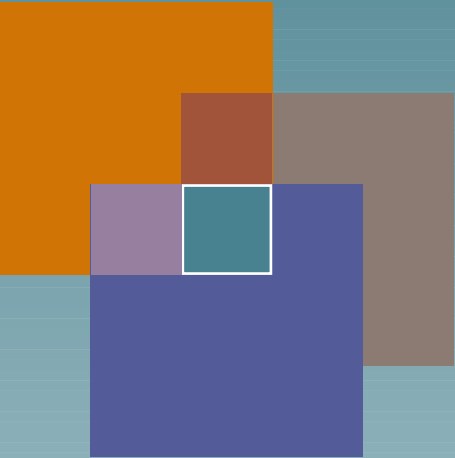




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# **JOB AND WORK ANALYSIS**

## **Guidelines on Identifying Jobs for Persons with Disabilities**

**Robert Heron**

**ILO Skills and  
Employability  
Department**



International  
Labour  
Office  
Geneva

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## PREFACE

As people with disabilities enter in greater numbers into competitive employment, it has become clear that they can be excellent employees, an asset to their employers, if they work in jobs matched to their skills, abilities and interests. Many employers of disabled persons are testifying to this all round the world. Other employers are willing to recruit disabled workers, but need support in this, as they may be unsure of what jobs to offer. Job and work analysis can be useful in identifying suitable jobs within the enterprise, and adjustments and accommodations which may need to be carried out, and in making it easier to match the skills and abilities of the disabled job seeker with the requirements of the job.

These guidelines on Job and Work Analysis arise from requests to the ILO in the course of its activities to promote employment opportunities for persons with disabilities. They are intended for employment services and service providers seeking to develop their capacity to promote the recruitment of persons with disabilities and the retention of workers who acquire a disability. They form part of a series of ILO tools on placement services for disabled job seekers: the ILO guide for job placement personnel *Assisting Disabled Persons in Finding Employment*, the ILO Resource Book for trainers of placement officers, and the guide for policy makers and employment service managers *Placement of Job Seekers with Disabilities – Elements of an Effective Service*. Their translation into national languages is encouraged. Comments and suggestions for their improvement are welcomed.

The guidelines were prepared by Robert Heron, former Senior Labour Administration Specialist, ILO Bangkok, in collaboration with Barbara Murray, ILO Skills and Employability Department, Geneva. This work was supported by the late Pekka Aro, former Director of the ILO Skills Department, who placed great emphasis on the ILO's role in promoting equal employment opportunities for persons with disabilities through its research, advocacy and service activities. It is hoped that they will be widely used in improving the employment prospects of persons with disabilities around the world.

Mpenga Kabundi  
Director  
ILO Skills and Employability Department  
Geneva  
November 2005

# **JOB AND WORK ANALYSIS**

## **A Guide to Assist in the Placement of Job Seekers with Disabilities**

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## INTRODUCTION

The effective placement in employment of job seekers with disabilities involves making the best possible match between their qualifications, interests and expectations and the requirements of enterprises, as indicated in the job descriptions and job specifications for particular vacancies.

The job matching process requires good quality information about job seekers with disabilities to determine experience, skills, interests and general capacity. The process also requires good quality information about jobs, including the specific tasks to be performed, the standards of performance required, the conditions under which the work is performed and the organizational setting in which the work takes place.

The job placement process requires a detailed job description for each vacancy and a detailed job specification outlining the general and particular requirements for each vacancy. Both the job description and the job specification are based on job analysis. Without good quality **job analysis** the description of job opportunities will be vague rather than precise, general rather than specific, broad rather than detailed. As a result, people with disabilities will be further disadvantaged in finding suitable jobs. When there is a vague job specification – or no job specification at all - it is very hard for people with disabilities to be placed in meaningful, productive and decent work.

This is not to suggest that job analysis should be motivated solely by the needs of people with disabilities. Job analysis is about tasks, not individual job seekers. It is important, however, to analyse how the tasks of a particular job and the environment in which they take place could be modified to accommodate the capacities of people with disabilities. Accordingly, placement officers should approach job analysis in a way which recognizes the circumstances of people with disabilities, generates opportunities for their employment and avoids exclusion. The steps in the job analysis process are standard but the targeted outcomes are informed by the need for fairness, inclusion and opportunities for people with disabilities.

