to this firm data, the number of subscribers from whom information is drawn, the level of support that they

provide and the way in which the data is verified. Thus far the company has indicated that they cannot provide this information. This will, however, be pursued and if possible, included in the next draft of this review.

3.1.3 ManpowerGroup

The ManpowerGroup organisation prepares the Manpower Employment Outlook Survey (Manpower 2013a). The survey is based on interviews with 750 employers, who are asked the question 'How do you anticipate total employment at your location to change in the next three months as compared to the current quarter?' (Manpower 2013b: 1). This is a regular, global survey conducted on a quarterly basis (ibid.). The incentive for participation is getting a copy of the final detailed report.

In South Africa, the survey provides data disaggregated at five regions – the Eastern Cape, Free State, Gauteng, KwaZulu-Natal and the Western Cape. Data is shown at ten sectoral levels that largely reflect the nine SIC sectors (Restaurants and Hotels were separated from Wholesale and Retail Trade – although usually these categories would be clustered together in SIC 6).

3.1.4 Quantec

Quantec is a private data collection company that provides data on demographics, labour, prices, general economic indicators, financial and capital markets, public finance, balance of payments statistics, national accounts and industry data (Quantec 2013). Quantec gets the bulk of its underlying data from Stats SA and then applies its own disaggregation methodologies. It is a popular resource for local government, since Stats SA data is generally not available at municipal level.

3.1.5 Adcorp

Adcorp puts out a monthly employment index containing estimates of overall employment and a breakdown by employment type and sector (Adcorp 2013).

Adcorp makes use of the data that is available to them as an employment services company. This includes data around placements, job search times, work applications, skills development levies,

Unemployment Insurance Fund claims and similar (ibid.). This is potentially a rich source of data, but the published reports do not contain this level of detail.

Adcorp's data and methodology have been heavily criticised, particularly by academics (Kerr & Wittenberg 2012a, b). Some of the Adcorp statistics (especially their unemployment and graduate unemployment data) do not correlate at all with other sources, which raises a concern about the extent to which this data can be used in an LMI system.

3.1.6 SAGRA

The South African Graduate Recruiters Association (SAGRA) undertakes an annual graduate recruitment and candidate survey (SAGRA 2013). The survey is based on responses from 80 employer organisations, which SAGRA has identified as 'the largest and most well known graduate employers in South Africa' (SAGRA 2012).

SAGRA also publishes an annual Candidate Survey (ibid.), based on an online questionnaire for new or future graduate employees. The 2013 survey covered more than 1 800 such individuals (ibid.). The SAGRA surveys contain important qualitative data about how employers perceive the 'right skills and degree mix' (ibid.: 1).

3.1.7 Professional associations

Some professional bodies also collect labour market information of direct relevance to their professions; for example, the South African Institute of Chartered Accountants collects the following data:

- Annual supply numbers (information from tertiary institutions on accounting related qualifications);
- Information on the number of training contracts signed;
- Membership data, by occupation, sector, status in employment and geographical area;
- Some unemployment data; and
- Wage trends, from a training contract, not post-qualification, perspective. However, they do make use of a global salary survey conducted by Robert Walters, which they recognise as an authoritative source on salary

levels in the South African accounting profession.

Other professional bodies, such as those for engineers, medical doctors, nurses, pharmacists, teachers, veterinarians and social workers, where professionals are required by law to be registered in order to practice, will have data sets on the numbers of registered professionals. Unfortunately, with the exception of the Engineering Council of South Africa and the Health Professions Council of South Africa, capacity constraints within these professional bodies mean that the data is not particularly reliable.

3.2 Ad hoc research

The focus of the previous section was on labour market data that is collected regularly. Another source of information is research projects focusing on labour market and skills development requirements in South Africa, which include a firm survey within their methodological design.

3.2.1 University of KwaZulu-Natal

Researchers at the school of Population Studies and Development Studies at the University of KwaZulu-Natal (UKZN) surveyed manufacturing firms in the greater Durban area regarding competitiveness and industrial structure (Valodia & Velia 2006). The survey was first done in 2002–2003 and data was collected from one in every three medium and large manufacturing firms (Population Studies & Development Studies 2013a) – about 600 in total (Population Studies & Development Studies 2013b). The aim of the survey was to inform local and national policy about constraints to manufacturing growth, briefly touching on whether or not skills shortages were a constraint to growth (Valodia & Velia 2005). It is understood that this survey will be repeated in 2013.

3.2.2 Human Sciences Research Council

The Human Sciences Research Council (HSRC) has a dedicated unit focusing on education and skills development (ESD). The unit's areas of research are broader than the scope of this investigation and include work around the wider education sector and education policy.

HSRC research tends to focus on the generation of ad hoc, detailed and comprehensive research on particular focus areas, rather than the maintenance of a detailed database. There has been a strong focus on the link between skills development and 'employability' – one of the key qualitative issues to be addressed in a comprehensive skills policy.

The following five skills-forecasting projects were undertaken by the HSRC between 1999 and 2004 (Wilson et al. 2004):

- *South African Labour Market Trends and Future Workforce Needs, 1998–2003* (Whiteford et al. 1999): This study of labour market trends and workforce needs from 1998 to 2003 covered eight of the nine SIC sectors (excluding agriculture). Detailed forecasts for skills demands were made at a sub-sector level for 68 professional and 10 artisanal occupation categories.
- *Key Skills Shortages and the Fast Tracking of Skills Development* (Van Aardt 2001): The Bureau for Market Research was appointed to investigate skills shortages and how to fast-track skills development. The study made recommendations about where the need for skills would be greatest.
- *Forecasting the Demand for Scarce Skills, 2001–2006* (Woolard et al. 2003): The earlier HSRC study by Whiteford et al. (1999) was updated to calculate employment forecasts for specific high-skill occupations for the period 2001–2006.
- *A Skills Analysis of the Financial, Accounting, Management Consulting and Other Financial Services Sector* (Van Zyl et al. 2003): A fairly basic skills demand projection model was developed for the SETA for Finance, Accounting, Management Consulting and other Financial Services (FASSET). It forecast changes in employment opportunities in the sector for the period 2002–2008.
- In 2003 Chemical Industries Education and Training (CHIETA) and the Department of Trade and Industry commissioned the HSRC to undertake a study on skills needs in the chemicals sector (Altman 2004). The study

provided a forecast for the overall sector and nine sub-sectors.

The studies employed different methodologies and made use of different data sets and combinations thereof, although Wilson et al. (2004) state that the models employed by the SETAs referred to above could generally be considered very basic and unsophisticated. Each study generated a detailed forecast of skills in various areas. We suggest that now that a reasonable period of time has elapsed since the forecasts were undertaken (between 11 and 14 years) it could be a very useful exercise to assess both where they were correct and where they were not. This could be a valuable input into designing future studies; for example, it could assist in clarifying the link between occupations and skills.

Recent relevant research includes the Impact Assessment of the National Skills Development Strategy II (NSDSII) project by the HSRC and the Development Policy Research Unit (DPRU) at the University of Cape Town (UCT), funded by the Department of Labour (Kruss et al. 2012). The project assessed and evaluated progress in skills development since the implementation of the NSDSII in March 2005. The research project covered three thematic areas:

- The impact of skills development on the placement of learners on completion of the programme;
- The impact of skills development support on large, medium and small firms, government, Black Economic Empowerment (BEE) firms and BEE cooperatives; and
- Progress evaluation of policies to increase high-level scarce and critical skills for employed workers and unemployed learners.

The following research reports were generated as part of the project:

- *Scarce Skills Information Dissemination: A Study of the SETAs in South Africa* (Goga & Van der Westhuizen 2012);
- *The NSF as a Mechanism to Address Skills Development of the Unemployed in South Africa* (Du Toit 2012);

- *The Impact of Work Experience Grants on Learner Placement* (Oosthuizen 2012);
- *Impact Assessment of Skills Development on Service Delivery in Government Departments* (Pillay et al. 2012a, b);
- *A Technical Report on Learnership and Apprenticeship Population Databases in South Africa: Patterns and Shifts in Skills Formation* (Janse van Rensburg et al. 2012);
- *Learnerships and Apprenticeships Survey 2010 Technical Report: Identifying Transitions and Trajectories through the Learnership and Apprenticeship Systems* (Wildschut et al. 2012);
- *HWSETA Case Study 2011: Skills Development for the Health and Social Development Sectors* (Wildschut 2012);
- *MERSETA Case Study 2011: Skills Development for the Metal and Related Services Sector* (Mummenthey, Kruss & Wildschut 2012a);
- *FASSET Case Study 2011: Skills Development for the Financial Sector* (Mummenthey Kruss & Wildschut 2012b); and
- *Developing Skills and Capabilities through the Learnership and Apprenticeship Pathway Systems. Project Synthesis Report. Assessing the Impact of Learnerships and Apprenticeships under NSDSI* (Kruss et al. 2012).

The methodology employed in this research is of particular interest; for example, the research project that focused on learnerships and apprenticeships (Mummenthey, Wildschut & Kruss 2012) had the following three components:

- Analysis of population datasets to determine numbers and levels of skills produced;
- Two surveys focusing on learnership and apprenticeship participants; the learnership survey was longitudinal, tracking a group for the period 2005–2010; and
- Three case studies – of low, intermediate and high-level skills sectors – including interviews with employers, SETAs and training providers.

Through this research the HSRC identified a number of challenges relevant to the implementation of firm surveys. These challenges, related to the quantitative data available, are discussed in 4.1.3 'Firm-level survey data'. Nevertheless, the project generated a

significant amount of qualitative data around the alignment between skills required by employers, and those provided by the current skills development strategies, with a particular focus on skills development by SETAs.

3.2.3 University of the Witwatersrand

The Labour Market Entry Survey (LMES) of the Centre for Researching Education and Labour at the University of the Witwatersrand focused on youth employment, recruitment and a youth-targeted wage subsidy (Schöer & Rankin 2011). The aim of their research report was to investigate the employment process of young South Africans from the point of view of firms, and firm-level responses to the implementation of a targeted hiring voucher for young people. The authors reported that job search and job matching is particularly poor in South Africa, which accounts for the high number of discouraged job seekers. They criticised the lack of demand-side (i.e. employer) data in unemployment statistics, which focus almost entirely on the supply side (i.e. workers).

A telephonic firm survey was part of the LMES. The sample was drawn from two sources – the Companies and Intellectual Property Registration Office (CIPRO) database and a sample of firms that the survey had indicated employed at least one young African person. A total of 112 firms were interviewed, with 15 of them answering shortened questionnaires owing to indicated time constraints (ibid.).

Although the focus of the research was to test firm response to a hypothetical youth employment voucher, the report also provides some valuable information around training and skills development, as well as firm recruitment behaviour.

This work was updated in a study by Tasha Naughtin, Neil Rankin, and Volker Schöer, which drew on data from a sample of 605 firms interviewed over the period 2010–2012, investigating how responses to a youth wage subsidy may differ across firms with different characteristics. It included the sample of firms interviewed as part of the LMES and a group of firms randomly drawn from a sampling frame obtained from CIPRO; the second group was sampled to provide a better overview of

the population of firms as a whole, and to provide a contrast to the types of firms that employ young people. Naughtin et al. report that:

- The majority of firms (59%) were in the manufacturing sector;
- Most firms were in the 20–49 or 50–199 employee size group (25% and 27%, respectively) and the median-sized firm employed 35 workers;
- The median monthly wage for unskilled youth was ZAR3 000;
- Most firms had a relatively small share of young people in their sample; and
- On average young employees represented 21% of the total workforce, with 22% of firms in the sample indicating that they employed no young workers at all.

The study found that the probability of employing young workers increases with firm size. Firms with more than 200 employees are 17% more likely to employ young people than firms with 20–49 employees, whereas those with fewer than ten employees are 22% less likely.

Naughtin et al. also discuss:

- Recruitment methods;
- The characteristics that firms consider when hiring young people;
- The extent to which firm-level characteristics are associated with whether a firm would take up a wage subsidy or not;
- The extent to which firms would increase youth employment based on different subsidy amounts;
- Issues relating to firm vacancies; and
- Opinions on labour regulations.

3.2.4 SAGDA

The South African Graduates Development Association (SAGDA) is a non-profit organisation with a particular focus on preparing unemployed graduates to enter the world of work. It is a potentially useful source of information around the qualitative issues that create mismatches between the skills that people have and the skills that organisations require.

According to their website, SAGDA will ‘produce and distribute [an] encyclopaedia of scarce and critical skills with SETAs’ (SAGDA 2013). It is not clear how far this project has progressed.

3.3 Workplace Skills Plans and Annual Training Reports

One of the key sources of LMI in South Africa is the data collected by SETAs through the annual WSP and ATR submission process. A WSP is a strategic document that outlines how an individual employer plans to address the training and development needs of the workplace in the forthcoming year, while the ATR (usually incorporated into the WSP) provides information on what training was conducted in the previous year. According to the skills development legislation, employers with more than 50 employees are required to submit a WSP/ATR by 30 June each year if they wish to claim their mandatory grant, a portion of the Skills Development Levy (SDL) paid by all employers with more than 50 employees.

3.3.1 Prescribed minimum data requirements for WSPs/ATRs

In terms of the Skills Development Regulation in force before December 2012, the minimum

prescribed data for inclusion in a WSP was as follows:

- Details of employer and skills development facilitator;
- Annual Skills Priorities: Strategic skills priorities for the forthcoming financial year;
- WSP: Number of people to be trained during the current financial year (current employees at the defined occupational level, current employees earmarked for development at the defined level and external recruits, including 18.2 learners at the defined level) by occupational category and race, gender and disability; and
- ATR: Number of people who were trained during the past financial year (current employees at the defined occupational level, current employees earmarked for development at the defined level, and external recruits, including 18.2 learners at the defined level) by occupational category and race, gender and disability.

New regulations published in December 2012 outline the minimum requirements for WSPs (Table 2.3). They also introduce the concept of a Professional, Vocational, Technical and Academic Learning (PIVOTAL) Training Plan.

Table 3.1: The prescribed minimum data requirements for WSPs

Private sector	Public sector
<i>Section A: Administrative Details</i>	<i>Section A: Administrative Details</i>
Entity name, SDL Number, Address, SIC Code	Entity name, SDL Number, Address, SIC Code
Details of person who completed the form	Details of person who completed the form
Banking details	Contact details of the chief financial officer
<i>Section B: Employment Summary</i>	<i>Section B: Training Budget</i>
Total number of employees by occupational category, by gender, race, disability, age and geography (local municipality)	Total personnel budget for the current financial year
Total number of employees in each province	1% of the personnel budget
	Total planned training budget for the current financial year
	Additional funding planned for the current financial year
<i>Section C: Skills Development</i>	<i>Section C: Employment Summary</i>
Planned beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality)	Total number of employees by occupational category, by gender, race, disability, age and geography (local municipality)
Planned training for unemployed by occupation and level (entry, intermediate and advanced)	
Planned training for employed by occupation and level (entry, intermediate and advanced)	
Planned Adult Education and Training (AET) (total number only)	

Private sector	Public sector
<p><i>Section D: Annual Training Report</i></p> <p>Actual beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality)</p> <p>Number of beneficiaries who completed training by occupation and level (entry, intermediate and advanced)</p> <p>Number of beneficiaries who completed AET (total number only)</p> <p>Impact Assessment – indicate how training as reported in the ATR and PIVOTAL Training Report (PTR) has affected the company; provide percentage of payroll spent on training</p>	<p><i>Section D: Scarce Skills</i></p> <p>Occupation, reason for scarcity, projected number of staff needed, number of qualified persons imported from outside South Africa</p>
<p><i>Section E: Planned PIVOTAL Training</i></p> <p>Planned beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the National Qualifications Framework (NQF) Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Verified beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Planned training for unemployed by occupation and level (entry, intermediate and advanced), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Planned training for employed by occupation and level (entry, intermediate and advanced), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p>	<p><i>Section E: Skills Development</i></p> <p>Strategic objectives described in the entity's strategic or business plan</p> <p>Strategic training priorities of the entity derived from the strategic objectives</p> <p>Planned beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality)</p> <p>Planned training for unemployed by occupation and level (entry, intermediate and advanced)</p> <p>Planned training for employed by occupation and level (entry, intermediate and advanced)</p> <p>Planned AET (total number only)</p>
<p><i>Section F: PIVOTAL Training Report</i></p> <p>Actual beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Actual verified beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Actual training for unemployed by occupation and level (entry, intermediate and advanced), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Actual training for employed by occupation and level (entry, intermediate and advanced), provide the NQF Level, name of PIVOTAL Programme and start and end date of the training</p> <p>Impact Assessment – indicate how training as reported in the ATR and PTR has affected the company; provide percentage of payroll spent on training</p>	<p><i>Section F: Annual Training Report</i></p> <p>Actual beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality)</p> <p>Number of employed beneficiaries who completed training by occupation and level (entry, intermediate and advanced)</p> <p>Number of unemployed beneficiaries who completed training by occupation and level (entry, intermediate and advanced)</p> <p>Number of beneficiaries who completed AET (total number only)</p> <p>Expenditure of training budget, by learning programme and employed/unemployed</p> <p>Expenditure of additional budget, by source, amount and project</p> <p>Impact Assessment – indicate how training as reported in the ATR and PTR has affected the company; provide percentage of payroll spent on training</p>
<p><i>Section G: General Comments</i></p> <p>Insert any clarification or comment that you wish to make on any aspect of the WSP, ATR and PTR</p>	<p><i>Section G: Planned PIVOTAL Training</i></p> <p>Planned beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the name of PIVOTAL Programme</p> <p>Verified beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the name of PIVOTAL Programme</p> <p>Planned training for unemployed by occupation and level (entry, intermediate and advanced), provide the name of PIVOTAL Programme</p> <p>Planned training for employed by occupation and level (entry, intermediate and advanced), provide the name of PIVOTAL Programme</p> <p>Expenditure of training budget, by learning programme and employed/unemployed</p> <p>Expenditure of additional budget, by source, amount and project</p>

Private sector	Public sector
<p><i>Section H: Authorisation and Stakeholder Support Declaration</i></p> <p>Signatories – person who completed the report and designated employee representative</p> <p>Authorisation – CEO or MD</p>	<p><i>Section H: PIVOTAL Training Report</i></p> <p>Actual beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the name of PIVOTAL Programme</p> <p>Actual verified beneficiaries of training by occupational category, by gender, race, disability, age and geography (local municipality), provide the name of PIVOTAL Programme</p> <p>Actual training for unemployed by occupation and level (entry, intermediate and advanced), provide the name of PIVOTAL Programme</p> <p>Actual training for employed by occupation and level (entry, intermediate and advanced), provide the name of PIVOTAL Programme</p> <p>Expenditure of training budget, by learning programme and employed/unemployed</p> <p>Expenditure of additional budget, by source, amount and project</p>
	<p><i>Section I: General Comments</i></p> <p>Insert any clarification or comment that you wish to make on any aspect of the WSP, ATR and PTR</p>
	<p><i>Section J: Authorisation and Stakeholder Support Declaration</i></p> <p>Signatories – person who completed the report and designated employee representative</p> <p>Authorisation – CEO or MD</p>

There are a number of aspects of this form that will need to be looked at once the data is collected:

- The way in which employers report on their employment figures (Section C of the private sector template and Section E of the public sector);
- The definition of additional funding in Section B within the public sector template (over and above the totals already required within the template); and
- The concept of scarce and critical skills, which is included in Section D of the public sector template but seemingly excluded from the private sector template; and
- Where private sector employers should report their levels of expenditure on training.

Some SETAs indicate that while some companies report on all training that is planned and that has taken place, others may only report the training covered by the grants. The extent to which this is ambiguous in the templates provided to companies needs to be explored.

The other aspect that should be explored is whether there is merit in having a standardised template used by all SETAs for WSP/ATR submission. The

guidelines outlined in the regulations and detailed in Table 3.1 are minimum requirements; SETAs are free to add to these and to determine their own format. Consequently, SETAs use different formats and have different levels of data collection, which may further compromise the comparability of data being collected through WSPs/ATRs.

3.3.2 Employee data collected in WSPs/ATRs by selected SETAs

This review considered the WSP/ATR formats and processes used by the following six SETAs:

- Chemical Industries Education and Training (CHIETA);
- Finance, Accounting, Management Consulting and other Financial Services (FASSET);
- Manufacturing, Engineering and Related Services Sector Education and Training Authority (merSETA);
- Mining Qualifications Authority (MQA);
- Public Service Sector Education and Training Authority (PSETA); and
- Wholesale and Retail Sector Education and Training Authority (W&RSETA).

In relation to employee information, the six SETAs collect data in slightly different ways:

- CHIETA and the MQA currently collect information on employee demographics, education and occupation, by employee and at the six-digit Organising Framework for Occupations (OFO) code level.
- W&RSETA and merSETA also collect information at the six-digit OFO level, but not per individual employee. Rather, employers submit the data by the OFO descriptor, demographics and education levels; that is, employers will group all their employees with the same six-digit OFO job description and the same demographic profile when they complete the WSP/ATR form.
- FASSET will be implementing a similar level of data-gathering in the 2013/14 cycle (submission in June 2013), although some of the information required will be voluntary in the first year of submission. Table 3.2 shows the type of employee data that FASSET will be collecting; this is similar to that collected by other SETAs.
- PSETA only collects employee information at the one-digit OFO level, which relates to major occupational categories.

Table 3.2: Employee data collected by FASSET in the 2013/14 cycle

Identity document number and type	Compulsory
Date of birth/age	Compulsory
Gender	Compulsory
Population group/race	Compulsory
Disabled	Compulsory ²
South African citizen	Compulsory ³
Nature of employment contract (full-time or part-time)	Voluntary ⁴
Type of employee (permanent or temporary)	Voluntary
Highest qualification type	Voluntary
Highest National Qualifications Framework level	Voluntary
Relevant professional designation	Voluntary
Relevant professional body	Voluntary
Geographic location of employee (rural or urban area)	Compulsory
Postal code of the area in which the employee is employed	Compulsory
Place (village, town, city) in which employee is employed	Compulsory
Local municipality in which employee is employed	Compulsory
Province in which employee is employed	Compulsory
One-digit OFO code	Compulsory
One-digit OFO description	Compulsory
Six-digit OFO code	Voluntary
Six-digit OFO description	Voluntary
Specialisation linked to six-digit OFO code	Voluntary
Job title	Voluntary

The employee data collected from the WSPs is then rolled up into Sector Skills Plans (SSPs). Each SETA is required to submit a five-year SSP to the Department of Higher Education and Training (DHET), with annual updates. In terms of the new Skills Development Regulations, the SSP is also linked to an Annual Performance Plan, which must set out priorities for training in the sector. The data collected through the WSPs/ATRs must 'contribute' to the SSP, and the SSP also needs to take into account 'national strategic goals as set out in the National Skills Development Strategy, the National Skills Accord and other relevant national priorities'.

In relation to more qualitative data, all SETAs are required to consult with stakeholders prior to submission of the SSP and the annual updates. This has the potential to provide an opportunity for strategic issues emanating from the data to be discussed and debated by employers, employee representatives and relevant government departments, although SETAs report that this is at best uneven; in many cases those individuals within the company who have a strategic sense of the direction of the company do not participate in the discussions facilitated by the SETAs.

3.3.3 Other data collection amongst SETAs

In addition to the collection of employee-related data through the WSP/ATRs, FASSET has also conducted a sector survey every five years: in 2002 (van Zyl et al 2002), 2007 (van Zyl et al. 2008) and 2012 (FASSET 2012). The survey is designed to describe the sector and its sub-sectors according to (van Zyl et al. 2008: xxi):

- The total number of employers;
- Geographical distribution;
- Employee profile (employment status, population group, gender, age, qualification and disability);
- The professional associations and training institutions operational in the sector and their respective roles in and contributions to its development;
- The education and training supply to the sector; and
- The skills needs in the sector, including scarce and critical skills.

The survey covers employers, learners, training providers and professional associations. It was reported that the sector survey was initiated in order to collect the kind of detailed data required for effective sector analysis; this was part of a deliberate strategy on the part of FASSET to keep the WSP/ATR format as simple as possible, so as to encourage employer submission of the WSP/ATRs. It is anticipated that the new FASSET WSP/ATR format (described in 3.3.2) will elicit this type of information in the future and that the sector survey will be discontinued.

The research organisation that conducted the FASSET sector survey reports that they had a good response rate on the whole and they suggest that this is due to FASSET's credibility and standing within the sector (ibid.). Other factors that reportedly led to the success of the survey included:

- The seniority of the researchers who conducted the interviews, particularly with senior management in companies;
- Communication around the importance of the data for the sector;
- Respondents were interested in the results of the survey for comparison purposes; and
- 'Peer pressure' – respondents wanted to be seen to be contributing to a 'common good'.

Problems encountered included the amount of quantitative data required – respondents often took a long time to submit the detailed employee records

needed for the survey. It was noted that it is much easier to collect 'opinions' from respondents – one interview with structured questions and little preparation required on the part of the respondents. Some respondents also indicated that they didn't have the time to participate in the survey.

In general, it was noted that the ability of respondents to forecast demand was not very good: there are too many variables (overall performance of the economy, mergers and acquisitions, etc.) and people were reluctant to discuss detailed strategic growth plans for competitive reasons.

In relation to the logistics of running a survey of this nature, it was stated that the management of a project of this nature was extremely complex. The use of senior researchers to conduct interviews (noted above as being vital to gaining access to senior respondents) further contributed to the expense.

3.4 Mapping available data sources against KILM

Table 3.3 maps the routine data sources (outlined in 3.1 'Routine data collection') and the WSP/ATR data against the KILM relevant to skills development (Table 2.2). The WSP/ATR data in Table 3.3 are those specified by the new Skills Development Regulations. It is also necessary to take into account the challenges of coverage and data integrity of the WSP/ATR data.

Table 3.3: WSP/ATR data and data sources mapped against the ten ILO KILM relevant to skills development. The 'traffic light' colours indicate the completeness or credibility of the data available in South Africa against the selected indicators: green means sufficient; orange shows that there are some gaps or that the data may be problematic; red indicates that the data is unavailable, very limited or very problematic.

#	Indicator	Data source	Latest available data	Comment
3	Status in employment	QLFS (Stats SA)	Q1 2013	This data describes the number of workers in formal employment vs the informal economy. The Stats SA data (QLFS, QES and GHS) is considered sufficient in this regard. The problems with the Adcorp methodology and data have been noted in 3.1. The SETA data (where comprehensive) can support this picture, though it has very limited data about the informal economy. The QLFS data could provide a sense of how good the WSP data is in terms of coverage, though the differences in sector makes this more complex.
		WSPs/ATRs (employees only)	WSP submissions – June 2012	

#	Indicator	Data source	Latest available data	Comment
		Adcorp Monthly Employment Index	March 2013	
		Quarterly Employment Statistics Survey (Stats SA)	December 2012	
		General Household Survey (Stats SA)	2011	
4	Employment by sector	QLFS (Stats SA) <i>Note: Sectors are different to those into which SETAs are divided</i>	Q1 2013	<p>The QLFS can provide this data; however, if there is a need to understand this data in relation to the SETA sectors, this may be more difficult, given the aforementioned problem with the sector delineation of SETAs.</p> <p>This difficulty (of the non-alignment of sectors) also means that it is hard to calculate the coverage of employees that the WSP achieves. This would rely on the ability to compare the WSP data with the QLFS.</p> <p>The problems with the Adcorp methodology and data have been noted in 3.1.</p> <p>Because of the lack of comparability between SETA and QLFS data, this is rated as 'orange'. However, the QLFS data on its own would be green.</p>
		Manpower Employment Outlook Survey (Manpower) <i>Note: Sectors are different to those into which SETAs are divided and similar to QLFS, although Manpower includes Restaurants and Hotels</i>	Q1 2013	
		Adcorp Monthly Employment Index <i>Note: Sectors are different to those into which SETAs are divided and virtually the same as QLFS, although Agriculture is excluded</i>	March 2013	
		WSP/ATRs	WSP submissions – June 2012	
		Quarterly Employment Statistics Survey (Stats SA) <i>Note: Formal non-agricultural sectors</i>	December 2012	
5	Employment by occupation	QLFS (Stats SA) <i>Note: Only to South African Standard Classification of Occupations (SASCO) Level 1 descriptor in the official releases, but to four digits in the raw data available from Stats SA</i>	Q1 2013	<p>In the official releases, the QLFS data goes to SASCO Level 1 only, which raises some challenges when using this data for skills planning.</p> <p>Some SETAs suggest that now that they are collecting at a six-digit level, they are able to use the data to understand the numbers employed in particular occupations within their sectors. All SETAs will be required to collect employee data at this level from 2013. However, the SETAs that already collect this detailed information have indicated that it takes time for employers to 'get it right'. In addition, the OFO has been updated numerous times since it was first introduced, and there continue to be debates about its value and the extent to which it effectively represents the occupations in the sectors. This data also cannot be used for 'time-series' analysis, owing to the numerous changes.</p>
		Adcorp Monthly Employment Index <i>Note: Excludes Agriculture and only to Level 1 OFO descriptor</i>	March 2013	
		WSP/ATRs <i>Note: In some sectors will go down to Level 6 OFO, but will be available at Level 1 for all SETA sectors</i>	WSP submissions – June 2012	
6	Part-time employment	QLFS (Stats SA)	Q1 2013	The QLFS data is sufficient and the new format of the WSP/ATRs should require the collection of this data into the future.
7	Hours of work	QLFS (Stats SA)	Q1 2013	The QLFS collects this data.
9	Unemployment	QLFS (Stats SA)	Q1 2013	<p>The QLFS presents data on unemployment by gender, race, province and education level. It will therefore provide a useful input into skills development analysis.</p> <p>In theory, the data collected by Adcorp could be useful here, but the problems with the methodology and data make this unlikely (3.1).</p>
10	Youth unemployment	QLFS (Stats SA) Note shows young people not in employment, education or training	Q1 2013	As above

#	Indicator	Data source	Latest available data	Comment
11	Long-term unemployment	QLFS (Stats SA)	Q1 2013	As above
14	Educational attainment and illiteracy	General Household Survey (GHS) (Stats SA)	2011	<p>The GHS shows educational attainment for people over the age of five in terms of pre-school, school, Adult Basic Education and Training, literacy classes, higher education institutions, further education and training colleges, other colleges and other. The QLFS also shows qualification types, though it does not provide this data for occupational qualifications registered on the National Qualifications Framework (NQF) levels.</p> <p>The WSP/ATRs should, in terms of the new regulations, show educational attainment in terms of NQF levels (and some SETAs already do this), though this is obviously only for employed people. This could provide more detail on NQF qualifications for employees than is available from the QLFS data and could therefore strengthen insights into this issue.</p>
		QLFS (Stats SA) <i>Note: Shows employed, unemployed and not economically active</i>	Q1 2013	
		WSP/ATRs	WSP submissions – June 2012	
		Census (Stats SA)	2011	
15	Average monthly wages	Quarterly Employment Statistics Survey (Stats SA) <i>Note: Excludes agriculture and informal sector</i>	December 2012	<p>The data available through the QLFS is generally considered to be sufficient. It can also be supplemented with private sector wage surveys.</p> <p>However, the issue of when new entrants are given an increase is difficult to ascertain. In addition, the extent to which training leads to increases is also difficult to extrapolate.</p>
		Andrew Levy Wage Settlement Survey	2012	
17	Labour productivity	Adcorp Monthly Employment Index	March 2013	<p>As indicated above, some of the indicators related to productivity are difficult to distil from the data; this includes issues such as increases, access to training, promotions, etc.</p> <p>The problems with the Adcorp methodology and data have been noted in 3.1.</p> <p>It is possible that this data is contained in the National Productivity Institute's report; this still needs to be reviewed in order to determine its value for these purposes.</p>
		National Productivity Institute	2012	

4. ISSUES WITH THE AVAILABLE DATA

The previous section outlined the available LMI data; this section highlights some of the issues that need to be considered when reviewing the data.

4.1 LMI availability and quality

4.1.1 Quantitative vs qualitative data

Datasets such as those collected by the ILO, Stats SA and WSPs focus almost entirely on the quantitative components of LMI. This data is critical – for example, it allows one to develop a picture of the demographics of the labour force in 5, 10 and 20 years' time, which provides a picture of who will be available for employment, their demographics (age, gender, race) and their location. Significant changes in the age and gender structure of the population can have complex consequences for skills development and training.

Edwards, Rankin and Schöer (2010) affirm the value of such data and comment that:

South Africa is fortunate to have a rich source of household survey data. The surveys include the October Household Surveys, the Labour Force Surveys, various Income-Expenditure surveys, census data and increasingly household panel data such as the Cape Area Panel Study and the recent National Income Dynamics Study. This data has also led to the emergence of a vibrant academic and research community analysing and cleaning the data, engaging with the statistical agencies that collect the data, and advancing our understanding of trends in, amongst others, employment, poverty and inequality. This data has provided us with numerous insights about employment dynamics in South Africa. For example, using a cohort analysis of the South African Labour

market from 1995 to 2004, [it was found] that the age at which young Africans become economically active is declining and that this increasing supply of labour to the market is not being absorbed into employment resulting in a growing pool of unemployed youth. Further, the proportion of the population employed is extremely stable over the ten-year period for all ages. Rising unemployment of women also appears to be associated with rapid entry of women into the labour market post-1994. The source of unemployment is therefore a combination of rapid entry into the labour market and insufficient growth in demand for labour (ibid.: 7–10).

These examples highlight the point that quantitative data is important and necessary, but it does not provide a comprehensive picture of the demand for skills. It is necessary to consider the possibilities of collecting qualitative data to complement the picture painted by the quantitative data.

4.1.2 The relationship between occupation and skills

There is also a need to engage with the reality that there may be a (sometimes considerable) conceptual gap between what a company considers a 'skilled' person to be and how skills policy defines a 'skilled' person. It is this conceptual gap that is partly responsible for the anomalous situation of companies reporting skills shortages of a particular type, while there are unemployed persons who appear to have those particular skills. In general terms, the components of a 'skilled' person from an employer's point of view usually include a number of components not reflected in the actual qualification or certification of the individual. This means that skills learned in training may not match the actual skills required in a particular occupation or in a particular

organisation. These issues are difficult to capture adequately in large-scale data-centric surveys.

A related important issue is how to interpret vacancy data: in a quantitative study, vacancies are often seen as a proxy for a shortage of skills. However, there are many other (qualitative) reasons why a company might have an unfilled vacancy. These include the salary being offered, the need to meet employment equity targets in filling a vacancy, the reputation of the company, non-salary benefits, working conditions, the location of the company and so on. A better understanding of the factors underlying vacancies will provide a more nuanced picture of labour market dynamics.

In most surveys 'occupation' is used as a proxy for skills and most labour market surveys focus on reporting and/or forecasting changes in the demand for particular occupations, and deriving skills demand from that information. That is, the number of people employed in a particular occupation and vacancies in that occupation are used to calculate the demand for skills. But this approach is not without its problems. Similar or identical occupations may differ considerably by industry in terms of the actual skills required to perform them. In addition, the skills that are associated with a particular occupation will change over time, particularly as technology changes.

Yet despite these concerns about the extent to which occupations can be used as a proxy for skills, it is much easier for employers to report employment and vacancies based on occupation, rather than trying to articulate a detailed skills-set for each occupation.

However, Edwards et al. (2010) suggest that a better picture of the relationship between occupation and skills may be obtained by regular but longer-interval detailed surveys, such as at three-year periods. These could provide a better insight into the skills associated with various occupations, as well as how these are changing over time. Further, this data must be complemented by other inputs including 'information on immigration, on the employment experience of recent graduates, ... employment

statistics, ... the experience of those who are working, ... and economic well-being' (ibid.: 7).

4.1.3 Firm-level survey data

Edwards et al. (2010) highlight concerns about the limited availability of firm-level survey data. They state that the difficulty of accessing such data impacts negatively on policy analysis and development in a number of key economic areas, for example, labour demand:

While the household surveys provide good insight into the labour supply relationship, firm survey data is required to answer the question on why the growth of firms has been too slow to provide additional employment opportunities. It is striking that given the importance of employment growth in South Africa that such little emphasis has been placed on obtaining data and evaluating the relationship between firms and employment. The firm-level analysis can provide insight into the relationship between firm growth, performance and productivity and how these related to the number and types of jobs and the incomes they generate. To understand the sources of unemployment and thereby enact policies to raise employment and reduce poverty, we need to understand the factors that influence labour supply as well as the factors that determine labour demand. Importantly, although data collected from participants in the labour market, through for example household surveys, can provide an indication of earnings, estimates of wage equations will be biased if there are employer effects on wages. Thus, any wage equations estimated with only supply-side data will be misspecified (ibid.).

They further indicate that:

the various cross-sectional firm surveys in South Africa give us some insight into the employment relationship within firms. Exporting firms tend to use relatively skilled labour. More educated workers receive higher wages, and this premium increases the greater the proportion of skilled labour

employed. An additional year of schooling is associated with an increase in wages of 11–12%. The firm-level analysis is thus consistent with household-level analyses on education premiums. What is not known, however, is the extent to which this premium reflects higher productivity of educated workers, as is found, for example, in Ghana. The shape of the earnings function in some African firms is also not known (ibid.).

They illustrate the value of firm-level research and state that, for example:

large and very large firms pay between 25 to 30% higher wages for unskilled labour. Females earn about 14% less than males, although a substantial fraction of this difference is accounted for by differences in the type of job chosen by females: employment of females is concentrated in the relatively low-wage service and non-production occupations. These estimates are possible, because the data set that is used (the World Bank's Investment Climate Assessment) links firm and worker data. Linked employer–employee data (LEED) is very useful in that it allows for a different range of questions, that cannot be answered by only firm-level or household data, to be investigated (ibid.).

However, they state that:

while the available cross-sectional firm surveys have been enormously informative, some key dynamic relationships relating to labour demand by firms remain unexplored. The key constraint to the required analysis is the lack of firm panel data (ibid.).

They offer some examples in this regard:

A. Learnership programmes to encourage employment and training of workers are central to South Africa's National Skills Development Strategy. Under these programmes, firms are able to deduct a certain (fixed) part of the cost of offering

formally registered learnerships from company taxes [to] incentivise training. Firm-level data suggests that individuals that have received training in the past earn about 30% more than individuals that have not received training, other factors remaining the same. However, this relationship does not necessarily reflect the effect of training on productivity and therefore wages. The wage premium may merely reflect the selection of its workers for training by firms. [It is argued] that firms link the learnership system to their recruitment and employment strategies with the intention of employing learners upon completion of the training. The learnership programmes may therefore be used as an additional selection mechanism to identify relatively productive workers. To evaluate whether training improves productivity, it is necessary to follow the firm and the employee over time.

B. The relationship between wage costs, labour market regulations and employment practices. South Africa's mediocre employment growth post-1994 has been in part attributed to labour market rigidities and relatively high wage levels. Firm survey evidence has consistently indicated that firm managers perceive labour legislation and labour costs to be inimical to employment growth. In particular, firms experiencing declines in employment cite high labour costs and labour regulations as a constraint to the operations. However, this relationship can easily reflect a confounding factor, such as poor managerial ability which is unobservable in the firm survey. Perception-based explanations are also notoriously unreliable. The debate on the role of labour market regulations remains unresolved because we have been unable to observe the responses by individual firms to changes in labour regulation over time.

C. Related to this issue, is the recommendation by the International Growth Advisory Panel that a youth wage subsidy scheme complemented by more lax rules on hiring and firing be implemented. A key

argument for this policy is that firms do not employ youth as youth are unable to signal their productivity potential (work ethic, ability, etc.) to the firm. This raises the risk to firms of employing youth. The wage subsidy and exemption from some of the laws related to hiring and firing aim to offset some of these risks and provide the youth with the opportunity to signal their ability and gain experience. The effectiveness of the policy is clearly dependent on how the subsidy alters the firm's employment demand behaviour. There are concerns that (a) the firm will substitute existing workers for youth who receive a subsidy, (b) the firm will fail to employ the subsidised worker once the subsidy period has ended, (c) the subsidy will encourage labour turnover by the firm and (d) firms will not respond to the subsidy as the games are offset by high bureaucratic costs. To evaluate the effectiveness of the subsidy, we require detailed firm-level data pre and post the implementation of the subsidy scheme.

D. Part of the government's strategy to promote economic growth is to facilitate the emergence of small, micro and medium enterprises (SMMEs). The argument that these are the types of firms that will absorb the unemployed and that potentially these firms will grow into large firms. Empirical evidence on Africa suggests that small enterprises do grow relatively fast, have higher returns to capital, demand relatively low-skilled labour and create more jobs per unit of investment. However, small firms are also more likely to close down and exit the market. Small firms also very rarely grow into large firms. Similarly, informal firms often do not move into the formal sector. Further, the jobs created by small firms are relatively poorly paid and while the labour created per unit investment is relatively high, the overall level of investment [in] small firms is very low. Finally, if the government's strategy is to promote exports, small firms are less likely to enter the export market. The complexity of the relationship between firm size and labour

demand indicated above is a clear example of the necessity for detailed firm data over time in order to formulate appropriate policies. Data that follows firms over time will provide insight into how firms grow and why they make the transition from small to large and from informal to formal.

E. Labour market matching. Firm characteristics not only determine the amount of new workers employed but also the type of worker employed as well as the way in which these workers enter the labour market. The actual allocation of vacant jobs is determined by the matching of job seekers and recruiting firms. Thus, which people finally get employed is not only a function of their skill and personal characteristics but also a matter of the process through which firms and job seekers are matched. Job search behaviour of the unemployed in South Africa has been well researched, but primarily from the supply side. Thus, the effect that the various job search methods have on the probability of being employed and the possibility that the individual, household and social characteristics of the unemployed could lead to endogenous labour market exclusion is well established. For example, having an employed household member increases the probability of employment success, possibly reflecting improved access to relevant labour market information. In that respect, the most unattached group comprises young, uneducated, African females living in rural areas. Empirical evidence from South African worker surveys show that up to 66% of the workers are employed via social networks which implies that job seekers without access to such recruitment networks are systematically disadvantaged. However, the probability of a match through a particular search/recruitment method is determined by the overlap between the number of job seekers and firms using this method to locate suitable candidates. The firm-side analysis is therefore required to complement the supply side, and this is best done using matched employer–employee data sets. Empirical work

using existing databases is nevertheless illustrative. Generally, all firms tend to favour referrals from their own workforce to other recruitment methods, but the recruitment process differs according to the firm size: small firms rely more extensively on social network hiring while larger firms use a wider range of recruitment channels open to job applicants. Therefore, the promotion of small and medium-sized firms in South Africa could have significant equity implications as it tends to favour households that are already attached to the labour market. A matched employer–employee data set allows researchers to investigate such poverty implications.

F. Another important aspect of the match between firms and workers is job mobility. [It has been shown] that there are significant levels of churn in the South African labour market as individuals transition between jobs and between unemployment and employment. However, very little is known about why workers switch jobs and the impact of these switches, either voluntary or involuntary, on wages. Furthermore, it is important to know how long individuals remain unemployed should they lose their jobs due to a shock that affects firms, and the factors associated with increased probability of finding a new job. Understanding this would allow government to design temporary support mechanisms to aid transitions between jobs.

G. HIV/Aids. There is an increased availability of survey data on the prevalence of HIV/Aids in South Africa. There is also an emerging empirical literature on the effect of HIV/Aids and Highly Active Retroviral Treatment on the decision of individuals to enter into the labour force and their ability to find work. Similarly, we have some insights on how HIV/Aids affects labour demand using matched firm-labour surveys. Nearly one third of firms surveyed in the World Bank Investment Climate Survey of 2002 reported a strong or prohibitive impact of the HIV/Aids epidemic

on overall firm performance. The primary channel of the impact appears to be investment, potentially driven by the increased uncertainty in future productivity of workers and market size. This labour-demand relationship, however, remains speculative as the required data following firms over time is not available. This lack of data also prevents an evaluation of the relationship between the provision of antiretroviral treatment by the state and/or individual firms and employment (ibid.)

The issues raised above further reinforce the report by Wilson et al. (2004), which highlights problems with the level of data available to support occupational forecasting initiatives in South Africa. Although the capacity to undertake multisectoral forecasting is considered to be high, there are concerns about the quality of the available data. Data concerns were judged to be particularly strong in relation to certain aspects, such as replacement demand and the non-technical dimensions of ‘skill’ (ibid.).

In terms of the then (i.e. 2004) available South African data sources, the following points were made by Wilson et al. (2004):

General labour market information: Different surveys measure different indicators and use different methods. Therefore, direct comparisons between data sets can be confusing and provide widely diverging pictures. It is not always easy or even possible to reconcile many of these surveys.

Sector data: Adequate sectoral data is required to model detailed labour and skills demand. One of the main problems here is the ‘disconnect’ between the sectoral classifications used by Stats SA and those used to delineate the scope of SETAs. The authors did make some recommendations for how three-digit Standard Industrial Classification codes could be ‘translated’ into SETA classifications, but admitted that this was not an ideal situation.

Accuracy of official data: There are some questions about the difficulties of reconciling the various official sources of employment. Although Stats SA has consolidated and updated some of its data collection in this area, the different data series are not always directly reconcilable.

Although the report by Wilson et al. (2004) was published nine years ago, most of the details of the assessment appear still to be valid. It could be concluded that the availability of information, together with the lack of a standardised approach towards data definition and collection, is a serious impediment to developing a detailed skills-forecasting model. Some of these discrepancies arise because of the fact that a particular enterprise may operate across different industries and thus economic sectors.

More recent research on the impact of the NSDSII (Kruss et al. 2012) (see 3.2 'Ad hoc research') highlighted challenges with respect to the implementation of firm surveys. For example, the case study for HWSETA (Wildschut 2012) pointed out problems related to the official datasets provided:

The project used datasets provided by each SETA on the basis that they represented the best available sources. However, there were widely reported difficulties with accurately quantifying the number of employers in the health and social development sectors. This may have been due to the difficulties of quantifying the private sector, as well as the non-profit organisation sector.

There was a lack of adequate aggregate data on employees in the sector, which meant that researchers had to depend on the relevant statutory councils' reports.

Even where data was available it was in many instances outdated.

The DHET database also presented some problems, which complicated the selection process; for example, in some instances

training-provider and employer information was captured in both categories simultaneously.

Contact information provided by HWSETA was in some instances inaccurate. This is a common problem experienced in similar studies of the SETA system (Wilson et al. 2004). Although the study focus did not allow this issue to be fully investigated, this is an issue that requires critical attention.

4.2 Collection of LMI through WSPs/ATRs

The primary problems relating to the data collected through the WSP process are those of coverage and data integrity.

In relation to coverage, the key incentive to employers to submit a WSP (in all SETAs except PSETA) is that they act as a grant release mechanism. The data pertaining to levels of participation suggest that this incentive may not be enough, particularly for small and medium companies. For example, the CHIETA 2013 SSP update (CHIETA 2013) notes that 16% of micro-enterprises and 43% of small enterprises registered to CHIETA with the South African Revenue Service submitted WSPs. In contrast to this, the figures for medium and large enterprises were 68% and 84%, respectively. This means that, even if the data included in the WSP/ATRs submitted is completely accurate, it is heavily skewed towards medium and large enterprises. This is not to say that there haven't been increases in the submission rates of the WSPs/ATRs over time, as employers have got into the cycle of submitting the documentation, while SETA support to workplaces (particularly small and medium employers) has improved. The W&RSETA notes, for example, that five years ago they received about 500 submissions, whereas in 2012 they received close to 9 000 (W&RSETA 2012).

In relation to data integrity, the SETAs using an electronic submission process are reporting a higher level of data integrity, as the systems compare responses and point out anomalies. SETAs report that employers are also increasingly seeing the value

of the amount of detail collected and submitted through the WSP process, and are therefore more likely to focus on the accuracy of their input. However, where data is still being submitted manually, as with PSETA, major problems are experienced, as noted in the PSETA SSP update 'there are clear anomalies in the WSP/ATR data which suggest poor workplace skills planning or poor data capturing' (PSETA 2011: 112).

The final key issue related to the LMI collected through the WSPs/ATRs is that of the OFO. Some employers have started to recognise the value of the detailed six-level descriptors in their own internal personnel systems. Yet, the fact that there have been so many iterations of the OFO and that there is still some contestation about some of the occupational descriptions, means that the OFO, while useful in principle in organising data, needs to be refined, and then stabilised before its value can be realised.

5. LMI AND SKILLS DEVELOPMENT IN OTHER COUNTRIES

5.1 Canada

Canada has two primary LMI instruments that are used for skills planning and projections: the Workplace and Employee Survey (WES) and the Canadian Occupational Projection System. The WES has been administered since 1999, surveying both employers and employees, and:

aims to shed light on the relationships among competitiveness, innovation, technology use, and human resource management on the employer side and technology use, training, job stability, and earnings on the employee side. The survey is unique in that employers and employees are linked at the micro-data level; employees are selected from within sampled workplaces (Brisbois et al. 2008: 5).

The Canadian Occupational Projection System (COPS)

began as a demand-side or manpower requirements system, but since the 1980s has used both supply and demand to provide a picture of the labour market. 'Supply' includes the number of people available for employment, including school leavers, immigrants and re-entrants to the labour force. 'Demand' includes the number of job openings expected either because of expansion or replacement. Expansion concerns growth in the economy. Replacement concerns job turnover from either permanent or temporary departures from the labour market (retirements and parental leave, respectively, for example) (ibid.: 12).

COPS aims to answer questions about supply and demand in the labour market, including questions about supply relative to demand. It addresses the following (ibid.: 13):

- *What kind of education is required to fill the new positions?*
- *How many jobs are expected to be created over the next decade?*
- *In which industries and occupations will the new jobs emerge?*
- *Will the supply be sufficient to meet this new demand?*
- *What occupations will face significant labour market pressures?*

5.2 European Union

European Union (EU) policy-makers are required to develop strategies (and make the related investment) that will influence the growth and structure of the economy and the labour market. In addition:

such choices need to be guided by robust labour market information and intelligence, including a forward-looking element. The role of labour market information and intelligence is twofold: to assess existing skill needs and to provide a longer-term perspective, so that we not only anticipate future requirements but can also actively shape them (CEDEFOP 2010a: 18).

The European Centre for the Development of Vocational Training (CEDEFOP) prepares comprehensive ten-year forecasts of skills supply and demand in Europe. The forecasts are based on an understanding that the type of skills that an economy needs can change considerably over the medium term; maintaining competitiveness requires

forecasting both which skills Europe will require and which skills Europeans will have. The CEDEFOP forecasts are designed to complement other LMI.

CEDEFOP (2010a: 1–2) states that the purpose of skills-forecasting is not just to benefit policy-makers, but also to:

- Benefit individuals when making choices around training or career paths;
- Provide guidance to training providers and educational institutions; and
- Provide information to placement companies.

The CEDEFOP 2010 survey highlights the fact that the skills requirements of many jobs do not remain unchanged; not only can the formal qualifications associated with particular jobs be expected to change, but so too the associated detailed skills and competencies. This survey is based on a complex quantitative model that uses econometric modelling based on time-series data. According to CEDEFOP, both quantitative and qualitative data and approaches are required to present a comprehensive picture of the labour market:

The analysis would benefit greatly from complementary data on skill demand on what people should know and be able to do in

particular jobs; likewise data on skill supply should not simply reflect formal qualifications but outcomes of all types of learning, including non-formal and informal learning. Regular and detailed qualitative projections can help to fill existing information deficits.

Among the many other areas that need further refinement and improvement, are the urgent need to improve existing data sources, to develop new surveys, to harmonise related work at national level and to devote more attention to fields of study and occupational requirements (ibid.: 15).

To this end, CEDEFOP has recently piloted a new employer survey on skill needs. Although employer surveys have been used in Europe before, they were fragmented and largely country-based, thus providing challenges for EU-wide comparable data. The new CEDEFOP survey aims to provide a ‘systemic and systematic approach to identify skill needs at European level’ (Nestler & Szovics 2010: 2). A key aim of the survey is to provide in-depth qualitative information on new or changing tasks in sectors and the skills needed to carry out these tasks. This will address the identified gap in current EU labour market data – the need to link workplace tasks with skills and occupations.

Box 1 Questions used in CEDEFOP interviews

The following questions were used in interviews with the 81 large organisations included in the CEDEFOP survey.

Overall challenges

1. Please mention the three most important challenges related to skills that you see for your company over the next three years.
2. Does your current staff possess the right types and levels of competences to meet these challenges?
 - If not, are the main gaps related to technical/occupational skills or to general skills like reading, language, teamwork etc.?

Detecting and addressing skill needs

3. If you identify skill gaps in your workforce, what is your main approach to solve them?

4. What are your main sources of information about skill requirements in the company?

Approaches to competence development

5. Please describe and explain the main approaches to competence development in your company?

6. Do you employ a company-based career development programme? Which categories of staff does it address?

- Can we get a (link to a) description of the programme?
- Is it linked to a talent management programme? Can we get a (link to a) description?

External collaboration and public support

7. Do you profit from any kind of public support to competence development of employees – the support may be in the form of provision of training opportunities or in the form of access to funds?

- If not, why?

8. Is your company involved in wider initiatives concerning competence development?

- At which level?
- Results?
- Challenges?

The EU's role in supporting competence development

9. Should the EU support projects where each sector identifies its skills needs to enable training providers to develop curricula that match those skill needs?

- Would your company/organisation participate in such a project?

Source: Danish Technological Institute (2012).

5.3 United States

The United States has developed a detailed source of occupational information documenting the mix of knowledge, skills and abilities required by a particular occupation. This initiative is housed in the Occupational Information Network (O*NET) programme, which replaced the Dictionary of Occupational Titles. Central to the programme is the O*NET database, which is a free online database containing hundreds of occupational definitions. Each occupation is defined in terms of a standardised, measurable set of variables known as descriptors. It is a hierarchical model, starting with six 'domains' that describe the day-to-day attributes of the job and the qualifications and interests of the typical worker in that job. These are then expanded to 277 'descriptors' (National Center for O*NET Development 2013a).

More than 900 occupations are covered, based on a standard occupational classification (SOC) system (ibid.). The SOC was designed to standardise occupational information among all parts of the federal government (Bureau of Labor Statistics 2013).

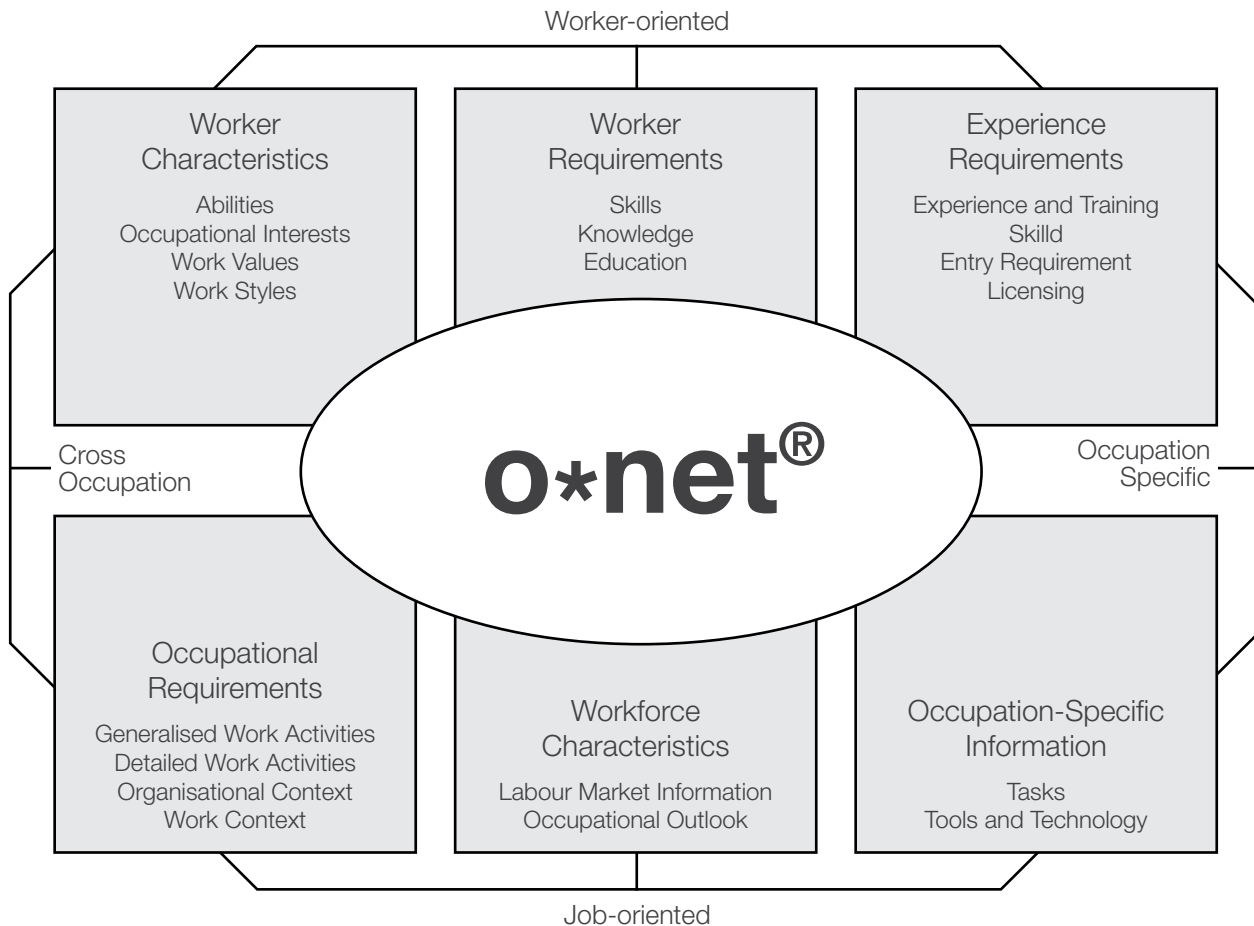
The O*NET project has established a continuing data collection programme to populate and maintain the database. It is based on collecting information from three sources: workers, occupation experts and occupation analysts (National Center for O*NET Development 2013a).

Questions are organised into several different questionnaires covering various aspects of a particular occupation. To reduce response time, workers are sampled from organisations and randomly assigned to answer only one of the questionnaires (National Center for O*NET Development 2013b). For occupations where it is

difficult to sample workers, occupation experts are identified and sampled. Additional input is supplied by occupation analysts. Interestingly, employers do not participate in the survey. However, employers have to be ‘incentivised’ to give their employees time

to fill in the questionnaires; this is done by giving them access to the research results. This can be an important general incentive to participation. (The full O*NET survey is included as Annexure B.)