To be really effective, placement officers with responsibility for finding meaningful employment for people with disabilities must have knowledge of the job analysis process. They also need the skills to enable them to apply this knowledge to the circumstances of their particular target group. That is the purpose of these guidelines: to provide placement officers with an additional and scientific tool to assist them in finding meaningful work for people with disabilities.



## CHAPTER 1:

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### WHO CAN DO JOB AND WORK ANALYSIS?

You do not need any formal qualifications to use work and job analysis to assist people with disabilities find suitable jobs. An understanding of work study, time and motion study, vocational assessment techniques and personnel management would be useful but is not essential. Every placement officer, whether employed in the public, private or NGO sector, can develop the necessary knowledge and skills.

To be successful at job and work analysis you should develop:

- a broad knowledge of how labour markets function
- a knowledge of the job matching process. This includes having the skills and techniques to assess the needs and requirements of enterprises as well as the needs and capacities of job seekers
- a knowledge of disability issues and a good awareness of the needs of people with disabilities, both as people and as job seekers
- a knowledge of what adaptations and aids are available or possible to support disabled people in their jobs
- the ability to interact with people in a wide variety of situations
- the ability to think logically and observe critically
- a belief that service to others is important.

The steps outlined in these guidelines will get you started in both work and job analysis. You probably follow some of these steps already. You do not have to be an economist, an accountant, a psychologist, a medical doctor, a lawyer or an occupational nurse to do job and work analysis. Any placement officer with intelligence and motivation can do it. You just need the capacity to:

- conduct structured interviews
- ask relevant questions
- listen attentively
- observe carefully
- record information systematically.



**Give work and job analysis a try. It is not as complex as you might think. You will find it satisfying and useful and it will help you to achieve your objective of placing more and more people with disabilities into decent, productive and meaningful work.**

## CHAPTER 2:

# KNOWING THE LABOUR MARKET

Work and job analysis require a good understanding of the overall labour market situation in your local area.

There is no single labour market in a province, district or city. There are many separate markets, each with its own particular supply and demand characteristics.

Some of these labour market segments are growing. Some are contracting. Others are stagnant. Some are over-supplied with suitably qualified workers. Others have enterprises where there are unfilled vacancies due to the lack of suitably qualified workers.

As a placement officer you need to be aware of the labour market situation in the area you are serving. In order to assist people with disabilities to find suitable jobs and to assist enterprises to find suitable workers, you will need to do some simple research. Answers to the following questions will provide you with important information concerning the needs of enterprises and their demand for workers, and the supply of workers available to fill those jobs:

- What are the main industries in this area? Within these industries, which are the main enterprises?
- What proportion of the workforce in this area is engaged in wage employment?
- What proportion of the workforce is engaged in self-employment and informal sector activities? What are the main activities (e.g. agriculture, fishing, food services, processing, and transportation)?
- How long have the main enterprises been operating in this area? Are they expected to stay in the longer term?
- Which enterprises appear to be growing? Which are contracting?
- What new enterprises are expected to come to this area in future? What products or services will they produce? What types of workers will they need?

- What is the general skill profile of workers in this area?  
Are they highly skilled, skilled or unskilled?
- What training providers, both public and private, mainstream and specialized, exist in this area? What training do they provide?  
How many people, disabled and non-disabled, do they train each year and in what subjects?
- Do the graduates of training institutions find jobs? What jobs?  
In which industries and enterprises?
- How many people with disabilities in this area are willing and able to work? How many are currently working?
- What is the skills profile of job seekers with disabilities in this area?
- Which enterprises have hired people with disabilities? What jobs?  
What types of disability do these workers have? How many have been employed?

Much of this information will be available from existing sources.

You need to bring it together and then **analyse** it to identify:

- which enterprises offer the best prospects for employing people with disabilities
- which people with disabilities might be placed in wage employment
- which people with disabilities might be facilitated to take up self-employment.



**Up-to-date, relevant, accurate information on your local labour markets will provide the basis for focused interventions to ensure more people with disabilities are placed in meaningful employment. This information can also identify those enterprises that may be willing to participate in job and work analysis activities.**

## CHAPTER 3:

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### WHAT IS JOB AND WORK ANALYSIS?

**Job Analysis** refers to a detailed and systematic process of breaking down work performed into a number of separate tasks and duties.

It is a detailed process in that it considers all tasks to be performed, sometimes dividing them between main tasks and secondary tasks.