Figure 5.1: O*Net content model (Source: National Center for O*NET Development (n.d.))



5.4 United Kingdom

The National Employer Skills Survey (NESS) was a biennial survey carried out across England between 2003 and 2009. It was ‘an employer survey that asks a representative sample of English employers about recruitment issues and problems, the skills that are lacking in their current workforce, and their approach to providing training’ (UKCES 2011: 17).

In 2011, the NESS was brought together with the skills surveys conducted in Northern Ireland, Scotland and Wales in the first employer skills survey to cover the entire United Kingdom (UK) – over 87 500 employers from England, Wales, Northern Ireland and Scotland were interviewed (Vivian et al.

2011). The survey was administered telephonically, and was estimated to take 25 minutes per interview (UKCES 2012). (The full survey tool used in the 2011 survey is included as Annexure C.)

The main categories of questions used in the survey are (IFF Research 2011):

- ‘Firmographics’ – information about the firm;
- Retention and retention difficulties;
- Recruitment and recruitment difficulties;
- Demand for skills and skills gaps;
- Workforce development;
- Skills utilisation/high performance working; and
- Business strategy and structure.

Box 2 Learning from international experience

The CEDEFOP draft conceptual outline *Employers' Surveys as a Tool for Identification of Skill Needs* (CEDEFOP 2008) identifies several strengths and weaknesses of employer surveys.

Employers' surveys provide first-hand information on skill needs directly from employers and thus provide a valuable 'insight' into the current demand side of the labour market; providing qualitative information on skill and competence requirements, their changes, and skill gaps among specific categories (e.g. occupations, graduates with specific qualifications). Employers' surveys not only enable the collection of information but also provide a means of verifying already available data and a better understanding of the processes and phenomena in the labour market.

However, employers' surveys as a method also have a number of limitations.

- Such surveys are very time- and resource-intensive and require meticulous planning in order to generate sufficiently rigorous data;
- Companies are already overloaded by numerous reporting requirements, and any additional surveys may become an extra burden and may result in a lower response rate; and
- Not all employers can assess their current human resource situation and their future needs objectively and accurately, and therefore the data they provide often turns out to be inflated or deflated.

Most survey results show that planning of training and recruitment goes hand in hand with the broader strategic plans of companies to expand, reduce, outsource or relocate their production and/or services. Yet, strategic thinking and the ability of the enterprise management to look beyond the present is another drawback of the employer survey methodology: companies often become hostages of the broader economic strategy of the country, sector or region, and sometimes have to adjust to changing global markets on an ad hoc basis. A broader awareness of economic trends and their driving forces is not always available inside companies and this hampers strategic thinking.

How does one overcome the weaknesses of the method?

First of all, questionnaires need to be limited to a minimum number of questions essential for identifying skill and competence needs for a particular purpose (e.g. policy-making, financing of training, design of qualification profiles or training programmes, provision of information for the guidance system).

Secondly, the questions themselves are important for the quality of answers and for the rate of response. Careful selection and formulation of questions may help to increase the response rate and the reliability of answers. For instance, the question 'Which skills do you need?' would puzzle a respondent. It might be more useful to ask which tasks are performed in this or that job, which composition of skills and competences are necessary to perform a specific job/task, which skills are core skills for a job, and, finally, what the reasons for providing in-company training are. Similarly, questions about future recruitment plans may not bring fruitful results. But one can learn about the future by carefully analysing past and present. Regular surveys based on the same methodology and/or longitudinal surveys allow comparison over time and gradually the creation of time series. Analysis

of trends may help to shed light onto the future in a more objective way than employers' answers based on their subjective judgment.

vThirdly, survey results need to be verified and enriched by additional focus groups and expert panels. Cautious treatment of results, as well as the usage of holistic methods, diminishes the negative effects of any methodological limitation. There is no ideal method but there certainly is an ideal approach: that is to combine different methods as well as to analyse results in combination with results from other statistical sources, surveys and studies. Employers' surveys should not be seen as a panacea but as a tool, albeit a very useful tool. In the context of CEDEFOP activities a survey of skill needs among enterprises appears to be an especially useful tool, which can provide key qualitative answers to add and to verify the quantitative mid-term occupational skills forecast at a European level.

An International Labour Organisation study (Sparreboom & Powell 2009) on labour market information and analysis for skills development adds the following:

Information on specific current and future skill needs can in principle also be obtained through enterprise training surveys, if an adequate response rate can be achieved and employers are willing to share information. Because such surveys can be tailor-made to serve specific purposes and target a specific group of enterprises, there is much scope to collect useful qualitative information. An example is the survey of businesses undertaken by The Economist Intelligence Unit in Asia. This is not a nationally representative survey, but a survey of members of a corporate network, with the aim of building a picture of perceptions among selected businesses. The survey conducted in 2007 highlighted skill shortages as an important business concern in the region.

While labour market signalling based on labour force surveys can be used to assess excess supply of labour, as captured in unemployment, enterprise surveys can be undertaken to measure demand that is not yet met by supply, [that is] job openings or vacancies. Enterprise surveys to measure job vacancies, and sometimes recruitment problems, have gained popularity in recent years in the industrialised world, including in several European countries and the United States (ibid.: 17).

6. IMPLICATIONS FOR THIS FIRM SURVEY

Designing and implementing surveys are part of a systematic process of collecting data on a specific topic by asking individual respondents questions, and then generalising results to various groups represented by these respondents. The type of survey selected, the target group and sample sizes will be determined to a large degree by the following:

- The purpose of the survey;
- The timelines for the survey;
- The sensitivity of the subject matter;
- The complexity of the research;
- The characteristics and resources of potential respondents; and
- The geographic location and spread of potential respondents.

6.1 Survey design

The initial step in survey design is determining the purpose of the survey – this is critical in determining the data to be collected. Once this is understood, it is necessary to clarify what data is already available and what data still needs to be collected. There is already a considerable amount of LMI that has been and is being collected in South Africa, some of it on a regular basis and rather more on an ad hoc basis. A useful starting point may be a data extraction and synthesis exercise, to obtain a better picture of *exactly* what data sets are available, and the level at which they are available. This will provide a more focused starting point for survey design and can assist to explain the relationships between this survey and others. Doing this may go a long way towards mitigating participant reluctance based on a perception that they have already submitted this information.

The other issue that has implications for survey design and implementation is the question of

whether or not the data to be collected is quantitative or qualitative. In general terms, qualitative data may be more costly to collect, since it requires more skilled personnel and more time to collect information, though as indicated it can offer valuable insights for which quantitative data may not allow.

A further issue to be determined is whether the survey will be once off or regular (and if regular, how frequent). This decision depends on the data that will be selected and the goals of the research. For example, the HSRC/DPRU Impact Assessment of the NSDSII project (Kruss et al. 2012) was conducted over a five-year period, since this was appropriate to the research goal – tracking the trajectories of learnerships and apprenticeships. In general terms, a regularly recurring survey will require greater commitment from participants, which may have implications for the length of the survey and the method of data collection, but detailed longitudinal surveys may be particularly useful in areas such as tracking changes in occupation composition.

6.1.1 Target group

With respect to the issue of identifying the target population and determining the associated sampling methodology, a 2010 EU survey (CEDEFOP 2010b) of vocational training across Europe used the following approach in respondent selection:

- The target group was made up of three sub-groups: large European firms considered to have adopted interesting and/or innovative approaches towards competence development, sector organisations representing sectors considered to be key to the future direction of Europe and labour and industry associations;

- A respondent selection matrix was developed to ensure balance among geographic location, sector and firm size; and
- A long list of 602 respondents was identified and prioritised according to the criteria of location, sector and size.

The FASSET sector survey (Van Zyl et al. 2003) included a wide cross-section of respondents to obtain as detailed a picture of the sector as possible, divided into four components:

- Employers;
- Professional bodies;
- Training providers; and
- Learners.

Different questionnaires were developed for each target group, depending on the data collection goals. For the employer survey, FASSET's own database of actively trading firms 2005 was used as the basis for deriving a sample. The data was organised according to location (at a provincial level), sub-sector and organisation size. Given the wide variation in firm size and nature within the sector, a random sampling technique was used to compile a respondent pool. Replacement samples were drawn to replace firms that had closed down, moved or failed to respond. A total of 1 033 employers participated, out of an 'adjusted' population of 6 210. Survey respondents were weighted on the basis of firm size (i.e. the response of the largest firm was weighted far higher than the response of the smallest firm) to compensate for the fact that around 50% of respondents had fewer than ten employees.

In the South African context, it is likely that most of the SETAs will provide the best source of target population information with respect to employers, supplemented by information from other regulatory departments (such as the Companies and Intellectual Properties Commission and possibly the South African Revenue Service) on non-levy-paying entities. The use of this information may go a long way towards ameliorating the cost and time of compiling an accurate and up-to-date list of contact information. However, the FASSET experience indicated that in many instances this data is not up to date, and it may be time-consuming to 'clean'

data to remove non-trading companies. FASSET also recorded that sometimes companies register two or more entities for the purposes of trading; the underlying database should also be adjusted for this. In addition, issues identified around the lack of correlation between SETA sectors and the Standard Industrial Classification code classifications may need to be addressed in the sample design, once again depending on the specific goals of the firm survey (i.e. how sector-specific the data is required to be.)

The HSRC/DPRU surveys of learnerships and apprenticeships (Kruss et al. 2012) made use of data obtained from each participating SETA (the six identified as having almost 90% of apprenticeships), though they noted the challenges associated with this, principally that there were discrepancies between the SETA and DHET data, which could be ascribed to a time lag.

6.1.2 Questions

The design of the questions is also critical to the integrity of the data obtained in a survey: this is determined to a considerable degree by the quality of the questions. Survey questions are best designed on the basis of the final data that is expected to materialise from the survey. The ability of respondents to provide the information that is actually required depends to a great degree on their ability to understand both the question and its purpose. Reliability of survey questions implies the extent to which all respondents interpret questions in the same way. If the focus of the survey is quantitative data (and closed questions are the norm) this may not be a serious issue, but it may be problematic if the focus is qualitative data (with a high proportion of open-ended questions), because respondents are often required to provide subjective assessments.

Another point to consider in the design of questions is the likelihood that companies may refuse to or be uncomfortable with the idea of answering. The UKZN study (Valodia & Velia 2006) highlighted that many companies are concerned about confidentiality around information that they perceive to be sensitive to their businesses or their strategic advantage in the market. They are also often much less willing to

answer questions about their clients, on the basis that they have confidentiality arrangements with them. This concern was further noted by the research group which undertook the FASSET sector survey (van Zyl et al. 2008). This unwillingness of companies to share information related to possible expansion or new business streams affects skills-forecasting.

6.1.3 Length of questionnaires

Very lengthy questionnaires and/or interviews may have a significant impact on the accuracy of the data collected (Iarossi 2006) since respondents are often in a hurry to complete them. The UK Firm Skills Survey takes approximately 25 minutes to complete (UKCES 2012). Iarossi (2006) suggests that interviews lasting longer than one-and-a-half hours may generate adverse outcomes.

6.1.4 Survey administration

Another issue to be considered in survey design is how the survey will be administered – telephonically, in person or self-administered (i.e. respondents complete the survey on their own). Different survey administration forms have different cost implications and data quality implications. They can also affect the time frames for completing the survey.

Self-administered surveys are the cheapest, but may result in data accuracy issues, unless the questions are extremely basic and clear. It may also prove to be difficult to obtain timely responses, in the absence of any legal sanction for missing a deadline.

Surveys administered during interviews tend to have higher levels of data accuracy, particularly when the data to be collected is of a qualitative nature. However, this result is, in turn, determined to a considerable degree by the skills of and training given to interviewers, and this will affect survey costs. Both the UKZN survey of manufacturing (Population Studies & Development Studies 2013a) and the FASSET sector survey (Mummenthey et al. 2012b) used very highly qualified and skilled persons to do the interviews, which does have cost implications.

The HSRC/DPRU survey of the learnership system (Kruss et al. 2012) incorporated interviews by

telephone, assisted by a specially developed computer-assisted telephonic interview (CATI) methodology. This methodology is based on short, highly focused interviews – no more than 10–15 minutes long. Interviewers made use of an electronic questionnaire, and participant responses were uploaded automatically to an Excel spreadsheet (Wildschut et al. 2012). According to the Wildschut et al. (2012: 9), the success of the CATI methodology depends on three factors:

- A large sample with good contact details;
- A focused questionnaire; and
- Well-trained and competent interviewers.

Where face-to-face interviews will be conducted, a two-phase approach is almost always required. An initial telephone call or e-mail (or both, or on more than one occasion) is used to identify the willingness of the organisation to participate and the correct person to be interviewed. This is then followed up by contact to set up the interview, and then the interview itself.

6.1.5 Field testing

Finally, it is usually necessary to field test a survey before it goes 'live'. It can be useful to test surveys on participants of previous similar surveys, since they are familiar with the process. Field testing will help to highlight issues around the comprehension and coherence of questions, as well as identifying areas where respondents are reluctant to answer questions. It can also be very useful in highlighting the issues that are more important to firms (as opposed to those most important to policy-makers) since relevance to respondents may be an important factor in generating higher participation levels.

6.2 Buy-in and participation

One of the challenges facing any envisaged firm survey is the difficulty of obtaining enough responses to have a meaningful set of data: many employers have statutory data fatigue and are unlikely to welcome yet another request for information, particularly when it is not clear what the benefits could be. Low levels of participation can add to the duration and costs of the survey, while reducing the usefulness of data. An approach such as that

adopted by FASSSET – to replace non-participants during the process – may have the benefit of ensuring data relevance, but also imply open-ended budgets and time frames.

Sufficiently high participation rates may be achieved where there is some kind of reward for participation (such as access to a grant or a useful research report). For example, Andrew Levy Employment only make their detailed research reports available to companies who participate by submitting data. In the absence of such rewards it may be very difficult to generate sufficiently high levels of participation. However, it is unlikely in the context of skills development policy that the distribution of detailed research findings could be limited to participant firms. The claiming of mandatory grants is seen as an incentive to develop WSPs and ATRs by most medium to large firms; nevertheless, the low submission rates for SMMEs across the sectors indicate that there is a point at which the grant is not a sufficient incentive. The lowering of the percentage of the levy, which comprises the mandatory grant claimable, may have a further negative effect on submission by smaller entities. Further, the fact that there are still problems with participation – even with an incentive available – highlights the difficulties that will be faced in administering an additional firm survey related to skills.

The UKZN study (Valodia & Velia 2006) indicated that obtaining sufficient buy-in and high enough participation rates in their manufacturing survey is a very real challenge, and they state that getting this right can be both difficult and time-consuming. Their approach has focused on building strong relationships with individuals and organisations that are well entrenched and/or well respected in the sector, such as chambers of commerce, lead companies and industry associations. Once these parties are convinced of the merits of the research, they function as project ‘champions’, helping to convince others to participate. This has been identified as a useful approach, but also one that can be immensely time-consuming. Similarly, the relatively high level of response to the FASSET sector survey (Mummenthey et al. 2012b) was put

down to the credibility and standing of the SETA amongst constituents; this issue may have major implications for those SETAs that are perhaps not held in such high esteem by stakeholders.

The UKZN study (Devey et al. 2005) also highlighted the importance of getting buy-in for complex surveys from the chief executive officers of organisations. Once they are on board, their support can be invoked to ensure participation from lower-level staff. Confidentiality is sometimes a barrier to participation or full disclosure and it is not always possible for the surveying organisation to enter into a non-disclosure agreement with each survey participant.

Related to this issue is the question of ‘sanctions’ or penalties for inaccurate or incomplete data submission. It is entirely possible that firms may either rush the data capture process or allocate junior or inexperienced staff to the task. In these instances the quality of the data may be compromised, but there is little that survey managers can do to address this if there is no sanction for poor data submission. The possibility of inaccurate or incomplete data may be increased by the use of lengthy qualitative interviews, where margins for error and interviewee fatigue are higher. In such cases it may be necessary to have multiple interview sessions.

The accuracy of the WSP/ATR is generally not verified and employers have been able to claim their mandatory grant by submitting information on time and in the correct format. Some SETAs do check whether planned training in fact takes place and more indicate that they will do this in 2014. For example, the W&RSETA (2013) indicates that it will in the future be monitoring actual training against planned training and will not be paying mandatory grants if there is not significant correlation between actual and planned training. However, this does not address the accuracy of the data with respect to employees, current qualifications and the extent to which the WSP and ATR capture all training planned and implemented or only enough to ensure that the 20% grant is refunded.

6.3 Other issues

The following general points should be taken into account:

- It is necessary, as part of the process of implementing a new survey, to address the underlying data quality issues outlined above and to develop and implement a plan to standardise data across the various data sources. In particular, the differences between Stats SA and SETA sector classifications must be considered. If this is not done, input from surveys will have only limited usefulness in providing the longer-term comparable time-series data so important to the construction of useful forecast models.
- It is important to reach greater levels of buy-in to the OFO, or alternatively to refine and stabilise it, so that the data that is collected has meaning and value for companies and can be effectively used in analysis.
- The relationship between occupations and skills should also be addressed. Since skills forecasts are by necessity future projections, they should forecast the ways in which the skills associated with particular occupations will change.
- It is necessary to decide whether such a survey should be implemented within the sectors or should focus on particular occupations across the economy.
- There is a need to understand who will be surveyed within the firm and the extent to which surveying other target groups, such as employees, could strengthen the credibility of the data. Employees could, for example, provide valuable information about the changing relationship between occupations and skills. Placement agencies may be in a good position to provide detailed qualitative information about the mismatch between vacancies and unemployment among apparently suitably skilled persons.
- Many employers have statutory data fatigue and are unlikely to welcome yet another request for information, particularly when it is not clear what the benefits could be. This could lead to difficulties with obtaining enough responses to have a meaningful set of data. We suggest that it is necessary to ensure that successes are highlighted and publicised. For example, Chemical Industries Education and Training employers indicate that they can see the value of the data that is being captured using OFO codes and it would be useful to share this perception with other employers grappling with the introduction of OFO codes. Without such buy-in, getting a statistically significant response with the right mix of respondents will be difficult.
- It is important to ensure that SMMEs are effectively included in the sample and that support is provided to SMMEs to enable them to participate. Work done by some SETAs in providing Independent Skills Development Frameworks to smaller companies to assist them with submitting mandatory grant applications is instructive here.
- More work needs to be done on establishing the credibility of existing WSP/ATR data. It is suggested that, particularly in the larger, more stable SETAs, the data that they are collecting is in fact useful and credible, at least for medium and large firms. There is a need to carefully review whether additional quantitative questions could be added to these surveys rather than instituting a new quantitative survey. In this case, the firm survey could focus on supplementing this quantitative data with a more qualitative firm survey (such as those conducted in the UK and in Europe by CEDEFOP). If this route is pursued it is suggested that it is necessary to consider what this should address to ensure that it adds value and is sufficiently detailed. This issue raises questions about the way in which the survey will be administered and whether there is a need for a self-completion survey and/or a telephonic qualitative survey (this will take time and it requires both an interviewer and an interviewee with particular skills and knowledge).

There are also a number of methodological issues to consider:

7. INPUT FROM THE WORKING GROUP

Following the presentation of the draft document to the working group, members were asked to consider the findings and provide some thoughts on key questions raised during the discussion and then circulated by the DPRU at UCT. This section contains the consolidated responses to these questions.

7.1 What is the purpose of the survey?

Impact evaluation or assessment, skills forecasting, verification of existing WSP data, or something additional? Where are the gaps in the current data?

It was generally felt that the survey needed to gather additional data (where there are gaps), verify key aspects of the data and explore trends and anticipated shortages (including qualitative data). It was also suggested that the survey should help with understanding impact (this should also have a qualitative dimension). It was stressed that the survey needed to take into account the context of the labour markets specific to SETAs, so as to assess what is unique about a specific sector.

It was also suggested that the requirements for the survey may differ depending on the nature of the data that the SETA is currently able to collect. For example, a SETA that has credible data may only require certain additional quantitative questions, the verification of limited aspects of the WSP data and a focus on the qualitative elements. By contrast a SETA that is struggling to access credible data may also need to use the survey to improve the quality of the data that it has about the sector.

Respondents stressed the importance of including questions that probe impact. Respondents also suggested that there is a need to understand the reasons for the change. For example, one respondent noted that greater change in relation to

skills development had been brought about in companies where there are particular government support instruments in place – such as in the clothing sector – and which have pushed new strategies. It was indicated that quality circles (on the factory floor) and Industrial Development Corporation loans have made tremendous differences to some firms in their skills investments because they have had to think about what they were doing and have had to engage people to help evaluate impact.

7.2 How will buy-in and participation from firms be ensured?

Whose buy-in do we need – Human Resources manager, CEO? How can we ensure that the data we collect (and then make available) becomes the incentive to participate in the survey? Should we offer any 'reward' for participation?

It was suggested that it was necessary to think about ways of improving participation rates, particularly where participation rates are generally low, or low for a particular target group. For example, the WSP/ATR process currently only collects data from levy-paying companies who wish to claim their mandatory grant, leaving out a large part of the sector 'labour market'. Linked to this was the observation that for many companies, the incentive of the mandatory grant was simply too small to justify their participation.

Most respondents agreed that getting buy-in would be a particular challenge, with one respondent commenting that in the current economic climate it was particularly hard to get smaller firms to concentrate on anything other than the 'bottom line'. One respondent indicated that she thought 'survey fatigue' was closely tied to lack of feedback around the results of the survey.

The researchers who conducted the FASSET firm survey believed that the relatively high participation rate was due to FASSET's credibility in the sector, together with a desire on the part of the participating companies to benchmark the overall results against their own performance. This could potentially be combined with a guide that participating firms would find useful – mini-case studies highlighting successes, for example, or skills development policy and procedure guidelines that have worked in other firms.

Most respondents seemed to agree that the CEO was a critical 'in point' in relation to gathering the data and in offering a perspective on where the industry is heading and the type of skills it may require. However, some respondents suggested that training or Human Resources personnel would also need to be included as they were more likely to have the detail that is required, at least on the quantitative side.

One idea that was put forward was to use another large public data collection party and possibly even tie in the survey to existing surveys such as the QES.

There were suggestions about the possibilities of sampling and one respondent suggested that it might not be necessary to capture all data from all firms, but rather to make inferences in terms of the sector, the size of the business, how many people they are likely to have employed and their core service/product offering.

In relation to rewards, the views of the respondents were split, with some considering that offering rewards would create a precedent that would be

difficult to sustain, while others thought that it would encourage participation. In addition to providing feedback that would be useful to the company, it might be possible to offer firms, particularly smaller firms, access to a credible sector expert.

In general, it was felt that one-to-one contact would be most likely to elicit data from small, micro and medium enterprises.

7.3 What should the focus of the pilot survey be?

Which SETA should be the first pilot? Should we focus on a SETA where there is limited WSP/ATR data and the focus will therefore be on collecting data similar to what should be included in the WSP/ATR? Should we focus on a SETA with strong firm participation and the focus will then be on augmenting existing WSP/ATR data? Do we want to introduce a qualitative element?

Most participants felt that a stronger SETA(s) should be part of the pilot, as they would already have baseline data, which could be explored for gaps and/or used for the purposes of trend analysis. Others suggested that there may be a need for one stronger SETA to which only some aspects of the survey would be applied, together with a SETA that has experienced greater levels of challenge in the WSP process, so that the full range of questions could be administered.

There was also a suggestion that the PSETA should be included in order to get information on the public sector.

REFERENCES

- Adcorp (2013) *Adcorp's Employment Index (AEI)*. Available at www.adcorp.co.za/Industry/Pages/Adcorp'sEmploymentIndex.aspx [accessed 17 October 2013]
- Altman M (2004) Employment and economic policy research. In *Human Sciences Research Council Annual Report 2003–2004*. HSRC. Available at www.hsrc.ac.za/uploads/pageContent/637/Employment%20and%20Economic%20Policy%20Research.pdf [accessed 8 October 2013]
- Andrew Levy Employment (2012) *The Wage Settlement Quarterly Report*. J Kelly and A Levy (eds). Andrew Levy Employment Publications
- Andrew Levy Employment (2013) *Wage Settlement Survey*. Available at www.andrewlevy.co.za/main/index.php/products-services/products/wagesettlement-survey [accessed 9 October 2013]
- Bhorat H & Cheadle H (2009) *Labour Reform in South Africa: Measuring Regulation and a Synthesis of Policy Suggestions*. DPRU Working Paper 09/139. Cape Town: Development Policy Research Unit, University of Cape Town. Available at www.dpru.uct.ac.za/sites/default/files/sites/default/files/DPRU%20WP09-139.pdf [accessed on 7 October 2013]
- Bigsten A & Söderbom M (2006) What have we learned from a decade of manufacturing enterprise surveys in Africa? *The World Bank Research Observer* 21(2): 241–265. Available at elibrary.worldbank.org/content/workingpaper/10.1596/1813-9450-3798 [accessed on 21 October 2013]
- Brisbois R, Orton L & Saunders R (2008) *Connecting Supply and Demand in Canada's Youth Labour Market*. Canada Policy Research Network Research Report. Available at www.cprn.org/documents/49679_EN.pdf [accessed on 7 October 2013]
- Bureau of Labor Statistics (2013) *Standard Occupational Classification*. Available at www.bls.gov/soc/ [accessed 18 October 2013]
- CEDEFOP (2008). *Employers' Surveys as a Tool for Identification of Skill Needs: Draft Conceptual Outline*. CEDEFOP/Skillsnet. Available at www.cedefop.europa.eu/etv/Upload/Projects_Networks/Skillsnet/Publications/Employers_surveys_draft_concept_outline.pdf [accessed on 17 October 2013]
- CEDEFOP (2010a) *Skills Supply and Demand in Europe: Medium-Term Forecast Up To 2020*. Luxembourg: Publications Office of the European Union. Available at www.cedefop.europa.eu/en/Files/3052_en.pdf [accessed on 7 October 2013]
- CEDEFOP (2010b). *Employer-Provided Vocational Training in Europe Evaluation and Interpretation of the Third Continuing Vocational Training Survey*. CEDEFOP Research Paper No. 2. Luxembourg: Publications Office of the European Union. Available at www.cedefop.europa.eu/EN/Files/5502_en.pdf [accessed 21 October 2013]
- CHIETA (2013) *Five Year Sector Skills Plan for the Chemical Sector: Annual Update 2013–2018*. Available at www.chieta.org.za/regions/item/download/48_55c876fa2811ff8526a5957e22d4a0fa.html [accessed 18 October 2013]
- Danish Technological Institute (2012) *European Business Forum on Vocational Training: Challenges*

and Trends in Continuing Development of Skills and Career Development of the European Workforce: Survey Report. European Commission. Available at ec.europa.eu/education/vocational-education/doc/forum12/survey_en.pdf [accessed on 7 October 2013]

Devey R, Valodia I & Velia M (2005) *Constraints to Growth and Employment: Evidence from the Greater Durban Metropolitan Area*. Research Report No. 64. Durban: School of Development Studies, University of KwaZulu-Natal.

Available at www.sds.ukzn.ac.za/files/RR64.pdf [accessed 21 October 2013]

Du Toit R (2012) *The NSF as a Mechanism to Address Skills Development of the Unemployed in South Africa*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9835 [accessed 7 October 2013]

Edwards L, Rankin NA & Schöer V (2010) Firm-Level data concept paper: Creating the opportunity and environment for firm-level research in South Africa. Unpublished draft, March 2010.