It is a systematic process in that it follows a step-by-step approach to collect, record, analyse and interpret the information collected.

Chapters 5-8 explain what is involved in job analysis and how to do it.

**Work analysis** is related to job analysis but is wider in scope. Job analysis involves looking at an individual job to identify the individual tasks involved. Work analysis involves looking at several or, indeed, many jobs at the same time.

Like job analysis, work analysis is both detailed and systematic. The outcome, however, is different. Job analysis identifies tasks and duties, whereas work analysis identifies potential new jobs and a need to reorganize and restructure.

Chapter 4 explains what is involved in work analysis and how to do it.

In order to understand what **job analysis** is it is necessary to make a clear distinction between:

- an occupation
- a position
- a job.

**In doing job and work analysis there are a number of terms you need to understand and be familiar with. These are described below.**

### Occupation

An occupation is a group of jobs that are reasonably similar with regard to the tasks performed and the knowledge, skills and abilities required to perform them successfully.

Examples include primary teacher, computer programmer, civil engineer, accountant, nurse, sales person, airline pilot, secretary and security guard.

### Position

A position (or post) refers to the level of a job within an organization or enterprise. This is usually shown by the title of the position. For example:

- Clerical Assistant, Grade 2
- Professional Officer, Level 3
- Assistant Sales Manager
- Senior Technical Officer, Level 1
- Employment Officer.

These titles say very little about the actual job or work to be performed.

Every job has a position or title, but for one position there may be many jobs. For example, an enterprise may employ 20 Clerical Assistants, Grade 2. They all have the same position and title but the actual job or work performed could be different for each one.

### Job

A job refers to the specific tasks and duties to be performed for a particular position. For example, a clerical assistant may have the specific tasks of drafting correspondence, drafting monthly reports and filing reports and documents. Another clerical assistant, with the same position, may have different tasks, such as arranging the printing of reports, preparing distribution lists and arranging for the distribution of documents.

**What about the following?** Are they examples of an occupation, position or job?

- He is a supervisor.
- She is a physicist.
- They are labourers.
- We are teachers.

None of these indicate the individual tasks to be performed or the conditions under which the actual work takes place. They refer to **occupations**, not **jobs**.



**In seeking to place people with disabilities successfully in jobs, your interest is not in occupation analysis or position analysis. Your concern is with job analysis.**

### Job Description

A job description is a written statement of all the important elements of a job. It is an outcome of the job analysis process. A job description usually includes the following:

- the position or job title
- the specific tasks to be performed
- the relationship between the job in question and other jobs in the enterprise
- responsibilities of the job
- working conditions, including wages and hours of work
- performance standards required in the job.

### Job Evaluation

Job evaluation is a process to assess the relative worth of jobs, usually for the purpose of determining pay levels. It is a process of ranking jobs in order of importance and worth, without regard to the personalities performing the work.

Job analysis is one of the tools used in job evaluation. Job analysis is done first and can then be used to assist in the ranking of jobs and assessing their relative worth.

### Job Specification

A job specification is a written statement of the qualifications and abilities required to enable the job to be performed satisfactorily. It is sometimes referred to as a **job profile, personnel specification or qualifications requirement**.

Sometimes the job specification is included as part of the job description. In other cases it is a separate document. The main content of a job specification includes requirements concerning:

- education level
- experience
- specific competencies
- personal characteristics.

A final term which is sometimes used in relation to the employment of people with disabilities is job coaching. This refers to a way of assisting people with disabilities in employment situations. It involves training people with disabilities to perform specific job tasks in an open employment situation.

As a placement officer your role is to undertake work and job analysis from a particular and specific perspective – the perspective of people with disabilities. This requires:

- knowledge of the concepts of work and job analysis and how to use them
- the application of this knowledge to assist people with disabilities to find employment.



**Knowledge and application go together if you want to place more people with disabilities successfully into productive jobs.**



## CHAPTER 4:

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# HOW TO DO WORK ANALYSIS

Work analysis involves a systematic examination and assessment of jobs in:

- an entire enterprise
- a particular department
- a section or unit within a department.

The **general** purpose of work analysis is to advise enterprise managers on how they can improve the overall performance of their enterprises. This includes:

- identifying work that is not being done at all
- identifying work that is being done too slowly, thereby creating bottlenecks.