FASSET (2012) *FASSET Sector Profile*. Available at www.fasset.org.za/downloads/sector_profile.pdf [accessed 18 October 2013]

Goga S & Van der Westhuizen C (2012) *Scarce Skills Information Dissemination: A Study of the SETAs in South Africa*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/view/5873 [accessed 4 October 2013]

Iarossi G (2006) *The Power of Survey Design: A User's Guide for Managing Surveys, Interpreting Results, and Influencing Respondents*. Washington DC: The World Bank. Available at openknowledge.worldbank.org/bitstream/handle/10986/6975/350340The0Powe1n0REV01_OFFICIAL0USE1.pdf [accessed 21 October 2013]

IFF Research (2011) *Employer Skills Survey: Draft Questionnaire v5*. Available at www.ukces.org.uk/assets/ukces/docs/research-data/ess2011-questionnaire.pdf [accessed on 4 October 2013]

International Labour Organisation (ILO) (2011) *Guide to Understanding the KILM*. Available at kilm.ilo.org/manuscript/guide.asp [accessed 4 October 2013]

Janse van Rensburg D, Visser M, Wildschut A, Roodt J & Kruss G (2012) *A Technical Report on Learnership and Apprenticeship Population Databases in South Africa: Patterns and Shifts in Skills Formation*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9841 [accessed 7 October 2013]

Kerr A & Wittenberg M (2012a) *Criticisms of the Adcorp Employment Index*. Cape Town: DataFirst, University of Cape Town. Available at www.datafirst.uct.ac.za/home/index.php?/Download-document/16-Criticisms-of-the-Adcorp-Employment-Index [accessed 17 October 2013]

Kerr A & Wittenberg M (2012b) *Science and Nonsense: Further Criticisms of Adcorp*. Cape Town: School of Economics and DataFirst, University of Cape Town. Available at www.datafirst.uct.ac.za/home/index.php?/Download-document/17-Science-and-Nonsense-Further-Criticisms-of-Adcorp [accessed 17 October 2013]

Kruss G, Wildschut A, Janse van Rensburg D, Visser M, Haupt G & Roodt J (2012) *Developing Skills and Capabilities through the Learnership and Apprenticeship Pathway Systems. Project Synthesis Report. Assessing the Impact of Learnerships and Apprenticeships under NSDSI*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9842 [accessed 7 October 2013]

Manpower (2013a) *Manpower Employment Outlook Survey*. Available at candidate.manpower.com/wps/portal/ZACampus!/ut/p/b0/04_Sj9CPyKssy0xPLMnMz0vMAfGjzOltjLzNPC29DSwNwoydDTzdzX2MLEOCjC18jfWUDU_P0C7ldFQHramRo/ [accessed 9 October 2013]

Manpower (2013b) *Manpower Employment Outlook Survey South Africa: Q1/2013*. Available at candidate.manpower.com/wps/wcm/connect/ZACampus/791c69c7-9d01-407d-a770-

98fe15dd795d/MEOS_South+Africa+Q113.pdf?MOD=AJPERES [accessed 9 October 2013]

Mummenthey C, Kruss G & Wildschut A (2012a) MERSETA case study 2011: Skills development for the metal and related services sector. In C Mummenthey, A Wildschut & G Kruss *Assessing the Impact of Learnerships and Apprenticeships under NSDSII: Three Case Study Reports*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-outputs/mtree-doc/9837 [accessed 7 October 2013]

Mummenthey C, Kruss G & Wildschut A (2012b) FASSET case study 2011: Skills development for the financial sector. In C Mummenthey, A Wildschut & G Kruss *Assessing the Impact of Learnerships and Apprenticeships under NSDSII: Three Case Study Reports*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-outputs/mtree-doc/9837 [accessed 7 October 2013]

Mummenthey C, Wildschut A & Kruss G (2012) *Assessing the Impact of Learnerships and Apprenticeships under NSDSII: Three Case Reports*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-outputs/mtree-doc/9837 [accessed 7 October 2013]

National Center for O*NET Development (no date) *The O*NET Content Model: Detailed Outline with Descriptions*. Available at www.onetcenter.org/dl_files/ContentModel_DetailedDesc.pdf [accessed 18 October 2013]

National Center for O*NET Development (2013a) *About O*NET*. Available at www.onetcenter.org/overview.html [accessed 18 October 2013]

National Center for O*NET Development (2013b) *O*NET Data Collection Overview*. Available at www.onetcenter.org/dataCollection.html [accessed 18 October 2013]

Nestler K & Szovics P (2010) *Developing and Piloting an Employer Survey on Skill Needs in Europe*, CEDEFOP Expert Workshop, 29–30 April 2010, Prague, Czech Republic. Available at www.cedefop.

europa.eu/EN/Files/Workshop_summary.pdf [accessed on 15 October 2013]

Oosthuizen M (2012) *The Impact of Work Experience Grants on Learner Placement: An Investigation into the Measurement of the Effectiveness of Work Experience Grants*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9836 [accessed 7 October 2013]

Pillay P, Juan A & Twalo T (2012a) *Impact Assessment of Skills Development on Service Delivery in Government Departments*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9838 [accessed 7 October 2013]

Pillay P, Juan A & Twalo T (2012b) *Impact Assessment of Skills Development on Service Delivery in Government Departments: Appendices*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9839 [accessed 7 October 2013]

Population Studies & Development Studies (2013a) *Collaborative Research Study of the Manufacturing Sector Firms in the eThekweni Manufacturing Area, 2013*. Available at sds.ukzn.ac.za/?7,12,127,4,0 [accessed 17 October 2013]

Population Studies & Development Studies (2013b) *Constraints to Growth in Employment and Manufacturing in the Greater Durban Manufacturing Area*. Available at sds.ukzn.ac.za/default.php?7,12,32,4,0 [accessed 17 October 2013]

PSETA (2011) *The PSETA Sector Skills Plan Update 2012–13*. Available at www.pseta.gov.za/wp-content/uploads/documents/skills%20planning/PSETA%20SSP%20Update%202011%20version2.pdf [accessed 18 October 2013]

Quantec (2013) *About Quantec*. Available at www.quantec.co.za/about/ [accessed 17 October 2013]

Rankin N (2007) Imperfect competition and the modelling of expectations in macroeconomics. *Portuguese Economic Journal*, 6(3):133–150.

Available at hdl.handle.net/10.1007/s10258-007-0020-2 [accessed on 7 October 2013]

Richardson S & Tan Y (2008) Forecasting future demands: what we can and cannot know. *Australian Bulletin of Labour*, 34(2): 154–191

SAGDA (2013) *Programs*. Available at www.sagda.org.za/Programs.html [accessed on 18 October 2013].

SAGRA (2012) *News : The SAGRA Graduate Recruitment and Candidate Surveys 2012*. Available at www.sagra.org.za/newsitem-30.htm [accessed 21 October 2013]

SAGRA (2013) *The SAGRA Employer & Candidate Surveys 2013: Press Release*. Available at www.sagra.org.za/ktml2/files/SAGRA%20Surveys%20Press%20Release%202013.pdf [accessed 21 October 2013]

Schöer V & Rankin N (2011) *Youth Employment, Recruitment and a Youth Targeted Wage Subsidy: Findings from a South African Firm Level Survey*. Washington DC: The World Bank. Available at documents.worldbank.org/curated/en/2011/06/16742439/youth-employment-recruitment-youth-targeted-wage-subsidy-findings-south-african-firm-level-survey [accessed 4 October 2013]

Skills & Learning Intelligence Module (2010) *The Labour Market Handbook: An Introduction to the Labour Market*. South West Observatory Skills and Learning. Available at www.swslim.org.uk/documents/TheLabourMarketHandbook.pdf [accessed 4 October 2013]

Sparreboom T (1999) *Improving Labour Market Information in Southern Africa*. ILO/SAMAT Policy Paper No. 10. Harare: International Labour Organisation. Available at www.ilo.org/public/english/region/afpro/harare/download/discussionpapers/pps10.doc [accessed 17 October 2013]

Sparreboom T & Powell M (2009) *Labour Market Information and Analysis for Skills Development*,

Employment Working Paper No. 27. Geneva: International Labour Organisation. Available at www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_108627.pdf [accessed on 21 October 2013]

Statistics South Africa (2011) *Census 2011: Introduction*. Available at www.statssa.gov.za/census2011/intro.asp [accessed 9 October 2013]

Statistics South Africa (2012) *About P0021: Annual Financial Statistics (AFS)*. Available at www.statssa.gov.za/publications/statsabout.asp?PPN=p0021&SCH=4498 [accessed 17 October 2013]

Statistics South Africa (2013a) *General Household Survey 2012*, Statistical Release P0318. Available at www.statssa.gov.za/publications/P0318/P0318August2012.pdf [accessed 14 October 2013]

Statistics South Africa (2013b) *Quarterly Labour Force Survey Quarter 2, 2013*, Statistical Release P0211. Available at www.statssa.gov.za/Publications/P0211/P02112ndQuarter2013.pdf [accessed 14 October 2013]

Statistics South Africa (2013c) *Quarterly Employment Statistics (QES) June 2013* Statistical Release P0277. Available at www.statssa.gov.za/publications/P0277/P0277June2013.pdf [accessed 14 October 2013]

UKCES (2011) *The Youth Inquiry: Employers' perspectives on tackling youth unemployment*. UK Commission for Employment and Skills. Available at www.ukces.org.uk/assets/ukces/docs/publications/the-youth-inquiry-final-report.pdf [accessed on 4 October 2013]

UKCES (2012) *UK Commission's Employer Skills Survey 2011: Technical Report*. Available at www.ukces.org.uk/assets/ukces/docs/publications/evidence-report-63-uk-ess-2011-technical-report.pdf [accessed 21 October 2013]

Valodia I & Velia M (2005) Varieties of manufacturing adjustment: evidence from firms in Durban. Paper presented at TIPS/DPRU Forum. Available at www.ipsa.ac.za

tips.org.za/files/777.pdf [accessed 18 October 2013]

Valodia I & Velia M (2006) Macro-micro linkages in trade: Trade, efficiency and constraints to growth and competitiveness of manufacturing firms in Durban, South Africa. *Journal of African Economies*, 15(4): 688–721

Van Aardt C (2001) *Key Skills Shortages and the Fast Tracking of Skills Development*. Pretoria: Bureau of Market Research, University of Southern Africa

van Zyl E, du Toit R & Fourie K (2002) *Skills Development in the Financial and Accounting Services Sector*. Available at www.fasset.org.za/downloads/research_HSRC_Fasset_report.pdf [accessed 18 October 2013]

van Zyl E, du Toit R & Fourie K (2003) *A Skills Analysis of the Financial, Accounting, Management Consulting and Other Financial Services Sector*. FASSET

van Zyl E, Hall E, Roux A, Mbatha E & du Toit R (2008) *Survey of the Financial and Accounting Services Sector*. Available at www.fasset.org.za/downloads/sector_survey_final_20May2008.pdf [accessed 18 October 2013]

Vivian D, Winterbotham M, Shury J, Davies B & Constable S (2011) *UK Employer Skills Survey 2011: First Findings*. UK Commission for Employment and Skills. Available at www.ukces.org.uk/assets/ukces/docs/publications/uk-ess-first-findings-2011-amended-22-dec.pdf [accessed on 17 May 2013]

W&RSETA (2012) *Sector Skills Plan: 2012–13 Update*. Available at www.wrseta.org.za/downloads/WRSETA_SSP_2012_-2013_Update.pdf [accessed 18 October 2013]

W&RSETA (2013) *Skills Development Grants: Policy Document*. Available at [www.wrseta.org.za/downloads/Skills_Development_Grants_Policy_18_April_2013_\(2\).pdf](http://www.wrseta.org.za/downloads/Skills_Development_Grants_Policy_18_April_2013_(2).pdf) [accessed 21 October 2013]

Whiteford A, van Zyl E, Simkins C & Hall E (1999) *South African Labour Market Trends and Future Workforce Needs, 1998–2003*. Pretoria: HSRC

Wildschut A (2012) HWSETA case study 2011: Skills development for the health and social development sectors. In C Mummmenthey, A Wildschut & G Kruss *Assessing the Impact of Learnerships and Apprenticeships under NSDSII: Three Case Study Reports*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-outputs/mtree-doc/9837 [accessed 7 October 2013]

Wildschut A, Kruss G, Janse van Rensburg D, Haupt G & Visser M (2012) *Learnerships and Apprenticeships Survey 2010 Technical Report: Identifying Transitions and Trajectories through the Learnership and Apprenticeship Systems*. Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/mtree-doc/9840 [accessed 7 October 2013]

Wilson R, Woolard I & Lee D (2004) *Developing a National Skills Forecasting Tool for South Africa*. Warwick Institute for Employment Research and Human Sciences Research Council. Available at www.hsrc.ac.za/en/research-data/view/1723 [accessed 4 October 2013]

Woolard I, Kneebone P & Lee D (2003) *Forecasting the Demand for Scarce Skills, 2001–2006, Human Resources Development Review 2003: Education, Employment and Skills in South Africa*. Cape Town: HSRC Press

ANNEXURE A DESCRIPTIONS OF THE KEY INDICATORS OF THE LABOUR MARKET

The following table gives descriptions of the 18 Key Indicators of the Labour Market (KILM) according to the International Labour Organisation.

#	Name of indicator	Description of indicator
Participation in the world of work		
1	Labour force participation rate	<p>The labour force participation rate is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work; it provides an indication of the relative size of the supply of labour available to engage in the production of goods and services. The breakdown of the labour force by sex and age group gives a profile of the distribution of the economically active population within a country.</p> <p>The labour force participation rate is calculated by expressing the number of persons in the labour force as a percentage of the working-age population. The labour force is the sum of the number of persons employed and the number of unemployed. The working-age population is the population above a certain age – ideally aged 15 and older – prescribed for the measurement of economic characteristics.</p> <p>The indicator for labour force participation rate plays a central role in the study of the factors that determine the size and composition of a country's human resources and in making projections of the future supply of labour. The information is also used to formulate employment policies, to determine training needs and to calculate the expected working lives of the male and female populations and the rates of accession to, and retirement from, economic activity – crucial information for the financial planning of social security systems.</p>
Employment indicators		
2	Employment-to-population ratio	<p>The employment-to-population ratio is defined as the proportion of a country's working-age population that is employed. A high ratio means that a large proportion of a country's population is employed, while a low ratio means that a large share of the population is not involved directly in market-related activities, because they are either unemployed or (more likely) out of the labour force altogether.</p> <p>The employment-to-population ratio provides information on the ability of an economy to create employment; for many countries the indicator is often more insightful than the unemployment rate.</p> <p>Although a high overall ratio is typically considered as positive, the indicator alone is not sufficient for assessing the level of decent work or decent work deficit.</p>
3	Status in employment	<p>The indicator of status in employment distinguishes between two categories of the total employed. These are: (a) wage and salaried workers (also known as employees); and (b) self-employed workers. These two groups of workers are presented as percentages of the total employed for both sexes and for males and females separately. Information on the sub-categories of the self-employed group – self-employed workers with employees (employers), self-employed workers without employees (own-account workers), members of producers' cooperatives and contributing family workers (also known as unpaid family workers) – is not available for all countries but is presented wherever possible.</p> <p>Breaking down employment information by status in employment provides a statistical basis for describing workers' behaviour and conditions of work, and for defining an individual's socio-economic group. A high proportion of wage and salaried workers in a country can signify advanced economic development. If the proportion of own-account workers (self-employed without hired employees) is sizeable, it may be an indication of a large agriculture sector and low growth in the formal economy. Contributing family work is a form of labour – generally unpaid, although compensation might come indirectly in the form of family income – that supports production for the market. It is particularly common among women, especially women in households where other members engage in self-employment, specifically in running a family business or in farming. Where large shares of workers are contributing family workers, there is likely to be poor development, little job growth, widespread poverty and often a large rural economy.</p>

#	Name of indicator	Description of indicator
4	Employment by sector	<p>The indicator for employment by sector divides employment into three broad groupings of economic activity: agriculture, industry and services.</p> <p>Sectoral information is particularly useful in identifying broad shifts in employment and stages of development. In the textbook case of economic development, labour flows from agriculture and other labour-intensive primary activities to industry and finally to the services sector; in the process, workers migrate from rural to urban areas.</p>
5	Employment by occupation	<p>The indicator for employment by occupation classifies jobs into major groups, with the groups defined by the classification that is used. Most internationally comparable data currently available are classified according to the International Standard Classification of Occupations, 1988 (ISCO-88).</p> <p>Occupational data constitute the basis for an exceptionally broad variety of analytical, policy and other purposes. Occupational statistics are used for research into labour market topics ranging from occupational safety and health to labour market segmentation, and occupational analyses inform economic and labour policies in such diverse areas as educational planning, migration and employment services. Occupational information is particularly important for the identification of changes in skill levels in the labour force. In many advanced economies, but also in developing economies, occupational employment projection models are used to inform policies aiming to meet future skills needs, as well as to advise students and jobseekers on expected job prospects.</p>
6	Part-time workers	<p>The indicator on part-time workers focuses on individuals whose working hours total less than 'full-time', as a proportion of total employment. Because there is no agreed international definition as to the minimum number of hours in a week that constitute full-time work, the dividing line is determined either on a country-by-country basis or through the use of special estimations. Two measures are calculated for this indicator: total part-time employment as a proportion of total employment, sometimes referred to as the 'part-time employment rate'; and the percentage of the part-time workforce comprised of women.</p> <p>There has been rapid growth in part-time work in the past few decades in developed economies. This trend is related to the increase in female labour force participation, but also results from policies attempting to raise labour market flexibility in reaction to changing work organisation within industries and to the growth of the services sector. Of concern to policy-makers in the apparent move towards more flexible working arrangements is the risk that such working arrangements may be less economically secure and less stable than full-time employment.</p>
7	Hours of work	<p>Two measurements related to working time are included in KILM 7 in order to give an overall picture of the time that the employed throughout the world devote to work activities. The first measure relates to the hours that employed persons work per week while the second measure is the average annual hours actually worked per person.</p> <p>In recent years interest in working time issues has intensified. The number of hours worked has an impact on the health and well-being of workers. Some persons in developed and developing economies working full-time have expressed concern about their long working hours and its effects on their family and community life. Additionally, the number of hours worked has an impact on workers' productivity and on the labour costs of establishments. Measuring the level and trends in working time in a society, for different groups of persons and for individuals, is therefore important when monitoring working and living conditions as well as for analysing economic and broader social developments</p>
8	Employment in the informal economy	<p>KILM 8 is a measure of employment in the informal economy as a percentage of total non-agricultural employment. There are wide variations in definitions and methodology of data collection related to the informal economy.</p> <p>The informal sector represents an important part of the economy, and certainly of the labour market, in many countries and plays a major role in employment creation, production and income generation. In countries with high rates of population growth or urbanisation, the informal sector tends to absorb most of the expanding labour force in the urban areas. Informal employment offers a necessary survival strategy in countries that lack social safety nets, such as unemployment insurance, or where wages and pensions are low, especially in the public sector. In these situations, indicators such as the unemployment rate (KILM 9) and time-related underemployment (KILM 12) are not sufficient to describe the labour market completely.</p>
Unemployment, underemployment and inactivity indicators		
9	Unemployment	<p>The unemployment rate is probably the best-known labour market measure and certainly one of the most widely quoted. Together with the employment-to-population ratio (KILM 2), it provides the broadest indicator of the labour market situation in countries that collect information on the labour force.</p> <p>The overall unemployment rate for a country is a widely used measure of its unutilised labour supply. If employment is taken as the desired situation for people in the economically active population (the labour force), unemployment becomes the undesirable situation. Still, some short-term unemployment can be both desirable and necessary for ensuring adjustment to economic fluctuations. Unemployment rates by specific groups, defined by age, sex, occupation or industry, are also useful in identifying groups of workers and sectors most vulnerable to joblessness.</p>

#	Name of indicator	Description of indicator
10	Youth unemployment	<p>Youth unemployment is generally viewed as an important policy issue for many countries, regardless of their stage of development. For the purpose of this indicator, the term 'youth' covers persons aged 15 to 24 years and 'adult' refers to persons aged 25 years and over. The indicator consists of four distinct measurements, each representing a different aspect of the youth unemployment problem. The four measurements are: (a) youth unemployment rate (youth unemployment as a percentage of the youth labour force); (b) ratio of the youth unemployment rate to the adult unemployment rate; (c) youth unemployment as a proportion of total unemployment; and (d) youth unemployment as a proportion of the youth population.</p> <p>Young men and women today face increasing uncertainty in their hopes of undergoing a satisfactory entry to the labour market, and this uncertainty and disillusionment can, in turn, have damaging effects on individuals, communities, economies and society at large. Unemployed or underemployed youth are less able to contribute effectively to national development and have fewer opportunities to exercise their rights as citizens. They have less to spend as consumers, less to invest as savers and often have no 'voice' to bring about change in their lives and communities. Widespread youth unemployment and underemployment also prevents companies and countries from innovating and developing competitive advantages based on human capital investment, thus undermining future prospects.</p>
11	Long-term unemployment	<p>The indicator on long-term unemployment looks at duration of unemployment, that is, the average length of time that an unemployed person has been without work and looking for a job. The indicator includes two separate measures of long-duration unemployment: (a) the long-term unemployment rate – those unemployed one year or longer as a percentage of the labour force; and (b) the incidence of long-term unemployment – those unemployed for one year or longer as a proportion of total unemployed.</p> <p>While short periods of joblessness are of less concern, especially when unemployed persons are covered by unemployment insurance schemes or similar forms of support, prolonged periods of unemployment bring with them many undesirable effects, particularly loss of income and diminishing employability of the jobseeker. Moreover, short-term unemployment may even be viewed as desirable when it allows time for jobless persons to find optimal employment in line with the jobseeker's skills set and capabilities; also, in employment systems where workers can be temporarily laid off and then called back, short spells of unemployment allow employers to weather temporary declines in business activity.</p>
12	Time-related underemployment	<p>This indicator relates to the number of employed persons whose hours of work in the reference period are insufficient in relation to a more desirable employment situation in which the person is willing and available to engage. The indicator was previously known as 'visible underemployment'. Two time-related underemployment rates are presented: one gives the number of persons in time-related underemployment as a percentage of the labour force, and the other as a percentage of total employment.</p> <p>Underemployment reflects underutilisation of the productive capacity of the labour force. To reflect the various facets of this concept, one needs to examine a set of indicators which includes but is not limited to labour force, employment-to-population ratios, inactivity rates, status in employment, working poverty and labour productivity. Utilising a single indicator to paint a picture of underutilisation will often provide an incomplete picture.</p> <p>Underemployment has been broadly interpreted and has come to be used to imply any sort of employment that is 'unsatisfactory' (as perceived by the worker) in terms of insufficient hours, insufficient compensation or insufficient use of one's skills. The fact that the judgement about underemployment is based on personal assessment that could change daily at the whim of the respondent makes it a concept that is difficult to quantify and to interpret. It is better to deal with the more specific (more quantifiable) components of underemployment separately; the 'visible' underemployment can be measured in terms of hours of work (time-related underemployment) whereas 'invisible' underemployment, which is measured in terms of income earned from the activity, low productivity, or the extent to which education or skills are underutilised or mismatched, are much more difficult to quantify. Time-related underemployment is the only component of underemployment to date that has been agreed on and properly defined within the international community of labour statisticians.</p>
13	Inactivity	<p>The inactivity rate is the proportion of the working-age population that is not in the labour force. By definition, the inactivity rate and the labour force participation rate (see KILM 1) will add up to 100%.</p> <p>Although labour market economists tend to focus on the activities and characteristics of people in the labour force, there has been continued, if less visible, interest in individuals outside of the labour market, especially those who want to work but are not currently seeking work. Much of this growing interest stems from concern over improving the availability of decent and productive employment opportunities in developing and developed economies alike. Individuals are considered to be outside the labour force, or inactive, if they are neither employed nor unemployed, that is, not actively seeking work. There are a variety of reasons why some individuals do not participate in the labour force; such persons may be occupied in caring for family members; they may be retired, sick or disabled or attending school; they may believe no jobs are available; or they may simply not want to work.</p> <p>In some situations, a high inactivity rate for certain population groups should not necessarily be viewed as 'bad'; for instance, a relatively high inactivity rate for women aged 25 to 34 years may be due to their leaving the labour force to attend to family responsibilities such as childbearing and childcare.</p>

#	Name of indicator	Description of indicator
	Educational attainment and illiteracy indicator	
14	Educational attainment and illiteracy	<p>KILM 14 reflects the levels and distribution of the knowledge and skills base of the labour force and unemployed.</p> <p>In all countries, human resources represent, directly or indirectly, the most valuable and productive resource; countries traditionally depend on the health, strength and basic skills of their workers to produce goods and services for consumption and trade. The advance of complex organisations and knowledge requirements, as well as the introduction of sophisticated machinery and technology, means that economic growth and improvements in welfare increasingly depend on the degree of literacy and educational attainment of the total population. The population's predisposition to acquire such skills can be enhanced by experience, informal and formal education, and training.</p> <p>Although the natural endowments of the labour force remain relevant, continuing economic and technological change means that the bulk of human capital is now acquired, not only through initial education and training, but increasingly through adult education and enterprise or individual worker training, within the perspective of lifelong learning and career management. Unfortunately, quantitative data on lifelong learning, and indicators that monitor developments in the acquisition of knowledge and skills beyond formal education, are sparse. Statistics on levels of educational attainment, therefore, remain the best available indicators of labour force skill levels to date. These are important determinants of a country's capacity to compete successfully and sustainably in world markets and to make efficient use of rapid technological advances. They also should affect the employability of workers.</p>
	Wage and compensation cost indicators	
15	Average monthly wages	KILM 15 presents trends in average monthly wages, both in nominal and real terms (i.e. adjusted for changes in consumer prices), for 115 economies. The inclusion of the series for the first time in the KILM 7th Edition was prompted by several considerations. Information on average wages represents one of the most important aspects of labour market information. Wages are a substantial form of income, accruing to a high proportion of the economically active population, namely persons in paid employment (employees).
16	Hourly compensation costs	The indicators within KILM 16 are concerned with the levels, trends and structures of employers' hourly compensation costs for the employment of workers in the manufacturing sector.
	Labour productivity indicator	
17	Labour productivity	<p>KILM 17 presents information on labour productivity for the aggregate economy with labour productivity defined as output per unit of labour input (persons engaged or hours worked).</p> <p>Economic growth in a country can be ascribed either to increased employment or to more effective work by those who are employed. The latter effect can be described through statistics on labour productivity. Labour productivity therefore is a key measure of economic performance. The understanding of the driving forces behind it, in particular the accumulation of machinery and equipment, improvements in organisation as well as physical and institutional infrastructures, improved health and skills of workers ('human capital') and the generation of new technology, is important for formulating policies to support economic growth. Such policies may focus on regulations on industries and trade, institutional innovations, government investment programmes in infrastructures as well as human capital, technology or any combination of these.</p>
	Poverty, income distribution and the working poor indicator	
18	Poverty, income distribution and the working poor	<p>This indicator is used for monitoring progress toward the first United Nations Millennium Development Goal (MDG), which is to eradicate extreme poverty and hunger. The proportion of the population living below the international poverty line of USD1.25 is an indicator under the first target (1a) of the MDG (on the eradication of poverty), while the proportion of persons living with their families below the poverty line, the 'working poor', is an indicator for monitoring the MDG's second target (1b) on decent work.</p> <p>The value of measures of poverty and income distribution lies in the information they provide on the outcome of economic processes at the national level, that is, as a reflection of the access of different groups of people to goods and services. The information relating to poverty shows the absolute number and the proportion of the population that has 'unacceptably' low consumption or income levels, while the inequality series shows the disparity between different groups of people within a country in terms of consumption or income levels. Thus, measurements of poverty are extremely important as an indication of the well-being and living conditions in a country.</p>

ANNEXURE B
O*NET SKILLS QUESTIONNAIRE

Skills Questionnaire



Background Information

This survey is designed to capture the diversity of American workers. This questionnaire will be administered to a large number of workers with differing amounts of job experience in many different jobs. Your answers to these questions will help us to know if the goal of diversity is being achieved. Therefore, it is very important that you give accurate answers to these questions.

Please read each question carefully and mark your answer by putting an ☒ in the box beside your answer, or by writing an answer on the line provided.

B1. What is the title of your job? (PLEASE PRINT)

B2. For how long have you worked at this job? (Mark one box)

- ☐ Ten years or more
- ☐ At least 6 years, but less than 10 years
- ☐ At least 3 years, but less than 6 years
- ☐ At least 1 year, but less than 3 years
- ☐ At least 3 month, but less than 12 months
- ☐ At least 1 month, but less than 3 months
- ☐ Less than 1 month

B3. In what year were you born? 1 9 _ _

B4. Are you male or female? (Mark one box)

- ☐ Male
- ☐ Female

B5. Are you Hispanic or Latino? (Mark one box)

- ☐ Yes
- ☐ No

B6. What is your race? (Mark one or more boxes)

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White

B7. Do you have any of the following long-lasting conditions?

- | | <u>Yes</u> | <u>No</u> |
|---|--------------------------|--------------------------|
| a. Blindness, deafness, or a severe vision or hearing impairment?..... | <input type="checkbox"/> | <input type="checkbox"/> |
| b. A condition that substantially limits one or more basic physical activities such as walking, climbing stairs, reaching, lifting, or carrying?..... | <input type="checkbox"/> | <input type="checkbox"/> |

B8. Because of a physical, mental, or emotional condition lasting 6 months or more, do you have any difficulty doing any of the following activities?

- | | <u>Yes</u> | <u>No</u> |
|--|--------------------------|--------------------------|
| a. Learning, remembering or concentrating?..... | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Dressing, bathing, or getting around inside the home?..... | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Going outside the home alone to shop or visit a doctor's office?..... | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Working at a job or business?..... | <input type="checkbox"/> | <input type="checkbox"/> |

Instructions for Making Skills Ratings

These questions are about work-related skills. A **Skill** is the ability to perform a task well. It is usually developed over time through training or experience. A skill can be used to do work in many jobs or it can be used in learning. You will be asked about a series of different skills and how they relate to *your current job* - that is, the job you hold now.

Each skill in this questionnaire is named and defined.

For example:

Writing	Communicating effectively in writing as appropriate for the needs of the audience.
----------------	---

You are then asked to answer two questions about each skill:

A How important is the skill to the performance of your current job?

For example:

How <u>important</u> is WRITING to the performance of your current job?				
Not Important*	Somewhat Important	Important	Very Important	Extremely Important
①	②	③	④	⑤

Mark your answer by putting an • through the number that represents your answer.

Do not mark on the line between the numbers.

***If you rate the skill as Not Important to the performance of your job, mark the one [①] then skip over question B and proceed to the next skill.**

B What level of the skill is needed to perform your current job?

To help you understand what we mean by **level**, we provide you with examples of job-related activities at different levels. For example:

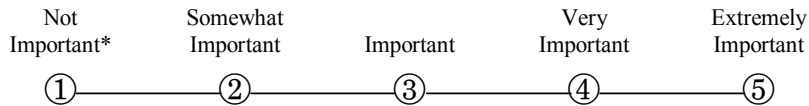
What <u>level</u> of WRITING is needed to perform your current job?						
	Take a telephone message		Write a memo to staff outlining new directives		Write a novel for publication	
	•		•		•	
①	②	③	④	⑤	⑥	⑦
						Highest Level

Mark your answer the same way you did for the first question.

1. Reading Comprehension

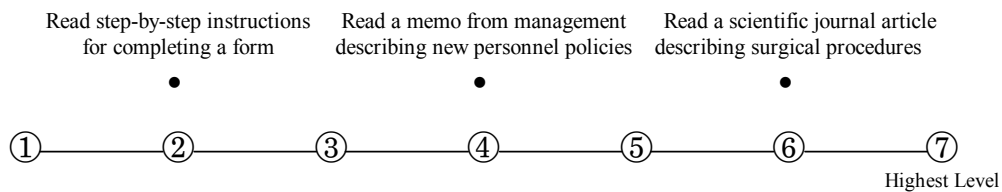
Understanding written sentences and paragraphs in work-related documents.

How important is READING COMPREHENSION to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

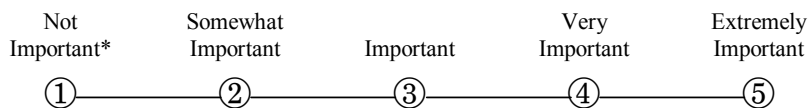
What level of READING COMPREHENSION is needed to perform *your current job*?



2. Active Listening

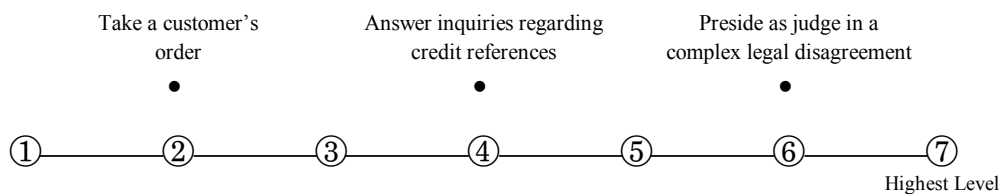
Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

A. How important is ACTIVE LISTENING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

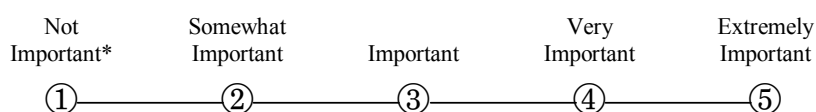
B. What level of ACTIVE LISTENING is needed to perform *your current job*?



3. Writing

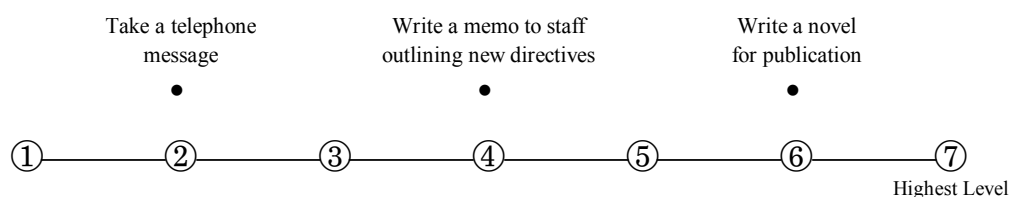
Communicating effectively in writing as appropriate for the needs of the audience.

A. How important is WRITING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

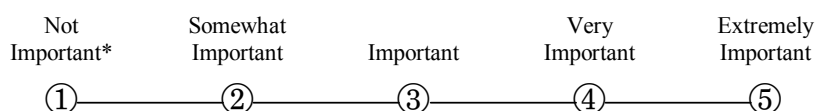
B. What level of WRITING is needed to perform *your current job*?



4. Speaking

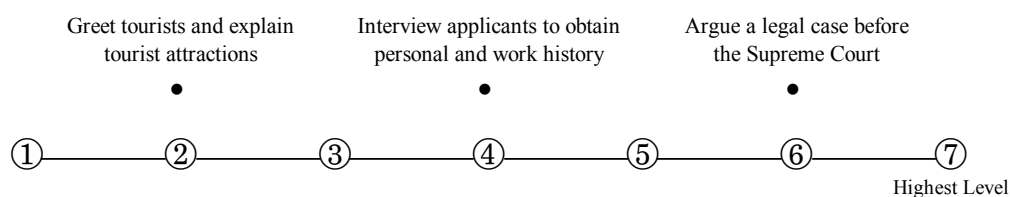
Talking to others to convey information effectively.

A. How important is SPEAKING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

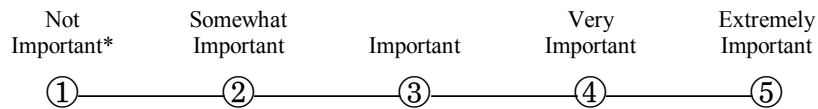
B. What level of SPEAKING is needed to perform *your current job*?



5. Mathematics

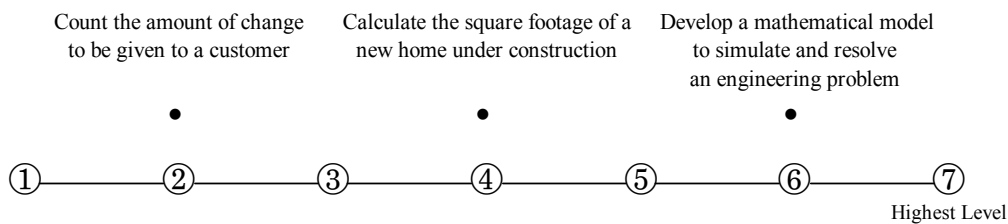
Using mathematics to solve problems.

A. How **important** is MATHEMATICS to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

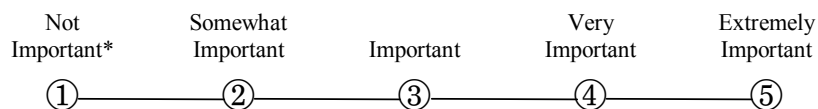
B. What **level** of MATHEMATICS is needed to perform *your current job*?



6. Science

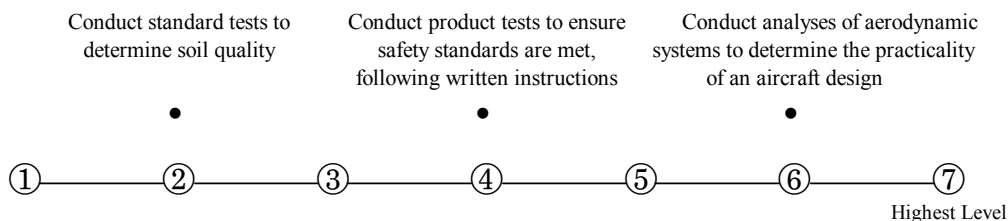
Using scientific rules and methods to solve problems.

A. How **important** is SCIENCE to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

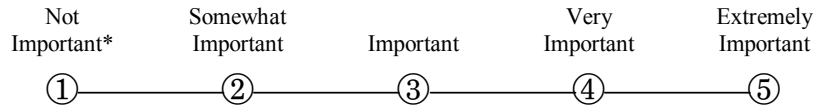
B. What **level** of SCIENCE is needed to perform *your current job*?



7. Critical Thinking

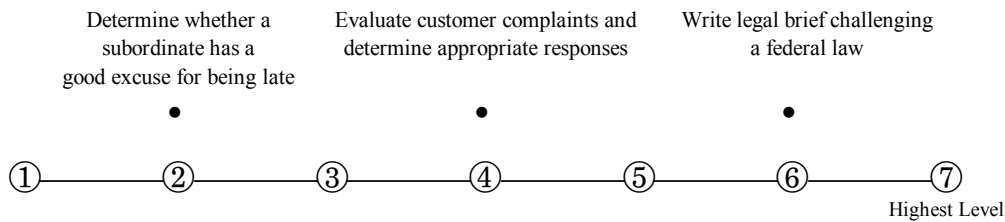
Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

A. How important is CRITICAL THINKING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

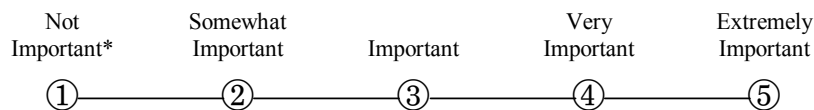
B. What level of CRITICAL THINKING is needed to perform *your current job*?



8. Active Learning

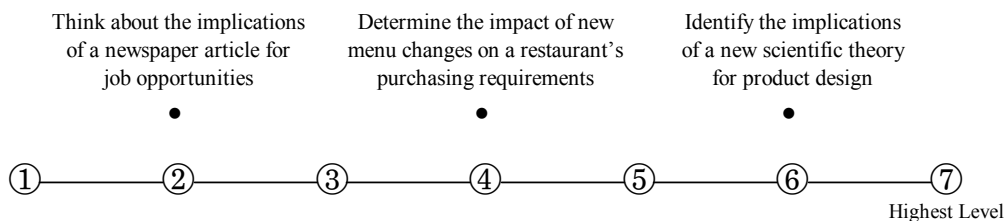
Understanding the implications of new information for both current and future problem-solving and decision-making.

A. How important is ACTIVE LEARNING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

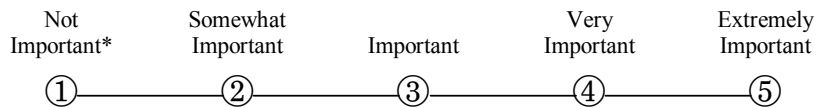
B. What level of ACTIVE LEARNING is needed to perform *your current job*?



9. Learning Strategies

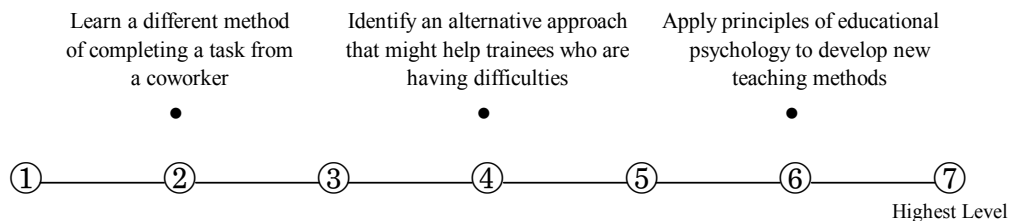
Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.

A. How important is LEARNING STRATEGIES to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

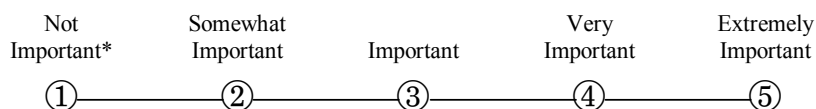
B. What level of LEARNING STRATEGIES is needed to perform *your current job*?



10. Monitoring

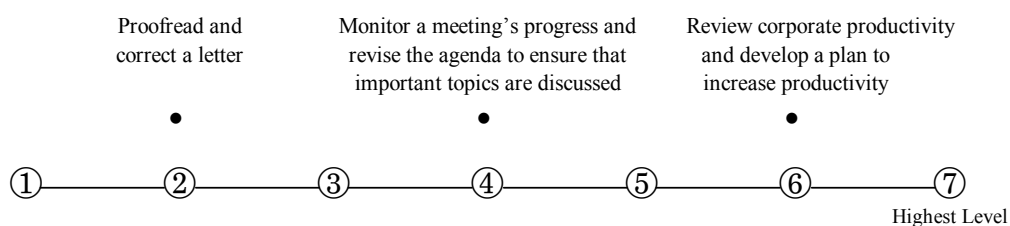
Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

A. How important is MONITORING to the performance of *your current job*?



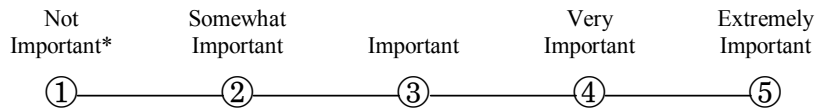
* If you marked Not Important, skip LEVEL below and go on to the next skill.

B. What level of MONITORING is needed to perform *your current job*?



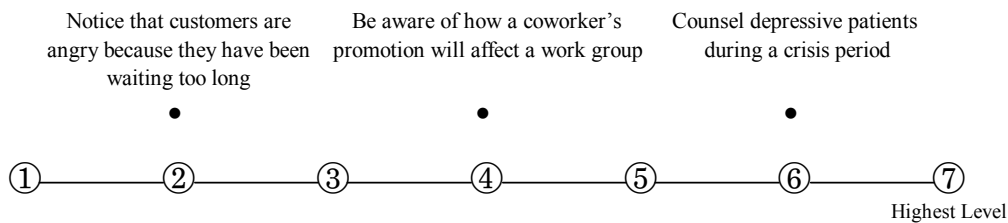
11. Social Perceptiveness Being aware of others' reactions and understanding why they react as they do.

A. How important is SOCIAL PERCEPTIVENESS to the performance of *your current job*?



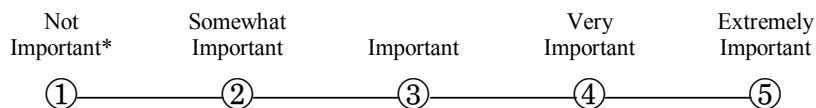
* If you marked Not Important, skip LEVEL below and go on to the next skill.

B. What level of SOCIAL PERCEPTIVENESS is needed to perform *your current job*?



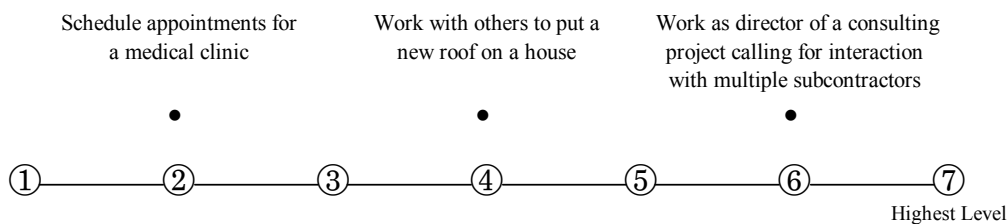
12. Coordination Adjusting actions in relation to others' actions.

A. How important is COORDINATION to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

B. What level of COORDINATION is needed to perform *your current job*?



13. Persuasion

Persuading others to change their minds or behavior.

A. How important is PERSUASION to the performance of *your current job*?

Not Important*	Somewhat Important	Important	Very Important	Extremely Important
①	②	③	④	⑤

* If you marked Not Important, skip LEVEL below and go on to the next skill.

B. What level of PERSUASION is needed to perform *your current job*?

Solicit donations for a charity	Convince a supervisor to purchase a new copy machine	Change the opinion of the jury in a complex legal case				
•	•	•				
①	②	③	④	⑤	⑥	⑦
						Highest Level

14. Negotiation

Bringing others together and trying to reconcile differences.

A. How important is NEGOTIATION to the performance of *your current job*?

Not Important*	Somewhat Important	Important	Very Important	Extremely Important
①	②	③	④	⑤

* If you marked Not Important, skip LEVEL below and go on to the next skill.

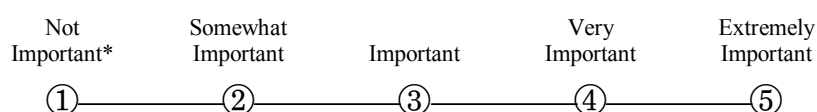
B. What level of NEGOTIATION is needed to perform *your current job*?

Present justification to a manager for altering work schedule	Contract with a wholesaler to sell items at a given cost	Work as an ambassador in negotiating a new treaty				
•	•	•				
①	②	③	④	⑤	⑥	⑦
						Highest Level

15. Instructing

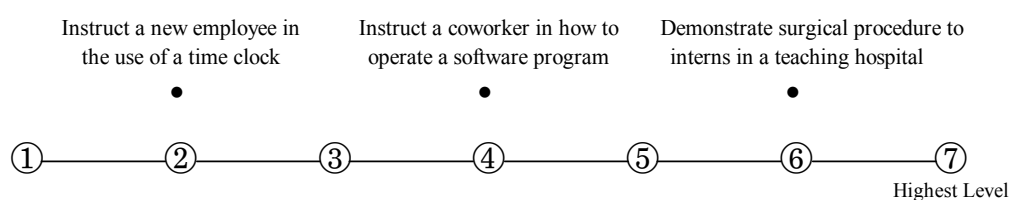
Teaching others how to do something.

A. How important is INSTRUCTING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

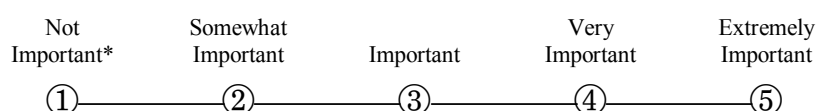
B. What level of INSTRUCTING is needed to perform *your current job*?



16. Service Orientation

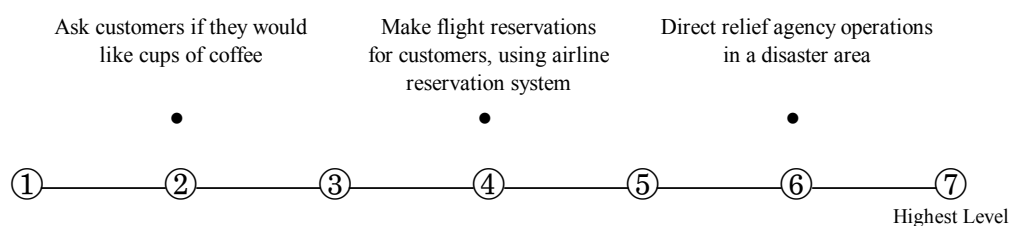
Actively looking for ways to help people.

A. How important is SERVICE ORIENTATION to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

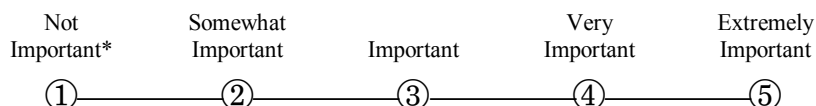
B. What level of SERVICE ORIENTATION is needed to perform *your current job*?



17. Complex Problem Solving

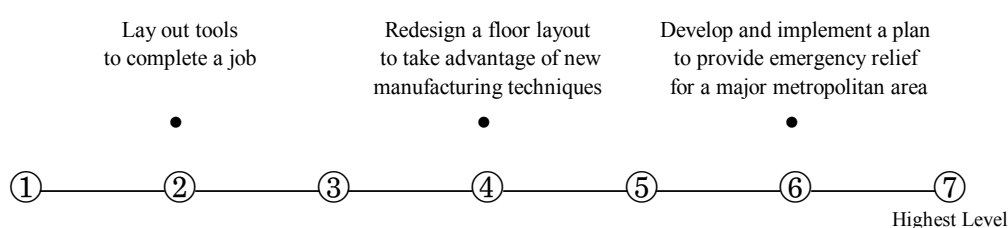
Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

A. How important is COMPLEX PROBLEM SOLVING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

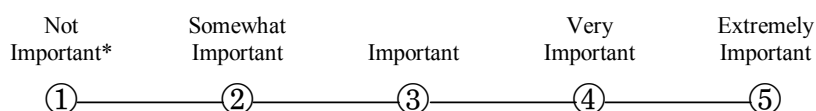
B. What level of COMPLEX PROBLEM SOLVING is needed to perform *your current job*?



18. Operations Analysis

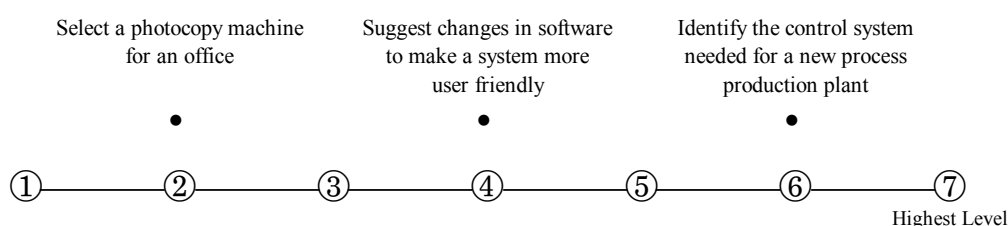
Analyzing needs and product requirements to create a design.

A. How important is OPERATIONS ANALYSIS to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

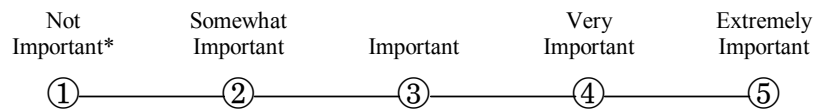
B. What level of OPERATIONS ANALYSIS is needed to perform *your current job*?



19. Technology Design

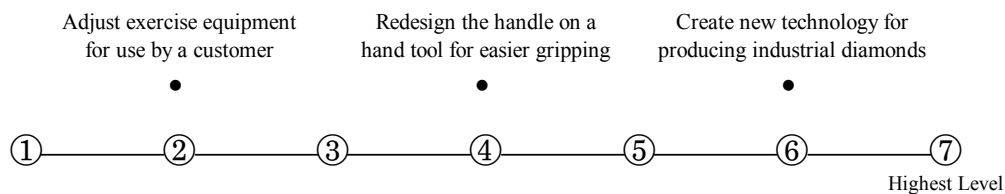
Generating or adapting equipment and technology to serve user needs.

A. How important is TECHNOLOGY DESIGN to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

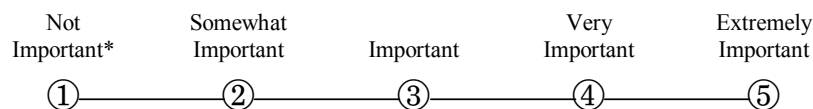
B. What level of TECHNOLOGY DESIGN is needed to perform *your current job*?



20. Equipment Selection

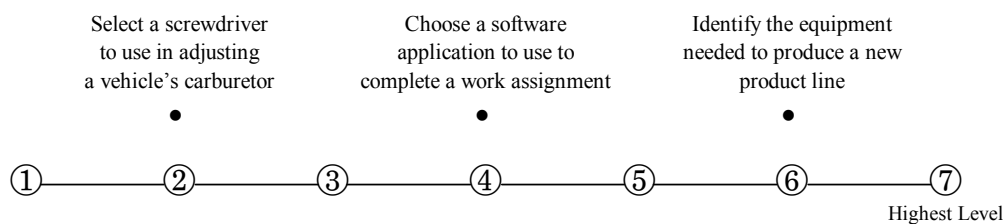
Determining the kind of tools and equipment needed to do a job.

A. How important is EQUIPMENT SELECTION to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

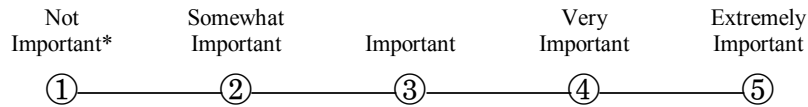
B. What level of EQUIPMENT SELECTION is needed to perform *your current job*?



21. Installation

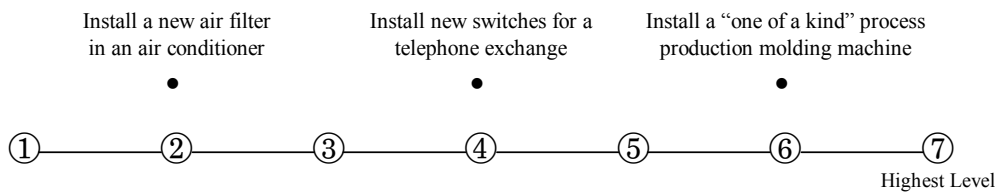
Installing equipment, machines, wiring, or programs to meet specifications.

A. How important is INSTALLATION to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

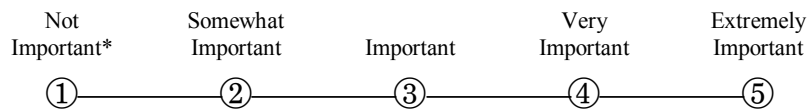
B. What level of INSTALLATION is needed to perform *your current job*?



22. Programming

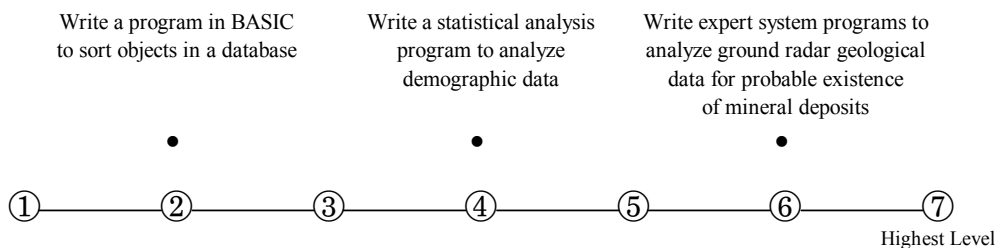
Writing computer programs for various purposes.

A. How important is PROGRAMMING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

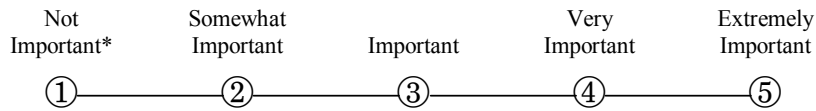
B. What level of PROGRAMMING is needed to perform *your current job*?



23. Quality Control Analysis

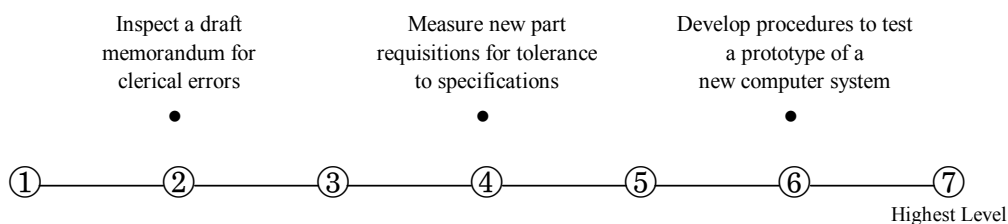
Conducting tests and inspections of products, services, or processes to evaluate quality or performance.

A. How important is QUALITY CONTROL ANALYSIS to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

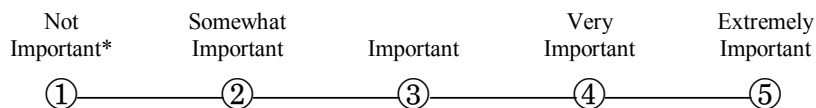
B. What level of QUALITY CONTROL ANALYSIS is needed to perform *your current job*?



24. Operations Monitoring

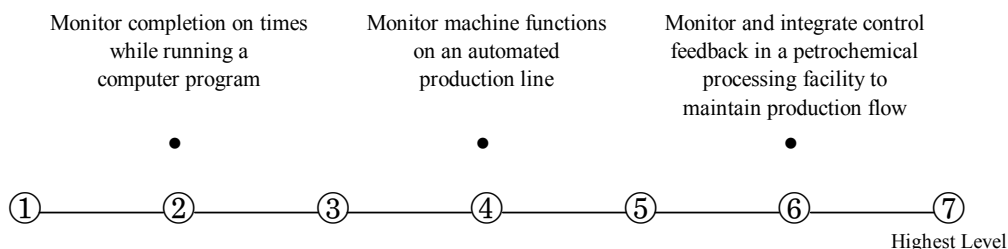
Watching gauges, dials, or other indicators to make sure a machine is working properly.

A. How important is OPERATIONS MONITORING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

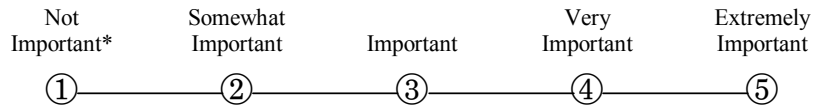
B. What level of OPERATIONS MONITORING is needed to perform *your current job*?



25. Operation and Control

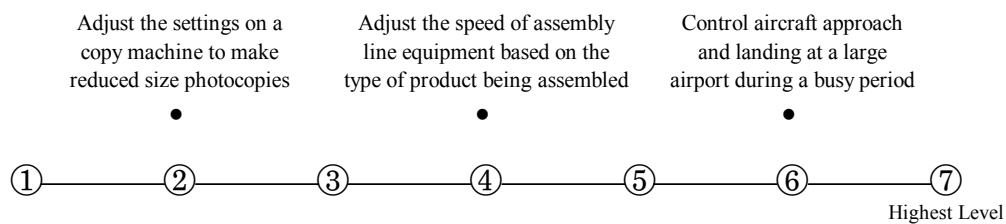
Controlling operations of equipment or systems.

A. How important is OPERATION AND CONTROL to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

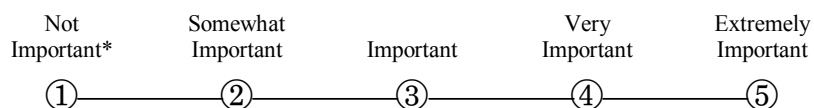
B. What level of OPERATION AND CONTROL is needed to perform *your current job*?



26. Equipment Maintenance

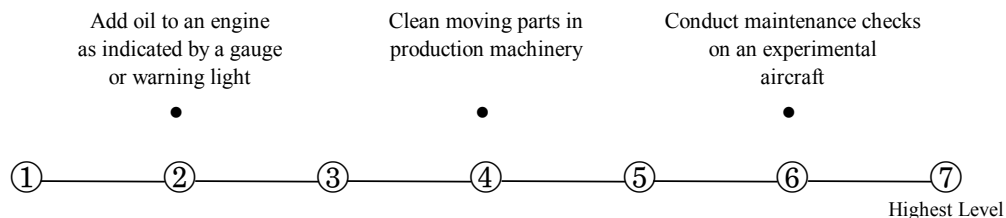
Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.

A. How important is EQUIPMENT MAINTENANCE to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

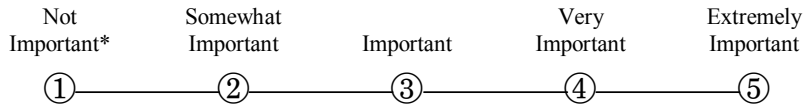
B. What level of EQUIPMENT MAINTENANCE is needed to perform *your current job*?



27. Troubleshooting

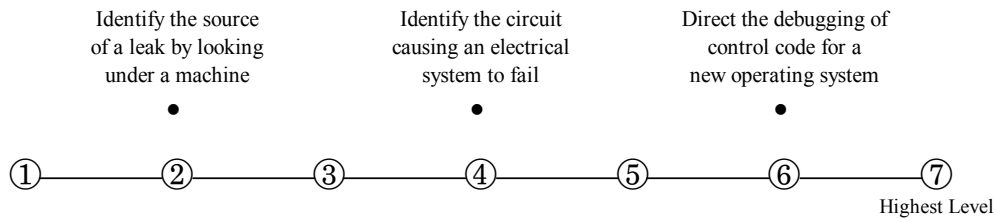
Determining causes of operating errors and deciding what to do about it.

A. How important is TROUBLESHOOTING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

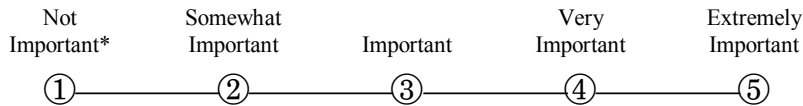
B. What level of TROUBLESHOOTING is needed to perform *your current job*?



28. Repairing

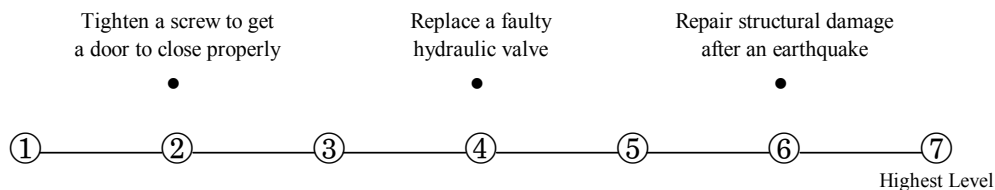
Repairing machines or systems using the needed tools.

A. How important is REPAIRING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

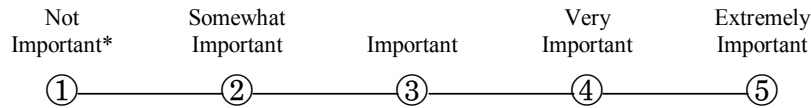
B. What level of REPAIRING is needed to perform *your current job*?



29. Systems Analysis	Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
-----------------------------	---

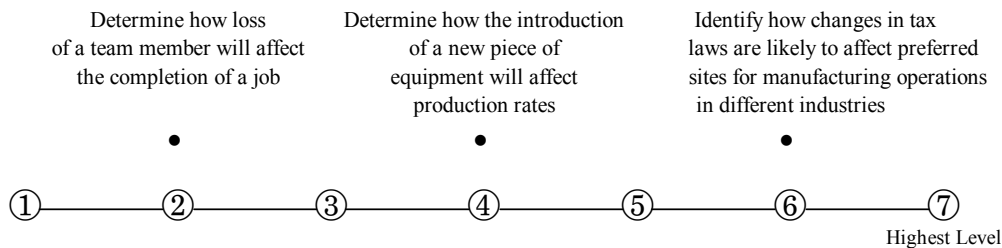
29. Systems Analysis	Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
-----------------------------	---

A. How important is SYSTEMS ANALYSIS to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

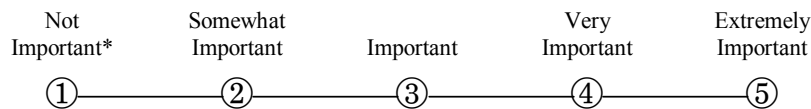
B. What level of SYSTEMS ANALYSIS is needed to perform *your current job*?



30. Systems Evaluation

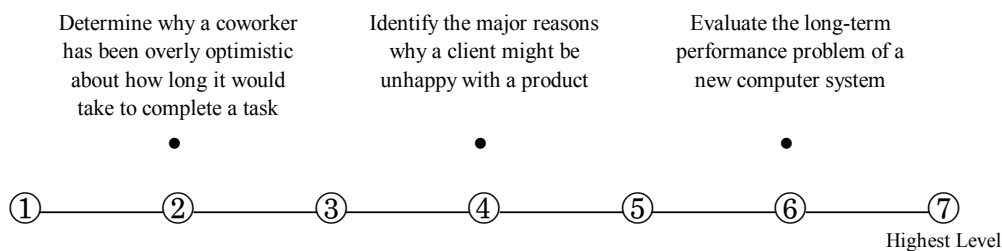
30. Systems Evaluation	Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
-------------------------------	---

A. How important is SYSTEMS EVALUATION to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

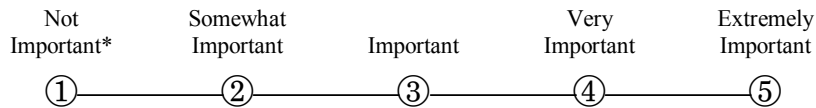
B. What level of SYSTEMS EVALUATION is needed to perform *your current job*?



31. Judgment and Decision Making

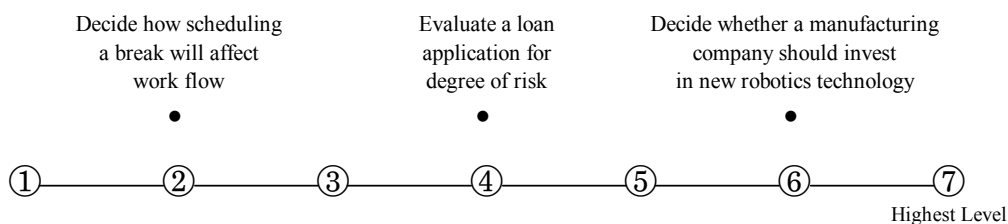
Considering the relative costs and benefits of potential actions to choose the most appropriate one.

A. How important is JUDGMENT AND DECISION MAKING to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

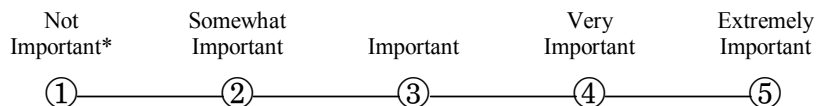
B. What level of JUDGMENT AND DECISION MAKING is needed to perform *your current job*?



32. Time Management

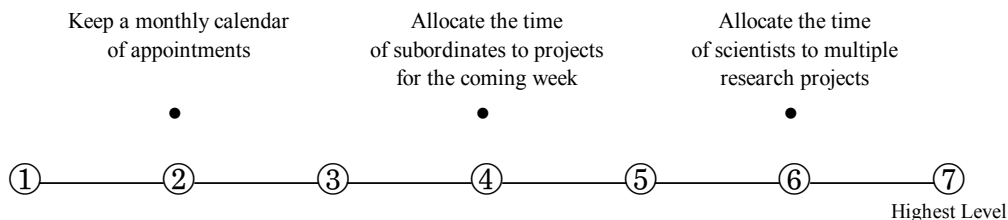
Managing one's own time and the time of others.

A. How important is TIME MANAGEMENT to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

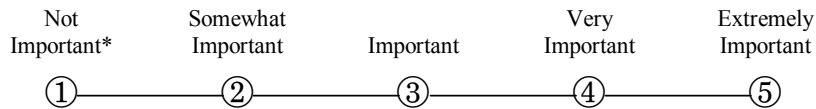
B. What level of TIME MANAGEMENT is needed to perform *your current job*?



33. Management of Financial Resources Determining how money will be spent to get the work done, and accounting for these expenditures.

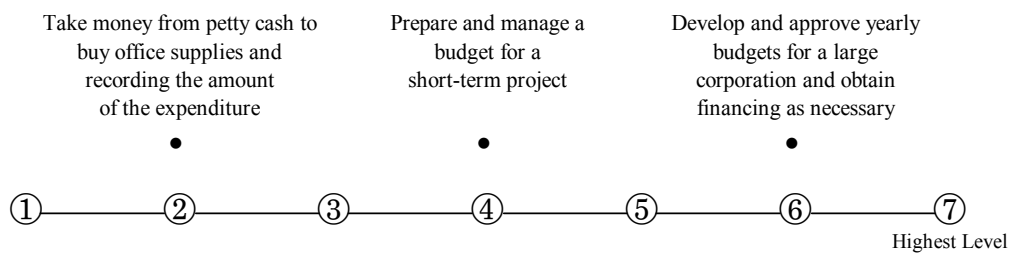
33. Management of Financial Resources Determining how money will be spent to get the work done, and accounting for these expenditures.

A. How important is MANAGEMENT OF FINANCIAL RESOURCES to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

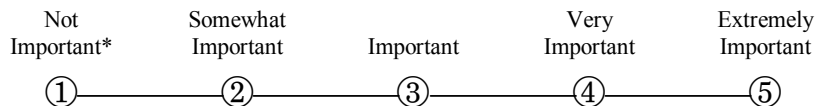
B. What level of MANAGEMENT OF FINANCIAL RESOURCES is needed to perform *your current job*?



34. Management of Material Resources	Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.
---	--

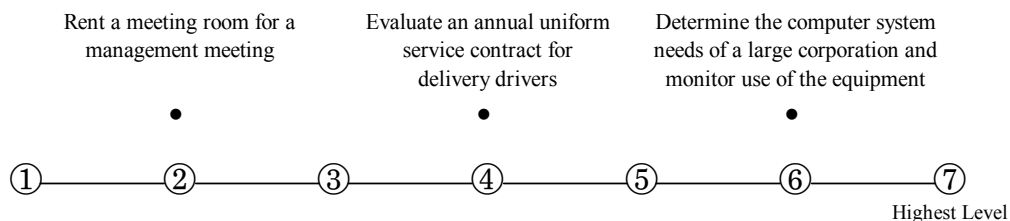
34. Management of Material Resources	Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.
---	--

A. How important is MANAGEMENT OF MATERIAL RESOURCES to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

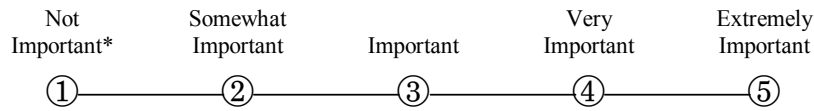
B. What level of MANAGEMENT OF MATERIAL RESOURCES is needed to perform *your current job*?



35. Management of Personnel Resources

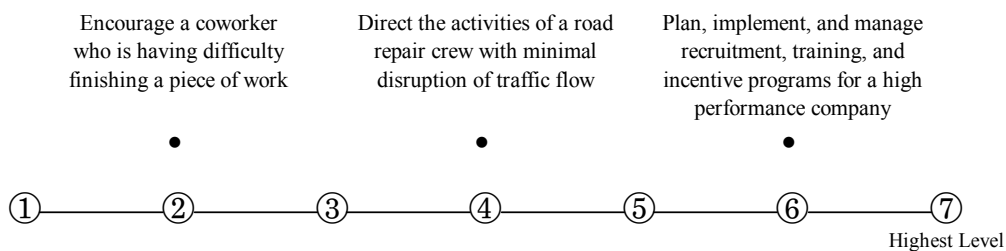
Motivating, developing, and directing people as they work, identifying the best people for the job.

A. How important is MANAGEMENT OF PERSONNEL RESOURCES to the performance of *your current job*?



* If you marked Not Important, skip LEVEL below and go on to the next skill.

B. What level of MANAGEMENT OF PERSONNEL RESOURCES is needed to perform *your current job*?



ANNEXURE C NATIONAL EMPLOYER SKILLS SURVEY 2011



IFF Research
Chart House
16, Chart Street
London N1 6DD

T 020 7250 3035
F 020 7490 2490
iff@iffresearch.com
iffresearch.com

Private & Confidential
Employer Skills Survey

J4932
Telephone

Date 13/12/11

S Screener

SCREENING OUTCOMES

Hard appointment
Soft appointment
Refusal
Refusal (company policy)
Refusal (taken part in recent survey)
Nobody at site to answer questions
Not available in deadline
Residential number
Dead line
Company closed
Company too small
Out of quota

ASK TELEPHONIST

S1 **Good morning / afternoon. My name is NAME and I'm calling from [COMPANY NAME]. Can I just check, is this [COMPANY NAME FROM SAMPLE]?**

Yes – correct	1	CONTINUE
No – company name wrong	2	TAKE CORRECT COMPANY NAME AND CONTINUE
Hard appointment	3	MAKE APPOINTMENT
Soft appointment	4	
Refusal	5	CLOSE
Refusal – company policy	6	
Refusal – taken part in recent survey	7	
Residential Number	8	
Company closed	9	

S2 **My name is NAME, calling from [COMPANY NAME], an independent market research company. We're conducting a survey about recruitment, human resources and workplace skills. Can I speak to the most senior person at this establishment with responsibility for these sorts of issues?**

INTERVIEWER NOTE: IF RESPONDENT ATTEMPTS TO TRANSFER TO SOMEONE AT ANOTHER SITE: **We need to speak to someone at this site rather than someone at another branch or office of your organisation. Could I speak to the person at this site who would have the best overview of the skills that your establishment needs its workers to have?**

Continue	1	CONTINUE
Referred to someone else at establishment NAME _____ JOB TITLE _____	2	TRANSFER AND ASK S3
Hard appointment	3	MAKE APPOINTMENT
Soft appointment	4	
Refusal	5	THANK AND CLOSE
Refusal – company policy	6	
Refusal – taken part in recent survey	7	
Not available in deadline	8	
WANTS REASSURANCES	9	SHOW REASSURANCES

ASK ALL

S3 **Good morning/afternoon, my name is NAME and I am calling from [COMPANY NAME], an independent research organisation.**

ALL: We are conducting a survey on behalf of the UK Commission for Employment and Skills and its partners including [ENGLAND: the Department for Business, Innovation and Skills (BIS) WALES: the Welsh Assembly Government SCOTLAND: the Scottish Government NI: the Northern Ireland Assembly].

The information will be used to inform government of the skill needs of businesses. Your assistance will ensure that the views expressed are representative of all employers in your industry.

The interview will take on average 25 minutes depending on the answers given. Would it be convenient to conduct the interview now?

Yes – continue	1	CONTINUE
Definite Appointment	2	MAKE DEFINITE APPOINTMENT
Soft appointment	3	MAKE SOFT CALL BACK
Refusal	4	THANK AND CLOSE
Refusal – company policy	5	
Refusal – taken part in recent survey	6	
Not available in deadline	7	
WANTS REASSURANCES	8	SHOW REASSURANCES

REASSURANCES TO USE IF NECESSARY

The interview will take around 25 minutes to complete.

Please note that all data will be reported in aggregate form and your answers will not be reported to our client in any way that would allow you to be identified.

If respondent wishes to confirm validity of survey or get more information about aims and objectives, they can call:

- **MRS: Market Research Society on 0500 39 69 99**
- **IFF: Catherine Riley or John Newton on 0207 250 3035**
- **UKCES: Dr Susannah Constable on 020 7881 8933**

ASK ALL WELSH (COUNTRY=4)

S4) **Would you prefer the interview to be carried out in Welsh or English?**

Welsh	1	AGREE CONVENIENT TIME FOR WELSH CALL BACK
English	2	CONTINUE

DUMMOD: APPLIES TO ENGLAND, NORTHERN IRELAND AND WALES ONLY (COUNTRY=1, 2, 4):
DUMMY QUESTION TO SET MODULE

MODULE 1 (50% OF SAMPLE ASSIGNED RANDOMLY)	1
MODULE 2 (50% OF SAMPLE ASSIGNED RANDOMLY)	2

A Firmographics

ASK ALL

A1 **First, some questions about your organisation and the site at which you work.**

How many people work at this establishment? Please include both full-time and part-time employees on your payroll and any working proprietors or owners, but exclude the self-employed and outside contractor or agency staff.

INTERVIEWER NOTE: NON-EMPLOYEE TRAINERS AND EMPLOYEES UNDER 16 SHOULD BE EXCLUDED.

PROBE FOR BEST ESTIMATE AND RECORD NUMBER

CLOSE IF DON'T KNOW / REFUSED

A1DUM) CATI TO CODE RANGE AUTOMATICALLY AND CHECK QUOTA

1	1	ASK A2A
2-4	2	GO TO A3
5-9	3	
10-24	4	
25-49	5	
50-249	6	
250 or more	7	

ASK IF A1=1

A2a **And do you own all or any part of the organisation?**

Yes	1	CLOSE
No	2	CONTINUE

ASK ALL

A3 **Is this establishment..? READ OUT. SINGLE CODE.**

The only establishment in the organisation, or	1	GO TO A6
One of a number of establishments within a larger organisation	2	ASK A4

ASK IF MULTI-SITE ORGANISATION (A3=2)

A4 **Can I just check, is this site..? READ OUT, CODE ONE ONLY**

A branch	1
A division	2
A subsidiary	3
An area / regional office	4
The head office	5
A franchised organisation	6
DO NOT READ OUT: Other (specify)	7
DO NOT READ OUT: Don't know	X

ASK IF MULTISITE BUT NOT HEAD OFFICE (A3=2 AND A4≠5)

A4A **In which country are the headquarters of your organisation based?**
PROMPT AS NECESSARY. CODE ONE ONLY.

England	1
Scotland	2
Wales	3
Northern Ireland	4
Outside the UK	5
DO NOT READ OUT: Don't know	X

ASK IF MULTI-SITE ORGANISATION (A3=2)

A5 **And how many people work across your organisation in the UK as a whole?**
ADD IF NECESSARY: **By that I mean both full-time and part-time employees on your payroll, as well as any working proprietors or owners.**
PROBE FOR BEST ESTIMATE AND RECORD NUMBER – ONLY ALLOW NUMBERS LARGER THAN GIVEN AT ESTABLISHMENT SIZE QUESTION (A1)

IF DK, PROMPT WITH RANGES (DO NOT ALLOW RANGES SMALLER THAN THE RANGE GIVEN AT A1DUM)

(IF ANSWER GIVEN, CATI CODE RANGES AUTOMATICALLY)

A5RAN

2-4	1
5-9	2
10-24	3
25-49	4
50-249	5
Over 250	6
Don't know	X

IF MULTI-SITE ORGANISATION (A3=2):

From now on, when I use the word ‘establishment’, I mean the site at which you work.

ASK ALL

- A6 **I have [SIC DESCRIPTION ON SAMPLE] as a general classification for your establishment. Does this sound about right?**

Yes	1	GO TO A8
No	2	ASK A7

IF NO (A6=2):

- A7 **How would you describe the main business activity of this establishment?**

PROBE FULLY:

What is the main product or service of this establishment?

What exactly is made or done at this establishment?

What material or machinery does that involve using?

Who does it sell its product/services to?

WRITE IN. MUST CODE TO 4-DIGIT SIC07.

ASK ALL

- A8 **Would you classify your organisation as one ...? READ OUT. CODE ONE ONLY**

MAINLY seeking to make a profit	1
A charity or voluntary sector organisation or a social enterprise	2
A local-government financed body ADD IF NECESSARY: such as a school or a body delivering leisure, transport, social care, waste or environmental health services	3
A central government financed body ADD IF NECESSARY: such as the Civil Service, any part of the NHS, a college or university, the Armed Services, an Executive Agency or other non-departmental public bodies	4
DO NOT READ OUT: None of the above, other (specify)	5

IF MULTI-SITE ORGANISATION AND NOT HEAD OFFICE (A3=2 AND A4≠5)

- A9 **Thinking about decisions relating to recruitment and training, would you say that they are...? READ OUT. CODE ONE ONLY.**

Taken solely by your establishment	1
Taken primarily at head office but your establishment has a lot of input	2
Taken primarily at head office but your establishment has some input	3
Taken solely by head office	4
DO NOT READ OUT: Don't know	X

IF PRIVATE SECTOR WITH MORE THAN ONE PERSON WORKING THERE (A1>1 AND A8=1 OR 5):

A9A **Of the [NUMBER FROM A1] people who work at this site, how many own all or any part of the organisation?**

PROBE FOR BEST ESTIMATE AND RECORD NUMBER. ALLOW 0-A1.

DP: IF AT THIS STAGE RESPONDENT NEEDS TO CHANGE THEIR ANSWER TO A1 INSERT DUMMY QUESTION WHICH OVERWRITES A1 WITHOUT INTERVIEWER NEEDING TO SNAP BACK

DUMSEG

DUMMY QUESTION TO DETERMINE SAMPLE SEGMENT

2+ EMPLOYEES OR 1+ WORKING PROPRIETORS AND 1 EMPLOYEE	1	A1>1 AND (A1 MINUS A9A > 0)
2+ WORKING PROPRIETORS 0 EMPLOYEES	2	A1>1 AND (A1 MINUS A9A = 0)
1 EMPLOYEE 0 WORKING PROPRIETORS	3	A1=1 AND A2a=2
1 WORKING PROPRIETOR 0 EMPLOYEES	4	A1=1 AND A2a=1

ASK ALL

A10 IF PRIVATE SECTOR (A8=1): **Are your products or services primarily sold...?**

IF PUBLIC/THIRD SECTOR (A8=2-5): **Does your establishment primarily serve the population...?**
READ OUT. CODE ONE ONLY.

Locally – within an individual town or local area	1
Regionally – within a specific area of [England/Scotland/Wales/Northern Ireland]	2
Nationally – within [England/Scotland/Wales/Northern Ireland]	3
Within the UK	4
Internationally – outside the UK	5
DO NOT READ OUT: Don't know	X
DO NOT READ OUT: Not applicable	Y

B Retention / Retention Difficulties

Next, some questions about your existing workforce.

ASK MODULE 2 AND SCOTLAND (DUMMOD=2 OR COUNTRY=3)

- B1 **Compared to 12 months ago, has the number of people employed at this establishment... ?**
READ OUT AND CODE ONE ONLY.

Remained about the same,	1
Increased	2
Decreased	3
DO NOT READ OUT: Was not in business 12 months ago	4
DO NOT READ OUT: Don't know	X

- B2 THERE IS NO QUESTION B2

ASK ENGLAND, NORTHERN IRELAND AND WALES (COUNTRY=1, 2 OR 4) (SCOTLAND SKIP TO SECTION C)

- B3 **Are there particular jobs in which you have difficulties retaining staff?**

INTERVIEWER - RETENTION DIFFICULTIES ARE WHEN A HIGH NUMBER OF STAFF LEAVE
(BUT NOT AS A DIRECT RESULT OF DOWNSIZING OR REDUNDANCY)

Yes	1	Ask B3A
No	2	Go to C1
Don't know	3	

ASK IF DIFFICULT TO RETAIN STAFF B3=1

- B3A **Which is the occupation in which you have the MOST difficulty retaining staff?**

WRITE IN. PROMPT FOR FULL DETAILS (E.G. IF 'MANAGER' PROBE: WHAT TYPE OF
MANAGER?)
CODE TO SOC 2010

- B4 Which of the following are the main reasons why it is difficult to retain staff in this occupation?**
 READ OUT. CODE ALL THAT APPLY. ROTATE ANSWER LIST

Wages offered are lower than those offered by other firms	1
Impact of the benefits trap	2
Geographic location of the firm	3
Unattractive conditions of employment	4
Lack of career progression	5
Long/unsocial hours	6
Too much competition from other employers	7
Not enough people interested in doing this type of work	8
Staff don't want long term commitment	9
Are there any other key reasons why it is difficult to retain staff (WRITE IN)	10

- B5 What measures, if any, have you taken to overcome the retention difficulties in this occupation?**
 DO NOT READ OUT. CODE ALL THAT APPLY

Offered higher pay or more incentives than normal	1
Introduced job enrichment	2
Introduced further training/development opportunities	3
Improved career progression	4
Provided assistance with travel	5
Provided assistance with childcare	6
Introduced flexible working hours	7
Changed the job specification by giving some of the tasks to other staff	8
Changed the job specification by automating some of the tasks	9
Other (WRITE IN)	10
Not taken any measures to overcome retention difficulties (ALLOW SINGLE CODE ONLY)	11

B6 Have the retention difficulties in this occupation caused...?
 READ OUT. CODE ALL THAT APPLY. ROTATE ANSWER LIST

Loss of business to competitors	1
Restriction to business development activities	2
Increased running costs (for example use of excess overtime subcontracting or use of temporary staff etc)	3
More strain on management of existing staff in covering the shortage	4
An increase in recruitment costs due to more advertising or use of a recruitment agency	5
Difficulties with quality	6
Difficulties with customer service	7
Loss of efficiency or increased wastage	8
Difficulties with accommodating technological change	9
Difficulties with introducing new working practices	10
Anything else? (WRITE IN)	12
Retention difficulties have not affected the business (ALLOW SINGLE CODE ONLY)	11

C Recruitment & Recruitment Difficulties

ASK ALL

- C1 **Moving on to recruitment. In the last 2-3 years, has this site taken on anyone to their first job on leaving school, college or university?**

Yes	1	ASK C2
No	2	Go to C6
Don't know	X	

IF RECRUITED EDUCATION-LEAVERS AND ENGLAND, NI OR WALES (C1=1 AND COUNTRY=1, 2 OR 4) – NOTE: ASK C2 TO C3A IN A LOOP (C2i, C2Ai, C3i, C3Ai; C2ii, C2aii ETC)

- C2 **Have any of these been...**

	Yes	No	Don't know
i) 16 year olds recruited to their first job on leaving school [IF NECESSARY ADD: Who have undertaken compulsory education but no more]	1	2	3
ii) 17 or 18 year olds recruited to their first job from school	1	2	3
iii) 17 or 18 year olds recruited to their first job from FE College	1	2	3
iv) Recruited to their first job from University or another Higher Education institution	1	2	3

FOR EACH "YES" AT C2:

- C2A **Were any of these recruited by your establishment in the last 12 months?**

	Yes	No	Don't know
i) 16 year olds recruited to their first job on leaving school [IF NECESSARY ADD: Who have undertaken compulsory education but no more]	1	2	3
ii) 17 or 18 year olds recruited to their first job from school	1	2	3
iii) 17 or 18 year olds recruited to their first job from FE College	1	2	3
iv) Recruited to their first job from University or another Higher Education institution	1	2	3

IF RECRUITED DIRECTLY FROM EDUCATION ESTABLISHMENTS LISTED AT C2 (C2(ANY)=1)

C3 Thinking of those recruited in the last 2-3 years, how well prepared for work have the...

- (C2i=1) **16 year old school leavers been?**
- (C2ii=1) **17-18 year olds you recruited to their first job from school been?**
- (C2iii=1) **17-18 year olds you recruited to their first job from FE Colleges been?**
- (C2iv=1) **university or higher education leavers been?**

READ OUT FOR EACH	
Very well prepared	1
Well prepared	2
Poorly prepared	3
Or very poorly prepared	4
DO NOT READ OUT: Don't know	X
DO NOT READ OUT: Varies too much to say	X

ASK IF POORLY OR VERY POORLY PREPARED FOR EACH ITERATION OF C3 (C3=3-4).

C3A In what ways have they been poorly prepared?

DO NOT READ OUT. PROBE FULLY. CODE ALL THAT APPLY.

Lack required skills or competencies (e.g. technical or job specific skills, IT skills, problem solving skills, team working skills)	1
Literacy/numeracy skills	2
Poor education	3
Lack of common sense	4
Poor attitude / personality or lack of motivation (e.g. poor work ethic, punctuality, appearance, manners)	5
Lack of working world / life experience or maturity (including general knowledge)	6
Other (WRITE IN)	7
Don't know (ALLOW SINGLE CODE ONLY)	X

IF RECRUITED EDUCATION-LEAVERS AND SCOTLAND (C1=1 AND COUNTRY=3)

ASK C3B TO C4A IN A LOOP

C3B Have any of these been recruited to their first job from...

	Yes	No	Don't know
i) A Scottish secondary school	1	2	3
ii) A Scottish FE College	1	2	3
iii) A Scottish University	1	2	3

FOR EACH "YES" AT C3B:

C3C **Have any of these recruits been taken on to their first job from [ITERATION TEXT] in the last 12 months?**

	Yes	No	Don't know
i) A Scottish secondary school	1	2	3
ii) A Scottish FE College	1	2	3
iii) A Scottish University	1	2	3

IF RECRUITED DIRECTLY FROM EDUCATION ESTABLISHMENTS LISTED AT C3B (C3B(ANY)=1)

C3D **Thinking of those recruited in the last 2-3 years to their first job on leaving**

- (C3Bi=1) **a Scottish secondary school,**
- (C3Bii=1) **a Scottish FE college,**
- (C3Biii=1) **a Scottish University,**

...in relation to their preparedness for work would you say that they were...?

READ OUT FOR EACH	
Very well prepared	1
Well prepared	2
Poorly prepared	3
Or very poorly prepared	4
DO NOT READ OUT: Don't know	X
DO NOT READ OUT: Varies too much to say	5

ASK IF POORLY OR VERY POORLY PREPARED FOR EACH ITERATION OF C3D (C3D=3-4).

C4A **In what ways have they been poorly prepared?**

DO NOT READ OUT. PROBE FULLY. CODE ALL THAT APPLY.

Lack required skills or competencies (e.g. technical or job specific skills, IT skills, problem solving skills, team working skills)	1
Literacy/numeracy skills	2
Poor education	3
Lack of common sense	4
Poor attitude / personality or lack of motivation (e.g. poor work ethic, punctuality, appearance, manners)	5
Lack of working world / life experience or maturity (including general knowledge)	6
Other (WRITE IN)	7
Don't know (ALLOW SINGLE CODE ONLY)	X

C5 THERE IS NO QUESTION C5

ASK ALL

C6 **How many vacancies, if any, do you CURRENTLY have at this establishment?**

PROBE FOR BEST ESTIMATE

WRITE IN NUMBER _____
ALLOW DON'T KNOW

IF C6 > 100 ASK:

C6chk **I've recorded that as <insert number from C6>, is this correct?**

Yes	1	CONTINUE
No	2	RE-ASK C6

ASK ALL WITH ANY VACANCIES AT C6. OTHERS GO TO D1.

C7 **In which specific occupations do you currently have [C6>1: vacancies C6=1 a vacancy] at this establishment?**

PROMPT FOR FULL DETAILS (E.G. IF 'MANAGER' PROBE: WHAT TYPE OF MANAGER?)
RECORD DETAILS FOR UP TO 6 OCCUPATIONS.

DUMVAC CATI DUMMY VARIABLE – LIST OF UP TO 6 OCCUPATIONS WITH VACANCIES

IF >1 OCCUPATION WITH VACANCIES AT C7, ASK C8. OTHERS GO TO C9.

C8 **How many vacancies do you have for <EACH OCCUPATION AT C7>?**

PROBE FOR BEST ESTIMATE

INTERVIEWER: [ANSWER FROM C5 MINUS TOTAL AT C8 SO FAR] VACANCIES REMAINING

DP – DO NOT ALLOW DON'T KNOW. ANSWER MUST BE AT LEAST 1

C7	C8 – number
Occupation 1 -	(1-9999)
Occupation 2 -	(1-9999)
Occupation 3 -	(1-9999)
Occupation 4 -	(1-9999)
Occupation 5 -	(1-9999)
Occupation 6 -	(1-9999)

CATI CHECK: TOTAL OF ALL VACANCIES AT C8 MUST SUM TO C6 (UNLESS GIVE 6 OCCUPATIONS IN WHICH CASE TOTAL CANNOT BE GREATER THAN C6).

IF FAIL CATI CHECK: PROMPT RESPONDENT WITH ... **This sums to <INSERT C8 SUM> but you just told me that you had <INSERT C6> vacancies in total...**
THEN RE-ASK C6, C7 AND 8

ASK ALL WITH VACANCIES AT C6 (C6>0)

C9 [IF C6>1: **Are any of these vacancies IF C6=1: Is this vacancy] proving hard to fill?**

Yes	1	ASK C10
No	2	GO TO D1
Don't know	3	GO TO D1

ASK IF HAVE MORE THAN ONE VACANCY AND HAVE HARD TO FILL VACANCIES (C9=1 AND C6>1); IF ONLY HAVE ONE VACANCY AND HAVE HARD TO FILL VACANCY CATI AUTOMATICALLY CODE C10=OCCUPATION FROM C7.

C10 **How many of your vacancies for <TEXT SUBSTITUTION: OCCUPATION AT C7> are proving hard-to-fill?**

CATI – SHOW ON SCREEN NUMBER OF VACANCIES FOR EACH OCCUPATION AT C7. ANSWER GIVEN MUST BE BETWEEN 0 AND C8 RESPONSE

	C10 Number of hard-to-fill vacancies
Occupation 1 -	(0 – RESPONSE AT C8_1)
Occupation 2 -	(0 – RESPONSE AT C8_2)
Occupation 3 -	(0 – RESPONSE AT C8_3)
Occupation 4 -	(0 – RESPONSE AT C8_4)
Occupation 5 -	(0 – RESPONSE AT C8_5)
Occupation 6 -	(0 – RESPONSE AT C8_6)

CATI CHECK: NUMBER OF HARD TO FILL VACANCIES MUST SUM TO > 0 AT C10.

IF FAIL CATI CHECK: PROMPT RESPONDENT WITH: **You told me earlier that you had vacancies that were hard-to-fill but I have not recorded any of them here...**
THEN RE-ASK C9

C10DUM CATI DUMMY VARIABLE – LIST OF UP TO 6 OCCUPATIONS WITH HARD-TO-FILL VACANCIES

ASK C11A – C13 IN SEQUENCE FOR UP TO 6 OCCUPATIONS > 0 AT C10 (I.E. OCCUPATIONS WITH HARD-TO-FILL VACANCIES)
NB IF C6=1 AND C9=YES, ASK ABOUT OCCUPATION FROM C7

C11A **What are the main causes of having a hard to fill vacancy for** [TEXT SUBSTITUTION: OCCUPATION WITH HARD TO FILL VACANCY AT C10]?
DO NOT READ OUT. CODE ALL THAT APPLY

	Occupations with hard-to-fill vacancies					
	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
Too much competition from other employers	1	1	1	1	1	1
Not enough people interested in doing this type of job	2	2	2	2	2	2
Poor terms and conditions (e.g. pay) offered for post	3	3	3	3	3	3
Low number of applicants with the required skills	4	4	4	4	4	4
Low number of applicants with the required attitude, motivation or personality	5	5	5	5	5	5
Low number of applicants generally	6	6	6	6	6	6
Lack of work experience the company demands	7	7	7	7	7	7
Lack of qualifications the company demands	8	8	8	8	8	8
Poor career progression / lack of prospects	9	9	9	9	9	9
Job entails shift work/unsociable hours	10	10	10	10	10	10
Seasonal work	11	11	11	11	11	11
Remote location/poor public transport	12	12	12	12	12	12
Other (WRITE IN)	13	13	13	13	13	13
No particular reason (ALLOW SINGLE CODE ONLY)	14	14	14	14	14	14
Don't know (ALLOW SINGLE CODE ONLY)	X	X	X	X	X	X

ASK C11B FOR EACH OCCUPATION WHERE VACANCIES ARE HARD-TO-FILL BUT WHERE ONE OF CODE 4 OR 7 OR 8 AT C11A NOT MENTIONED (IF ALL HARD-TO-FILL OCCUPATIONS CODED 4, 7 OR 8 AT C11a, GO TO C13)

C11B **Can I just check, are you finding** [IF (SUM OF C10)=1: **this vacancy** IF SUM OF C10>1: **any of these vacancies**] **for** <OCCUPATION FROM C10> **hard to fill because...**

READ OUT; CODE ONE ONLY

	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
Applicants have not been of sufficient quality	1	1	1	1	1	1
Because there have been few or no applicants	2	2	2	2	2	2
Or for both of these reasons	3	3	3	3	3	3
DO NOT READ OUT: Neither of these reasons	4	4	4	4	4	4
DO NOT READ OUT: Don't know	5	5	5	5	5	5

ASK FOR ALL HARD-TO-FILL VACANCIES CAUSED BY LACK OF QUALITY (C11B=1 OR 3)

C12 **You said that you have had problems with the quality of the candidates for** [OCCUPATION].
Would you say that they have been lacking...

READ OUT. CODE ALL THAT APPLY.

	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
The skills you look for	1	1	1	1	1	1
The qualifications you look for	2	2	2	2	2	2
The work experience that you require	3	3	3	3	3	3
Or do applicants tend to have poor attitudes, motivation and/or personality	4	4	4	4	4	4
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X	X	X	X	X	X

ASK FOR EACH OCCUPATION WITH HARD-TO-FILL VACANCIES CAUSED BY LACK OF SKILLS (C12=1, 2 OR 3 OR C11A=4, 7 OR 8)

C13 **Have you found any of the following skills difficult to obtain from applicants for <TEXT SUBSTITUTION: OCCUPATION WITH SKILLS SHORTAGE VACANCY>?**

READ OUT. CODE ALL THAT APPLY

DP – ROTATE ORDER OF SKILLS (APART FROM IT SKILLS WHICH MUST ALWAYS APPEAR TOGETHER WITH BASIC IT USER SKILLS FIRST, FOLLOWED BY ADVANCED IT SKILLS. TECHNICAL & PRACTICAL SKILLS, JOB SPECIFIC SKILLS, ANY OTHER SKILLS, NONE & DON'T KNOW MUST ALWAYS APPEAR LAST).

	Occupations with hard to fill vacancies					
	Occ 1	Occ 2	Occ 3	Occ 4	Occ 5	Occ 6
Basic computer literacy / using IT	1	1	1	1	1	1
Advanced IT or software skills	2	2	2	2	2	2
Oral communication skills	3	3	3	3	3	3
Written communication skills	4	4	4	4	4	4
Customer handling skills	5	5	5	5	5	5
Team working skills	6	6	6	6	6	6
WALES: Written Welsh language skills	7	7	7	7	7	7
WALES: Oral Welsh language skills	8	8	8	8	8	8
Foreign language skills	9	9	9	9	9	9
Problem solving skills	10	10	10	10	10	10
Planning and Organisation skills	11	11	11	11	11	11
Strategic Management skills	12	12	12	12	12	12
Numeracy skills	13	13	13	13	13	13
Literacy skills	14	14	14	14	14	14
Office admin skills	15	15	15	15	15	15
Technical or practical skills	16	16	16	16	16	16
Job specific skills	17	17	17	17	17	17
Any other skills (WRITE IN)	18	18	18	18	18	18
DO NOT READ OUT: No particular skills difficulties (ALLOW SINGLE CODE ONLY)	19	19	19	19	19	19
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X	X	X	X	X	X

ASK ALL WITH HARD-TO-FILL VACANCIES (C9=1)

C14 **Are hard-to-fill vacancies causing this establishment to...** READ OUT. CODE ALL THAT APPLY

DP – RANDOMISE ORDER APART FROM "OTHER"/"NONE"/DON'T KNOW.

Lose business or orders to competitors	1
Delay developing new products or services	2
Have difficulties meeting quality standards	3
Experience increased operating costs	4
Have difficulties introducing new working practices	5
Increase workload for other staff	6
Outsource work	7
Withdraw from offering certain products or services altogether	8
Have difficulties meeting customer services objectives	9
Have difficulties introducing technological change	10
DO NOT READ OUT: None (ALLOW SINGLE CODE ONLY)	11
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

ASK ALL WITH HARD-TO-FILL VACANCIES (C9=1)

C15 **What, if anything, is this establishment doing to overcome the difficulties that you are having finding candidates to fill these hard-to-fill vacancies?** DO NOT READ OUT. PROBE FULLY. CODE ALL THAT APPLY.

INTERVIEWER NOTE: If the respondent mentions advertising or recruitment please probe to fully understand whether they are using a new method of recruitment (code 6), spending more money on recruitment (code 4), or both.

Increasing salaries	1
Increasing the training given to your existing workforce	2
Redefining existing jobs	3
Increasing advertising / recruitment spend	4
Increasing / expanding trainee programmes	5
Using NEW recruitment methods or channels	6
Recruiting workers who are non-UK nationals	7
Bringing in contractors to do the work, or contracting it out	8
Being prepared to offer training to less well qualified recruits	9
Other (WRITE IN)	10
Nothing (ALLOW SINGLE CODE ONLY)	11
Don't know (ALLOW SINGLE CODE ONLY)	X

D Demand for Skills / Skills Gaps

I'd now like to turn to the skills within your existing workforce.

ASK ALL

- D1 **Thinking now about your <INSERT NUMBER OF STAFF FROM A1> current staff, roughly how many of them are qualified to degree level equivalent or above?**

ENTER NUMBER _____ ALLOW 0 TO A1

Don't know X

IF NOT ALL STAFF HAVE DEGREE LEVEL QUAL (D1<A1 OR D1=DK)

- D1A **And roughly how many of your [IF D1>0: remaining] <TOTAL NUMBER OF STAFF MINUS D1> staff hold an HND, HNC or Foundation degree?**

INTERVIEWER NOTE: FOUNDATION DEGREES ARE NOT OFFERED IN SCOTLAND

ENTER NUMBER _____ ALLOW 0 TO (A1 MINUS D1 (IF D1=DK COUNT AS 0))

Don't know X

IF NOT ALL STAFF HAVE LEVEL 4+ QUAL (D1+D1A<A1 OR D1 AND D1A=DK)

- D2 **And roughly how many of your [IF D1+D1A>0: remaining] <TOTAL NUMBER OF STAFF MINUS (D1+D1A)> staff hold a Level 3 qualification? By this we mean qualifications such as A / AS Levels, Highers, NVQ Level 3, SVQ Level 3, Advanced level Welsh Baccalaureate, OND / ONC / BTEC nationals or equivalent level qualifications.**

ENTER NUMBER _____ ALLOW 0 TO [IF D1>0: A1-D1. IF D1=DK: A1]

Don't know X

- D3 THERE IS NO QUESTION D3

ASK MODULE 1 AND SCOTLAND (DUMMOD=1 OR COUNTRY=3)

D4 **And does your establishment have any of the following pay and incentive schemes for your employees?**

READ OUT; CODE ALL THAT APPLY

Bonuses that are based on the overall performance of the company	1
Individual performance related pay	2
Flexible benefits (ADD IF NECESSARY: This is the option to use some pre-tax pay for extra benefits such as pensions, childcare vouchers, life assurance etc)	3
IF PRIVATE SECTOR (A8=1): Share options for employees BELOW SENIOR MANAGEMENT	4
DO NOT READ OUT: None of the above (ALLOW SINGLE CODE ONLY)	5
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

ASK ALL

D5 **Now I need to understand the different roles that your existing staff currently fill at this establishment. You said earlier that there were <INSERT NUMBER FROM A1> staff at this establishment. How many of these are employed as managers, directors or senior officials?**

ADD AS NECESSARY: **This categorisation covers occupations where main tasks consist of direction and co-ordination of organisations and businesses. This can include the management of internal departments / sections.**

ADD AS NECESSARY: **Staff should be categorised according to their primary role, i.e. the one that takes up the greatest proportion of their time.**

(Note: this excludes supervisors)

(Note: if police force this covers inspectors and above)

WRITE IN NUMBER ____ [RESPONSE MUST NOT EXCEED A1]

CATI CHECK AFTER D5: IF NUMBER OF STAFF EMPLOYED AT A1 IS GREATER THAN 50 AND RESPONDENTS SAYS NO MANAGERS EMPLOYED AT D5

D5chka **Can I just check, I've recorded that there are no managers employed at this site – is this correct?**

Yes	1	CONTINUE
No	2	GO BACK TO D5 AND RECODE (INTERVIEWER NOTE: TO CHANGE NUMBER OF STAFF USE '<A1')'

ASK IF A1 > D5, OTHERS GO TO D9

- D6 **And how many – if any – of your <INSERT NUMBER: A1–D5> staff are employed in administrative or secretarial occupations?**

NOTE: STAFF SHOULD BE CATEGORISED ACCORDING TO THEIR PRIMARY ROLE, I.E. THE ONE THAT TAKES UP THE GREATEST PROPORTION OF THEIR TIME

[IF 'MANUFACTURING' (SIC ON SAMPLE – 01 to 45) ADD AS NECESSARY: **including secretaries, receptionists & PAs, telephonists, book-keepers, credit controllers/wage clerks, assistants/clerks**]

[IF 'SERVICES' (SIC ON SAMPLE: 50-74 & 93) ADD AS NECESSARY: **including secretaries, receptionists & PAs, telephonists and communication operators, market research interviewers, book-keepers, credit controllers/wage clerks, pension and insurance clerks, office assistants, database assistants**]

[IF 'PUBLIC SECTOR' SIC ON SAMPLE 75-99 excl 93) ADD AS NECESSARY: **including secretaries, receptionists & PAs, local government officers and assistants, civil service executive officers, book-keepers, credit controllers/wage clerks, office assistants, library and database assistants**]

ADD IF NECESSARY: **Administrative and secretarial occupations undertake general admin, clerical, secretarial work and perform a variety of specialist client orientated clerical duties. Generally speaking, all those with 'clerk', 'secretary' in the job title will fall into this group, including financial clerks and book-keepers.**

WRITE IN NUMBER _____ [RESPONSE MUST NOT EXCEED A1 – D5]

ASK IF A1 > D5+D6, OTHERS GO TO D9 EXCEPT IN NI OR SCOTLAND (SEE ROUTING ABOVE D8A)

- D7 **You've told me that a total of [D5+D6] of your [A1] staff are employed as managers or in administrative roles. I'd now like you to tell me what roles the remaining [A1-(D5+D6)] staff fill. I'm going to read you seven different occupational roles, and I'd like you to tell me if any of your remaining [A1-(D5+D6)] staff are employed in each. If staff carry out more than one role, please only include them in their main function.**

First, do you employ any staff at this establishment as <...OCCUPATION...>?

CATI CHECK: NUMBER OF CATEGORIES TO BE NO GREATER THAN NUMBER OF STAFF EMPLOYED NOT IN MANAGEMENT / ADMINISTRATIVE ROLES (i.e. A1 – (D5 + D6))

FOR EACH OCCUPATION EMPLOYED (YES AT D7)

D8 How many of your staff at this establishment are employed as ...? READ OUT

	D7		D8
	Yes	No	
Elementary occupations ADD IF NECESSARY Elementary occupations require knowledge and experience necessary to perform mostly routine tasks usually involving use of simple hand held tools and in some cases physical effort. Most do not require formal educational qualifications. [IF 'MANUFACTURING' (SIC ON SAMPLE – 01 to 45) ADD AS NECESSARY: including labourers, packers, goods handling and storage staff, security guards, cleaners] [IF 'SERVICES' (SIC ON SAMPLE: 50-74 & 93) ADD AS NECESSARY: including bar staff, shelf fillers, kitchen/catering assistants, waitresses, postal workers, cleaners, dry cleaners, goods handling and storage staff, security guards] [IF 'PUBLIC SECTOR' SIC ON SAMPLE 75-99 excl 93) ADD AS NECESSARY: including labourers, cleaners, road sweepers, traffic wardens, security guards]	1	2	(1-99999)
Process, plant and machine operatives ADD IF NECESSARY: Process, plant and machine operative occupations require knowledge and experience to operate vehicles and other mobile and stationary machinery, and monitor industrial and plant equipment, or to assemble products. Most will not have a particular standard of education but will usually have formal experience related training. ADD IF NECESSARY: All transport and mobile machine drivers belong in this group. ADD AS NECESSARY: including plant and machine operators plus routine operatives (sorters, assemblers) and HGV, van, fork lift, bus, taxi drivers	1	2	(1-99999)
Sales and customer service occupations ADD IF NECESSARY: Sales and customer services occupations require knowledge and experience necessary to sell goods and services, accept payment and replenish stocks, provide information to potential clients and additional services to customers after the point of sale. ADD AS NECESSARY: including sales assistants and retail cashiers, telesales, call centre agents, customer care occupations ADD AS NECESSARY: Buying and purchasing officers, sales representatives, estate agents or auctioneers SHOULD NOT be included in this group. These should be categorised as ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS.	1	2	(1-99999)

<p>Caring, Leisure and Other Service Occupations ADD IF NECESSARY: Caring, Leisure and Other Service Occupations involve the provision of service to customers whether in a public protective or personal care capacity. Main tasks usually involve the care of the sick, elderly and children and the provision travel care and hygiene services. These job-roles generally require a good standard of general education.</p> <p>[IF 'MANUFACTURING' (SIC ON SAMPLE – 01 to 45) ADD AS NECESSARY: including such occupations as care assistants, nursery nurses.]</p> <p>[IF 'SERVICES' (SIC ON SAMPLE: 50-74 & 93) ADD AS NECESSARY: including travel agents, travel assistants, sport and leisure assistants, hairdressers and beauticians, nursery nurses/childminders, housekeepers]</p> <p>[IF 'PUBLIC SECTOR' SIC ON SAMPLE 75-99 excl 93) ADD AS NECESSARY: including care assistants and home carers, nursery nurses/childminders, ambulance staff, pest control officers, dental/veterinary nurses, caretakers, sport and leisure assistants]</p> <p>IF 'HEALTH AND SOCIAL CARE (SIC ON SAMPLE: 85)' ADD AS NECESSARY: Occupations with high level vocational qualifications such as nurses, midwives, paramedics, physiotherapists, youth workers and welfare officers SHOULD NOT be included in this group. They are categorised as ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS).</p>	1	2	(1-99999)
<p>Skilled trades occupations</p> <p>ADD IF NECESSARY: Skilled trades occupations require a substantial period of training. Main tasks involve the performance of complex physical duties that normally involve initiative, manual dexterity and other practical skills.</p> <p>ADD AS NECESSARY: including farmers, electricians, motor mechanics, machine setters/tool makers, TV engineers, plumbers, carpenters, plasterers, printers, chefs, butchers, furniture makers</p> <p>ADD AS NECESSARY: Science and engineering technicians SHOULD NOT be included in this group. They are categorised as ASSOCIATE PROFESSIONAL AND TECHNICAL OCCUPATIONS.</p>	1	2	(1-99999)

<p>Associate professional and technical occupations</p> <p>ADD IF NECESSARY: Occupations in this group will usually require an associated high level vocational qualification, often involving substantial period of full time training or further study. Main tasks require experience and knowledge to assist in supporting professionals or managers.</p> <p>[IF 'MANUFACTURING' (SIC ON SAMPLE – 01 to 45) ADD AS NECESSARY: including science and engineering technicians, lab technicians, IT technicians, accounting technicians.]</p> <p>[IF 'SERVICES' (SIC ON SAMPLE: 50-74 & 93) ADD AS NECESSARY: including insurance underwriters, finance and investment analysts and advisers, writers/journalists, buyers, sales reps, estate agents, pilots, graphic designers, fitness instructors.]</p> <p>[IF 'PUBLIC SECTOR' SIC ON SAMPLE 75-99 excl 93) ADD AS NECESSARY: including junior police/fire/prison officers, therapists, paramedics, community workers, careers advisors, health and safety officers, housing officers, writers/journalists, fitness instructors]</p> <p>ADD IF NECESSARY: Most professionals in the arts, design, media or sports fields will be in this group</p> <p>ADD IF NECESSARY: Architects, surveyors, engineers, chartered accountants and management consultants SHOULD NOT be included in this group. They should be categorised as PROFESSIONAL OCCUPATIONS.</p>	1	2	(1-99999)
<p>Professional occupations</p> <p>ADD IF NECESSARY: Professional occupations will almost always require a degree or equivalent formal qualification. Some occupations will require postgraduate qualifications and/or a formal period of experience-related training.</p> <p>This categorisation includes high-level occupations in the natural sciences, engineering, life sciences, social sciences, humanities and related fields where job-holders will either be</p> <ul style="list-style-type: none"> • practically applying extensive theoretical knowledge; • increasing the stock of knowledge through research; • communicating knowledge by teaching <p>[IF 'MANUFACTURING' (SIC ON SAMPLE – 01 to 45) ADD AS NECESSARY: including professional engineers, software and IT professionals, accountants, chemists and scientific researchers]</p> <p>[IF 'SERVICES' (SIC ON SAMPLE: 50-74 & 93) ADD AS NECESSARY: including solicitors and lawyers, accountants, IT professionals, economists, architects, actuaries, doctors, engineers]</p> <p>[IF 'PUBLIC SECTOR' SIC ON SAMPLE 75-99 excl 93) ADD AS NECESSARY: including doctors, nurses, midwives, psychologists, teachers, social workers, librarians, accountants, economists, IT professionals, engineers]</p>	1	2	(1-99999)

ASK IF SCOTLAND/NORTHERN IRELAND AND WORKING PROPRIETORS AT SITE (A9A>0) AND MORE THAN ONE OCCUPATION SELECTED FROM D5-D7. OTHERS GO TO D9

D8A) **You mentioned earlier that there are [INSERT NUMBER FROM A9A] people who work at this site and own all or part of the organisation. How many of these are working as/in...?**

CATI – SHOW ALL OCCUPATIONS EMPLOYED AT D5-D7

	D8A
Managers, Directors and senior officials]	(0 – RESPONSE AT D5)
Professional occupations	(0 – RESPONSE AT D8_7)
Associate professional and technical occupations	(0 – RESPONSE AT D8_6)
Administrative and secretarial occupations	(0 – RESPONSE AT D6)
Skilled trades occupations	(0 – RESPONSE AT D8_5)
Caring, Leisure and Other Service Occupations	(0 – RESPONSE AT D8_4)
Sales and customer service occupations	(0 – RESPONSE AT D8_3)
Process, plant and machine operatives	(0 – RESPONSE AT D8_2)
Elementary occupations	(0 – RESPONSE AT D8_1)

CHECK SUM OF D8A=A9A – IF NOT RE-ASK D8A

SAY TO ALL:

Thinking about the broad categories of employees, for each, I'd like to know how many you think are fully proficient at their job. A proficient employee is someone who is able to do the job to the required level.

[ADD IF SCOTLAND/NORTHERN IRELAND AND WORKING PROPRIETORS AT SITE (COUNTRY=3 OR 2 AND A9A>0): **Please include people who work at the site and own all or part of the organisation]**

ASK ALL, ASKING FOR EACH OCCUPATION WITH STAFF AT D5 / D6 / D7

D9) **Back to thinking about ALL people working at your establishment, how many of your [INSERT NUMBER FROM D5 / D6 / D8] existing staff working in [OCCUPATION] would you regard as fully proficient at their job?**

CATI – SHOW NUMERIC BREAKDOWN FROM D8 TO HELP RESPONDENTS ANSWER D9.

CATI – ANSWER AT D9 MUST BE BETWEEN 0 AND D5, D6 or D8 RESPONSE FOR SAME OCCUPATION.

	D9
Managers, Directors and senior officials]	(0 – RESPONSE AT D5)
Professional occupations	(0 – RESPONSE AT D8_7)
Associate professional and technical occupations	(0 – RESPONSE AT D8_6)
Administrative and secretarial occupations	(0 – RESPONSE AT D6)
Skilled trades occupations	(0 – RESPONSE AT D8_5)
Caring, Leisure and Other Service Occupations	(0 – RESPONSE AT D8_4)
Sales and customer service occupations	(0 – RESPONSE AT D8_3)
Process, plant and machine operatives	(0 – RESPONSE AT D8_2)
Elementary occupations	(0 – RESPONSE AT D8_1)

D9DUM CATI DUMMY VARIABLE – LIST OF ALL OCCUPATIONS NOT FULLY PROFICIENT AT THEIR JOB

D9DUM2 CATI DUMMY VARIABLE – LIST OF 2 RANDOMLY CHOSEN OCCUPATIONS FROM D7DUM

D9DUM3 CATI DUMMY VARIABLE – YES IF HAVE ANY SKILLS GAPS (A1>SUM OF D9) / NO IF NO SKILLS GAPS (A1=SUM OF D9)

ASK IF SCOTLAND/NORTHERN IRELAND AND HAS SKILLS GAPS IN OCCUPATIONS WHERE HAVE WORKING PROPRIETORS (COUNTRY=3 OR 2 AND (D9_1>0 AND D8A_1>0) OR (D9_2>0 AND D8A_2>0) OR (D9_3>0 AND D8A_3>0) OR (D9_4>0 AND D8A_4>0) OR (D9_5>0 AND D8A_5>0) OR (D9_6>0 AND D8A_6>0) OR (D9_7>0 AND D8A_7>0) OR (D9_8>0 AND D8A_8>0) OR (D9_9>0 AND D8A_9>0)), OTHERS CHECK ROUTING ABOVE D10

D9A **Could I just check, are any of these individuals who are not fully proficient in their jobs either owners or part-owners of the organisation?**

Yes	1	CONTINUE
No	2	GO TO D10

IF D9A=1

D9B **And how many owners / part-owners who are not fully proficient are working as/in...?**

CATI – SHOW ALL OCCUPATIONS WITH WORKING PROPRIETORS AT D8A AND SKILLS GAPS AT D9

CATI – DO NOT ASK FOR OCCUPATION IF A9A=1 AND D9A=1

	D8A
Managers, Directors and senior officials]	(0 – RESPONSE AT D9_1)
Professional occupations	(0 – RESPONSE AT D9_2)
Associate professional and technical occupations	(0 – RESPONSE AT D9_3)
Administrative and secretarial occupations	(0 – RESPONSE AT D9_4)
Skilled trades occupations	(0 – RESPONSE AT D9_5)
Caring, Leisure and Other Service Occupations	(0 – RESPONSE AT D9_6)
Sales and customer service occupations	(0 – RESPONSE AT D9_7)
Process, plant and machine operatives	(0 – RESPONSE AT D9_8)
Elementary occupations	(0 – RESPONSE AT D9_9)

CATI – CHECK THAT THE SUM OF D9B OCCUPATIONS < A9A. IF NOT, RE-ASK D9B

ASK ALL WITH SKILLS GAPS (D9DUM3=1), OTHERS GO TO D15

NORTHERN IRELAND: ASK D10 AND D11 FOR ALL OCCUPATIONS WITH SKILLS GAPS

ENGLAND/SCOTLAND/WALES: ASK D10 AND D11 OF UP TO 2 OCCUPATIONS WITH SKILLS GAPS (CHOSEN AT RANDOM AT D9DUM2)

D10 [TEXT SUBSTITUTION IF (COUNTRY=1, 3 OR 4) AND >2 OCCUPATION AT D9 NOT PROFICIENT:
I want to ask about two of the categories where you say not all staff are proficient.]

What are the main causes of some of your <OCCUPATION> not being fully proficient in their jobs...?

READ OUT. RANDOMISE ORDER OF 1-10. CODE ALL THAT APPLY.

The development of new products and services	1
The introduction of new working practices	2
The introduction of new technology	3
They are new to the role – IF NECESSARY ADD either because they have recently started the job or have recently been promoted to a higher level role	4
They have not received the appropriate training	5
Their training is currently only partially completed	6
They have been on training but their performance has not improved sufficiently	7
Unable to recruit staff with the required skills	8
Problems retaining staff	9
Staff lack motivation	10
Are there any other reasons? (SPECIFY)	11
DO NOT READ OUT: No particular cause (ALLOW SINGLE CODE ONLY)	12
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

ASK OF THE SAME OCCUPATIONS AS D10

- D11 **Thinking about your <OCCUPATION> who are not fully proficient which, if any, of the following skills do you feel need improving... ?** READ OUT; CODE ALL THAT APPLY

CATI – ROTATE ORDER OF SKILLS (APART FROM IT SKILLS WHICH MUST ALWAYS APPEAR TOGETHER WITH “GENERAL IT USER SKILLS” FIRST, FOLLOWED BY “IT PROFESSIONAL SKILLS”. “TECHNICAL & PRACTICAL SKILLS”, “ANY OTHER SKILLS”, “NONE” & “DON'T KNOW” MUST ALWAYS APPEAR LAST).

	Occ 1	Occ 2
Basic computer literacy / using IT	1	1
Advanced IT or software skills	2	2
Oral communication skills	3	3
Written communication skills	4	4
Customer handling skills	5	5
Team working skills	6	6
WL: Written Welsh language skills	7	7
WL: Oral Welsh language skills	8	8
Foreign language skills	9	9
Problem solving skills	10	10
Planning and organising skills	11	11
Strategic management skills	12	12
Numeracy skills	13	13
Literacy skills	14	14
Office admin skills	15	15
Technical or practical skills	16	16
Job specific skills	17	17
Any other skills (WRITE IN)	18	18
DO NOT READ OUT: No particular skills difficulties (ALLOW SINGLE CODE ONLY)	19	19
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X	X

ASK ALL WITH SKILL GAPS

- D12 **Thinking about your establishment as a whole, does the fact that some of your staff are not fully proficient have an impact on how your establishment performs?** READ OUT

Yes – major impact	1	ASK D13
Yes – minor impact	2	
No	3	TO D14

ASK IF HAD IMPACT (D12=1 OR 2)

- D13 **Is the fact that some of your staff are not fully proficient causing this establishment to...?**
READ OUT. CODE ALL THAT APPLY. ROTATE ANSWER LIST.

Lose business or orders to competitors	1
Delay developing new products or services	2
Have difficulties meeting quality standards	3
Increase operating costs	4
Have difficulties introducing new working practices	5
Increase workload for other staff	6
Outsource work	7
DO NOT READ OUT: No particular problems / None of the above (ALLOW SINGLE CODE ONLY)	8
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

ASK ALL WITH SKILL GAPS

- D13A **Have you taken any steps to improve the proficiency or skills of these staff, or do you have any plans to do so?** READ OUT

Yes	1	ASK D14
No – but have plans to	2	GO TO D15
No	3	
DO NOT READ OUT: Don't know	4	

ASK IF HAVE TAKEN ACTION (D13A=1)

- D14 **Which if any of the following steps is this establishment taking to overcome the fact that some of its staff are not fully proficient in their job?**
READ OUT. CODE ALL THAT APPLY.

Increase training activity / spend or increase/expand trainee programmes	1
Reallocating work	2
Increase recruitment activity / spend	3
More staff appraisals / performance reviews	4
Implementation of mentoring / buddying scheme	5
More supervision of staff	6
Recruiting workers who are non-UK nationals	7
Changing working practices	8
Any other action? (WRITE IN)	9
DO NOT READ OUT: Nothing (ALLOW SINGLE CODE ONLY)	10
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

- ASK IF ANY STAFF FULLY PROFICIENT (SUM(D9)>0)
- D15 **You said that you have [SUM(D9)] staff who are FULLY proficient at their job. Of these, how many would you say have BOTH qualifications AND skills that are more advanced than required for their current job role?**

ENTER NUMBER
VALID RANGE = 0 TO (SUM(D9))
ALLOW DON'T KNOW

E THERE IS NO SECTION E

F Workforce development

ASK ALL

F1 **Does your establishment have any of the following...?**

INTERVIEWER NOTES:

- A IF RESPONDENT INDICATES THAT ESTABLISHMENT IS COVERED BY A COMPANY WIDE [SHOW CODE RELEVANT FOR EACH ITERATION: TRAINING PLAN / TRAINING BUDGET] CODE AS 'YES'
- B CODE AS 'NO' IF IN PROCESS OF DRAWING UP FIRST [SHOW CODE RELEVANT FOR EACH ITERATION: TRAINING PLAN / TRAINING BUDGET]
- C CODE AS 'YES' IF CURRENTLY HAVE [SHOW CODE RELEVANT FOR EACH ITERATION: TRAINING PLAN / TRAINING BUDGET] BUT IN PROCESS OF DRAWING UP NEW ONE.

	Yes	No	Don't know
A training plan that specifies in advance the level and type of training your employees will need in the coming year?	1	2	3
A budget for training expenditure? [IF MULTI-SITE AND NOT HQ (A2=2 AND A3≠5): which specifically covers training spend for this site]	1	2	3

ASK MODULE 1 AND SCOTLAND (DUMMOD=1 OR COUNTRY=3)

F2 **Approximately what proportion of your staff have a formal written job description?**
PROMPT AS NECESSARY

None	1
Some but fewer than half	2
Around half	3
More than half but not all	4
All	5
DO NOT READ OUT: Don't know	X

F3 **And approximately what proportion of your staff have an annual performance review?**
PROMPT AS NECESSARY

None	1
Some but fewer than half	2
Around half	3
More than half but not all	4
All	5
DO NOT READ OUT: Don't know	X

ASK ALL

- F4 **Over the past 12 months have you arranged or funded any off-the-job training or development for employees at this site - by off-the-job training we mean training away from the individual's immediate work position, whether on your premises or elsewhere.**

Yes	1
No	2
Don't know	3

- F4a **And have you arranged or funded any on-the-job or informal training and development over the last 12 months - by this I mean activities that would be recognised as training by the staff, and not the sort of learning by experience which could take place all the time.**

Yes	1
No	2
Don't know	3

F4DUM CATI VARIABLE: TYPES OF TRAINING

Provide both off-the-job and on-the-job training	1	F4=1 AND F4a=1
Provide off-the-job training only	2	F4=1 AND (F4a=2 OR 3)
Provide on-the-job training only	3	(F4=2 OR 3) AND F4a=1
Provide neither off-the-job nor on-the-job training	4	(F4=2 OR 3) AND (F4a=2 OR 3)

IF NO TRAINING ARRANGED IN PAST 12 MONTHS (F4DUM=4)

F5 **You mentioned that you have not funded or arranged training for any employees at this location over the past 12 months. What are the reasons for this?**

PROBE: **What other reasons have there been?**

DO NOT READ OUT. CODE ALL THAT APPLY

No training available in relevant subject area	1
The courses interested in are not available locally	2
The quality of the courses or providers locally is not satisfactory	3
Difficult to get information about the courses available locally	4
I don't know what provision is available locally	5
The start dates or times of the courses are inconvenient	6
No money available for training	7
External courses are too expensive	8
Managers have lacked the time to organise training	9
Employees are too busy to give training	10
Employees are too busy to undertake training and development	11
Training is not considered to be a priority for the establishment	12
All our staff are fully proficient / no need for training	13
Trained staff will be poached by other employers	14
Other (WRITE IN)	15
No particular reason (ALLOW SINGLE CODE ONLY)	16

ALL WHO HAVE NOT TRAINED (F4DUM=4) NOW SKIP TO F7

ASK IF PROVIDE TRAINING AT ALL (F4=1 OR F4a=1).

F6 **Which of the following types of training have you funded or arranged for employees at this establishment over the past year?**

READ OUT AND CODE ALL THAT APPLY. ROTATE ANSWER LIST.

Induction training	1
Health & safety/first aid training	2
Job specific training	3
Supervisory training	4
Management training	5
Training in new technology	6
Any other types? (please specify)	7
DO NOT READ OUT: None of these (ALLOW SINGLE CODE ONLY)	8
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

ASK IF PROVIDE H&S / INDUCTION TRAINING (F6=1 OR 2)

F7a **And how much of the training that you have funded or arranged has been for health & safety or induction training? PROBE FOR BEST ESTIMATE**

WRITE IN %

IF DON'T KNOW, PROMPT WITH RANGES AS NECESSARY.

None	1
Less than 10%	2
10% - 19%	3
20% - 29%	4
30% - 39%	5
40% - 49%	6
50% - 59%	7
60% - 69%	8
70% - 79%	9
80% - 89%	10
90% - 99%	11
100%	12
DO NOT READ OUT: Don't know	X

ASK ALL

F7 **And has your establishment done any of the following to aid the development of your employees in the last 12 months?**

READ OUT; CODE ALL THAT APPLY

Supervision to ensure that employees are guided through their job role over time	1
Provided opportunities for staff to spend time learning through watching others perform their job roles	2
Allowed staff to perform tasks that go beyond their strict job role and providing them with feedback as to how well they have done	3
DO NOT READ OUT: None of these (ALLOW SINGLE CODE ONLY)	4
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	X

ASK IF PROVIDE TRAINING AT ALL (F4=1 OR F4A=1), OTHERS GO TO F16
 F8 [IF BOTH ON AND OFF-THE-JOB (F4DUM=1): **Thinking about both on- and off-the-job training,**
Over the last 12 months how many staff employed at this establishment have you funded or arranged training and development for, including any who have since left?

IF SAY "ALL STAFF", SAY: **So including any staff who have since left, how many staff would that be?**

WRITE IN ____ (1 – 99999) ____

F8RAN PROMPT WITH RANGE IF DON'T KNOW

1-2	1
3-4	2
5-9	3
10-19	4
20-29	5
30-39	6
40-49	7
50-99	8
100-199	9
200 or more	10
(DO NOT READ OUT) Don't know	X

IF F8 > (A1 x 2) ASK:

F8CHK **You said you currently have <INSERT VALUE FROM A1> employees but you have trained <F9 FIGURE> staff in the past 12 months, is this correct?**

Yes	1	GO TO F9
No	2	RE-ASK F8

F10DUM CATI DUMMY VARIABLE – LIST EACH OCCUPATION EMPLOYED AT D6-D6B FOR ALL WHO TRAIN (F4=1 OR F4A=1)

IF PROVIDE TRAINING AT ALL (F4=1 OR F4A=1)
 F9 **Over the last 12 months which occupations have you funded or arranged training for [F4DUM=1: , whether on- or off-the-job]?**

PROMPT AS NECESSARY

CATI – SHOW ALL OCCUAPTIONS MENTIONED AT D5-D7, PLUS (AS LONG AS NOT ALL 9 CATEGORIES ANSWERED YES AT D5 –D7) 'ANY OTHER OCCUPATIONS'

ASK IF MORE THAN ONE OCCUPATION MENTIONED AT F9

- F10 **You said you had funded or arranged training for <F9 FIGURE OR F9RAN RANGE> staff in the last 12 months, including any who have since left. How many of these were <READ OUT IN TURN EACH ANSWER FROM F9> ...**

SCREEN TO SHOW THE FIGURE OR RANGE FROM F8 AND COUNTDOWN AFTER EACH F10 ANSWER.

TOTAL OF F10 MUST EQUAL F8 (OR BE WITHIN BAND IF ANSWERED F8RAN) – IF NOT CHECK IF TOTAL TRAINED FIGURE WRONG (IF SO SNAP BACK TO F8 OR F8RAN) OR AMEND F10 ANSWERS.

	F9	F10
Managers, Directors and senior officials]	1	WRITE IN NUMBER_____
Professional occupations	2	WRITE IN NUMBER_____
Associate professional and technical occupations	3	WRITE IN NUMBER_____
Administrative and secretarial occupations	4	WRITE IN NUMBER_____
Skilled trades occupations	5	WRITE IN NUMBER_____
Caring, Leisure and Other Service Occupations	6	WRITE IN NUMBER_____
Sales and customer service occupations	7	WRITE IN NUMBER_____
Process, plant and machine operatives	8	WRITE IN NUMBER_____
Elementary occupations	9	WRITE IN NUMBER_____
Any other occupations (WRITE IN)	10	WRITE IN NUMBER_____
Calculate sum		SUM F10

IF SUM F10 DOES NOT EQUAL F8 (OR IS GREATER THAN TOP OF F8RAN BAND OR LESS THAN THE BOTTOM OF F8RAN BAND) ASK:

- F10chk **You said that in the last 12 months that you trained <F8> staff, but the sum of the occupations that you have trained total <F10SUM>. Do you wish to amend the overall figure or the number within each occupation?**

Total figure	1	RE-ASK F8
Occupational figure	2	RE-ASK F10

ASK IF SCOTLAND/NORTHERN IRELAND AND WORKING PROPRIETORS AT SITE (COUNTRY=3 OR 2 AND A9A>0), OTHERS CHECK ROUTING ABOVE F11

- F10A **Could I just check, are any of the individuals who have received training in the last 12 months either owners or part-owners of the organisation?**

Yes	1	CONTINUE
No	2	GO TO F11

IF F10A=1

F10B **And how many of the owners / part-owners who have received training are working as/in...?**

CATI – SHOW ALL OCCUPATIONS WITH WORKING PROPRIETORS AT D8A AND PEOPLE TRAINED AT F10

CATI – DO NOT ASK FOR OCCUPATION IF A9A=1 AND F10A=1

	D8A
Managers, Directors and senior officials]	(0 – RESPONSE AT F10_1)
Professional occupations	(0 – RESPONSE AT F10_2)
Associate professional and technical occupations	(0 – RESPONSE AT F10_3)
Administrative and secretarial occupations	(0 – RESPONSE AT F10_4)
Skilled trades occupations	(0 – RESPONSE AT F10_5)
Caring, Leisure and Other Service Occupations	(0 – RESPONSE AT F10_6)
Sales and customer service occupations	(0 – RESPONSE AT F10_7)
Process, plant and machine operatives	(0 – RESPONSE AT F10_8)
Elementary occupations	(0 – RESPONSE AT F10_9)

IF PROVIDE TRAINING AT ALL (F4=1 OR F4A=1)

F11 **And, over the last 12 months, on average, how many days training and development [F4DUM=1: whether on- or off-the-job,] have you arranged for EACH MEMBER OF STAFF receiving training?**

NOTE TO INTERVIEWER: If respondent says 'a week' or 'two weeks' etc check: **So how many WORKING days is that?**

INTERVIEW NOTE: For "less than a day" please code "Don't know" and record on next screen

WRITE IN ABSOLUTE NUMBER _____ (1-260)_____

F11RAN: IF DON'T KNOW AT F11, PROMPT WITH RANGES

Less than a day	1
1 day	2
2 days	3
3 – 4 days	4
5 – 6 days	5
7 – 8 days	6
9 – 10 days	7
11 – 12 days	8
13 – 14 days	9
15 – 16 days	10
17 – 18 days	11
19 – 20 days	12
More than 20 days	13
DO NOT READ OUT: Don't know	X

IF MORE THAN 20 at F11 OR CODE 13 AT F11RAN

F11chk **Can I just check that, on average, EACH MEMBER OF STAFF receiving training and development has received [INSERT ANSWER FROM F12 IF GAVE ASBOLUTE FIGURE OR “more than 20” IF CODE 12 ON DON’T KNOW RANGE] days training over the last 12 months?**

Yes	1	GO TO F12
No	2	RE-ASK F11

ASK ALL WHO TRAIN (F4=1 OR F4A=1)

F15 **Does your establishment formally assess whether the training and development received by an employee has an impact on their performance?**

Yes	1
No	2
Don't know	X

ASK ALL PROVIDING TRAINING (F4=1 or F4A=1)

F12 **Thinking now about qualifications, how many of the <F8 integer / band> people that you have funded or arranged training for [TEXT SUBSTITUTION IF BOTH ON AND OFF THE JOB: whether on- or off-the-job,] over the past 12 months are or were being trained towards a nationally recognised qualification?**

WRITE IN _____ (0 – F8 INTEGER / TOP OF F8 BAND)

PROMPT WITH RANGE IF DON'T KNOW

None	1
1-2	2
3-4	3
5-9	4
10-19	5
20-29	6
30-39	7
40-49	8
50-99	9
100-199	10
200 or more	11
(DO NOT READ OUT) Don't know	X

CATI CHECK – ANSWER GIVEN AT F12 SHOULD NOT BE GREATER THAN ANSWER GIVEN AT F8 (INTEGER OR TOP OF RANGE IF ANSWERED BANDED VERSION).

ASK IF TRAINING TOWARDS A NATIONALLY RECOGNISED QUALIFICATION (F12>0 or bands 2-11). OTHERS CHECK F15.

F13 [IF F12=1: **Is or was this member of**, IF F12>1:**Are or were any of these**] **staff being trained towards any of the following types of qualification in the last 12 months ...READ OUT?**

F14 IF MORE THAN ONE CATEGORY YES AT F13 AND F12>1 (INTEGER OR BANDED) ASK F14 **And of those** [TEXT SUBSTITUTION: insert number from F12] **people being trained towards qualifications, approximately how many were being trained towards** <INSERT EACH YES FROM F13>?

READ OUT.

	F13			F14	
	Yes	No	Don't know	Number	Don't know
Level 1 qualifications [SC: (in Scotland they may be known as Level 4 qualifications)] such as an [EN/WL/NI: NVQ SC: SVQ] Level 1 or BTEC Introductory Diploma [SC: or General Standard]	1	2	3	(1-F12)	X
Level 2 qualifications [SC: (in Scotland they may be known as Level 5 qualifications)] such as an [EN/WL/NI: NVQ SC: SVQ] Level 2, GCSEs [SC:, Credit Standard Grade] or BTEC First Diploma	1	2	3	(1-F12)	X
Level 3 qualifications [SC: (in Scotland they may be known as Level 6 qualifications)] such as an [EN/WL/NI: NVQ SC: SVQ] Level 3, A-Levels or BTEC Nationals [WL: , or the Advanced Level Welsh Baccalaureate SC: , or Highers or Advanced Highers]	1	2	3	(1-F12)	X
Level 4 qualifications or above [SC: (in Scotland they may be known as Level 7 qualifications)] such as degrees, HNC/HNDs, postgraduate degrees or high level specialist professional qualifications	1	2	3	(1-F12)	X

ASK ALL

F16 **Is your establishment currently accredited with the Investors in People Standard?**

Yes	1
No	2
DO NOT READ OUT - Don't know	X

G Skills utilisation / High performance working

ASK SECTION G TO MODULE 1 AND SCOTLAND ONLY (DUMMOD=1 OR COUNTRY=3)

G1 Does your establishment...

	YES	NO	DK	n/a
Give employees information about the financial position of the establishment	1	2	X	Y
IF A1>9 Create teams of people, who don't usually work together, to work on a specific project	1	2	X	Y
IF A1>9 Have teams of people that solve specific problems or discuss aspects of work performance? These are sometimes known as "problem solving groups" or "continuous improvement groups"	1	2	X	Y
Have an equal opportunities policy	1	2	X	Y
Have formal procedures in place for employee consultation (such as a staff association, employee forum or trade union consultation)	1	2	X	Y
Currently hold any of the ISO 9000 Standards	1	2	X	Y

G2 Do you have processes in place to allow you to identify "high potential" or talented individuals within your establishment?

Yes – formally documented	1
Yes - informal	2
No	3
Don't know	X

G3 Is there a formal procedure for dealing with discipline and dismissals (other than redundancies) for non-managerial employees?

Yes	1
No	2
Don't know	X

ASK IF MULTISITE OR HAS 10 OR MORE EMPLOYEES (A3=2 OR A1>9)

- G4 **Which of the following methods do you use to communicate or share information in this workplace?** READ OUT; CODE ALL THAT APPLY

Annual staff surveys	1
Formal staff suggestion schemes	2
Scheduled team meetings	3
Intranet	4
Newsletters	5
Any other ways (write in)	6
DO NOT READ OUT: None of the above (ALLOW SINGLE CODE ONLY)	7
DO NOT READ OUT: Don't know (ALLOW SINGLE CODE ONLY)	8

- G5 **To what extent would you say employees at your establishment...**READ OUT FOR EACH, CODE ONE ONLY

	To a large extent	To some extent	Not much	Not at all	DK
Have variety in their work	1	2	3	4	X
Have discretion over how they do their work	1	2	3	4	X
Have access to flexible working	1	2	3	4	X

H Business strategy and structure

ASK ALL

- H1 I'd now like to ask you a few questions about how the products or services that are provided by this establishment compare to those provided by others in your industry, including those based in other countries.

- A) **First, which of the following best describes the establishment's goods or services...?**
READ OUT, CODE ONE ONLY

They are a standard range of goods or services	1
There are minor differences in goods or services according to customer requirements	2
There are substantial differences in goods or services according to customer requirements	3
Don't know	4

Now, on a scale of 1 to 5, where would you place this establishment if...

ASK PRIVATE SECTOR ONLY (ASK A8=1)

- B) **one indicates that, compared to others in your industry, the competitive success of your establishment's products or services is wholly dependent on price and five that success does not depend at all on price**

Wholly price dependent	1	2	3	4	5	DK	Not at all price-dependent
------------------------	---	---	---	---	---	----	----------------------------

ASK ALL EXCEPT PUBLIC SECTOR (IF A8=1,2 OR 5)

- C) **one indicates that, compared to others in your industry, this establishment very rarely leads the way in terms of developing new products, services or techniques, and five that you often lead the way**

Very rarely lead the way	1	2	3	4	5	DK	Often lead the way
--------------------------	---	---	---	---	---	----	--------------------

ASK PRIVATE SECTOR ONLY (ASK A8=1)

- D) **one indicates that this establishment competes in a market for a standard or basic quality product or service, and five that you compete in a market for premium quality products or services.**

Standard or basic	1	2	3	4	5	DK	Premium quality
-------------------	---	---	---	---	---	----	-----------------

ASK MODULE 2 ONLY (DUMMOD=2)

- E) **one indicates that, compared to others in your industry, your IT systems and/or networks are well behind recent technological developments, and a score of five that, compared to others in your industry, you are state of the art.**

Well behind recent developments	1	2	3	4	5	DK	State of the art
---------------------------------	---	---	---	---	---	----	------------------

ASK MODULE 2 ONLY (DUMMOD=2)

- F) **one indicates that the way you produce or deliver your products or services is not automated at all, and a score of five that they are highly automated**

Not automated at all	1	2	3	4	5	DK	Highly automated
----------------------	---	---	---	---	---	----	------------------

H2 THERE IS NO QUESTION H2

ASK ALL

- H3 **Does your establishment have a business plan that specifies the objectives for the coming year?**

INTERVIEWER NOTES:

- IF RESPONDENT INDICATES THAT ESTABLISHMENT IS COVERED BY A COMPANY WIDE BUSINESS PLAN, CODE AS 'YES'
- CODE AS 'NO' IF IN PROCESS OF DRAWING UP FIRST BUSINESS PLAN
- CODE AS 'YES' IF CURRENTLY HAVE A BUSINESS PLAN BUT IN PROCESS OF DRAWING UP NEW ONE.

Yes	1
No	2
DO NOT READ OUT: Don't know	X

I Closing questions

ASK ALL

- I1 **Thank you very much for taking the time to speak to us today. Occasionally it is necessary to call people back to clarify information; may we please call you back if required?**

REASSURE IF NECESSARY: **Your details will only be used by IFF to call you back regarding this particular study.**

Yes	1
No	2

- I2 **If the government and its agencies wish to undertake further work on related issues in the future would it be ok for them or their appointed contractors to contact you on these issues?**

Yes – both client and/or their contractors may recontact	1
Only the client may recontact	2
No	3

IF I2=1 AND TRAIN AT ALL (F5a=1 or F5b=1)

- I3 **We may wish to recontact you in the next few weeks with some follow up questions about training expenditure. This may include sending you some questions on paper which we would collect the answers to over the telephone. Would this be possible?**

Yes	1	Go to I3B
No	2	Go to I4

ASK IF I3=1

- I3B **Can you tell me your email address?**

INTERVIEWER NOTE: CODE NULL FOR DON'T KNOW / DO NOT HAVE AN EMAIL ADDRESS

WRITE IN ADDRESS _____ GO TO I3C
NULL/REF GO TO I3D

ASK IF NOT NULL/REF AT I3B

- I3C **I have that as [text sub of email address recorded at I3B] - is that right?**
INTERVIEWER NOTE: SPELL OUT EMAIL ADDRESS LETTER-BY-LETTER

Yes	1	CONTINUE TO I3D
No	2	GO TO I3B AND REDO

ASK ALL

- I4 I have your postcode as [INSERT FROM SAMPLE] is this correct?

Yes	1	ASK I6
No	2	RECORD CORRECT POSTCODE

- I5 THERE IS NO QUESTION I5

- I6 And can I just confirm the best number to contact you on is [SHOW TELEPHONE NUMBER]?

Yes	1	NEXT QUESTION
No	2	RECORD CORRECT NUMBER

ASK ALL

- I7 Finally, it is sometimes possible to link the data we have collected with other government surveys or datasets to enable further statistical analysis. Would you be happy for this to be done?

ADD IF NECESSARY: Your confidentiality will be maintained, and linked data will be anonymised and only used for statistical purposes by researchers authorised by the Office for National Statistics.

Yes	1
No	2

CONFIRM NAME, JOB TITLE, TELEPHONE AND EMAIL

THANK AND CLOSE

I declare that this survey has been carried out under IFF instructions and within the rules of the MRS Code of Conduct.

Interviewer signature:

Date:

Finish time:

Interview Length

mins

ENDNOTES

- 1 This indicator is not included in the ILO list as relevant for skills development; however, it is included here as it is considered relevant within this context.
- 2 Includes type and nature of disability, also compulsory.
- 3 Includes country of origin where not a South African citizen, also compulsory.
- 4 From 2014/15, most of these 'voluntary' fields will become compulsory, with the exception of the specialisation linked to the six-digit OFO code.
- 1 www.saica.co.za/.
- 2 www.robertwalters.co.za.
- 3 J Erasmus, pers. comm., 15 June 2004, cited in Wilson et al. (2004).
- 4 Naughtin T, Rankin N & Schöer V (in prep) South African firms and the youth wage subsidy. Corresponding author: neilrankin@sun.ac.za.
- 5 Ibid.
- 6 Ibid.
- 7 Skills Development Act, 1998 (Act No. 97 of 1998).
- 8 Until 2013; the date will change to 1 April from 2014.
- 9 Skills Development Act, 1998 (Act No. 97 of 1998).
- 10 18.2 learners are *unemployed* learners with a learnership agreement with a company, whereas 18.1 learners are already employed by the company with which they have a learnership agreement.
- 11 Skills Development Act, 1998 (Act No. 97 of 1998), Amendment Notice to Government Notice No R 990, Government Gazette No. 35940, 3 December 2012.
- 12 PIVOTAL programmes result in occupational qualifications and may include a knowledge component that is normally delivered at a further education and training college or a university, as well as structured learning in an accredited training centre or an approved workplace.
- 13 Skills Development Act, 1998 (Act No. 97 of 1998), Amendment Notice to Government Notice No R 990, Government Gazette No. 35940, 3 December 2012.
- 14 Ibid.: p. 13.
- 15 For example, Rankin (2007) shows that, similar to other countries, there is a clear relationship between firm size and wages in South Africa.
- 16 This result is consistent with those for other African economies (Bigsten & Söderbom 2006).
- 17 The most useful LEED is universal data for all employees that can be linked to the firms in which they work. This type of data allows researchers to follow individuals as they move between firms (and thus allows for the control of unobserved and unchanging individual specific effects such as motivation or ability). Countries such as Denmark, France and Germany are now making this type of data available to researchers.
- 18 The subsidy applies to any type of occupation or skill level, as long as the employer registers the learnership with the relevant Sector Education Training Authority (SETA).
- 19 Although comparisons with other countries suggests that South Africa's labour regulations are not unnecessarily high (Bhorat & Cheadle 2009).
- 20 These are people who would be considered experts in the area of 'profiling' occupations – that is, which skills, abilities and tasks are associated with particular occupations and how these change over time. They are used in an 'oversight' process when the results of employee surveys are compiled. They also help to draw up questionnaires and provide input when it is difficult for interviewers to get hold of a sufficiently large sample of a particular profession.