**Once shortcomings have been identified, this information can be used to reallocate work from existing jobs to create a new job.**

For placement officers concerned with assisting people with disabilities the specific purpose of work analysis is to encourage the enterprise to solve its performance problems by creating one or more jobs that could be done by people with disabilities.

A secondary purpose is to use work analysis as an opportunity to identify opportunities for work experience in enterprises for persons with disabilities.

### Work Analysis: The Steps

Work analysis involves a combination of systematic procedure and creativity. The systematic procedure involves a number of key steps:

- Start with a general overview of the enterprise by **observing** what is going on. In doing this, you are not operating as a management consultant mandated to improve the performance and profits of the enterprise. You are operating as a placement officer, trying to find suitable jobs for people with disabilities. To do this you need to find out how the enterprise operates in general, including the following:
  - What raw materials are used?
  - How are the raw materials transported and stored?
  - What processes are involved?
  - What products and services are produced?
  - What is the general working environment?
  - Does the enterprise appear to be expanding?
  - What appears to be the enterprise culture?
  - Are any people with disabilities employed?
- **Next, identify** specific departments, sections or units where there are opportunities for employing people with disabilities. You need to have a good knowledge of the different kinds of disability, the ability profile of the disabled people in your area, and of jobs people with disabilities have done successfully. You do not need to have **individual** people with disabilities in mind.
- **Observe** the general work that is taking place in the identified department or section. For example, ask yourself:
  - Is the work flowing smoothly?
  - Are there any signs of bottlenecks or of work piling up?
  - Are there any signs of workers rushing and under pressure?
  - Is the workplace clean and tidy?
- **Observe** workers performing individual jobs. If job descriptions are available, compare your observations with the written tasks and duties in the job description.

- **Identify** any gaps between acceptable and actual performance levels. Try to identify the causes of these gaps.
- **Talk to workers** about their jobs and any difficulties they have in meeting performance standards.
- **Discuss** your observations and tentative conclusions with management, highlighting the possibility of creating some additional jobs to overcome the identified performance problems.
- **Prepare** a proposal for creating some additional jobs. You should include an outline of the job descriptions for the jobs to be created.
- **Indicate** the broad profile of the people with disabilities you believe could handle these jobs.

The enterprise may agree to create one or two new jobs but may argue that these should not be offered to people with disabilities. You must resist this vigorously and advocate strongly for people with disabilities to be given the opportunity. Refer to:

- successes in other enterprises employing people with disabilities
- the reliability and commitment of workers with disabilities
- financial incentives available to the enterprise if it employs people with disabilities
- legal requirements
- the follow-up assistance you will be able to provide through the employment service.

If your efforts result in a decision to offer the jobs to people with disabilities, make every effort to refer people who make a good match. This will build the confidence of the enterprise in your ability to provide good quality services. It will also build your confidence in using work analysis as a tool to assist people with disabilities.

If you are unable to convince the enterprise to create a job for a disabled person, try to encourage the enterprise to offer a work trial. This still allows for the possibility of a permanent job at a later stage. It also provides an opportunity for a person with a disability to gain valuable work experience.

The **creative aspects** of work analysis are just as important as the process of systematic observation. This involves:

- seeing things that others do not see
- visualizing how a person with a disability could fit in to a particular department, section or unit
- suggesting innovative approaches to problems.

The following example shows a situation in which work analysis identifies that some work is not being done at all, due to pressure to reach daily output targets.

In a garment enterprise, sewing machinists are under pressure to produce a daily quota. They do not have time to keep their workplaces tidy, so empty boxes and off-cuts of material clutter their workstations and passageways.

The machinists say that the cleaners will come at the end of the shift and make the workplace tidy.

The placement officer, in undertaking a work analysis exercise, observes that the poor housekeeping during the shift actually slows down the production rate and creates a risk of accidents and fires.

The placement officer recommends that the enterprise employ two additional workers to keep the workplace tidy on an ongoing basis and then convinces the employer to engage workers with disabilities to fill the jobs. It is possible the placement officer has two people already in mind!

The next example illustrates a situation in which a number of jobs are re-organized to create one new job. One or two tasks are taken from various jobs and put together to create a new job suitable for a person with a disability.

**Ten secretaries in a very busy office are so pressured with their word processing and routine correspondence work that the sending of faxes and the photocopying and collating of documents is always delayed. Work is piling up but not being done. These delays are an indication of inefficiency in the office and will result in criticisms from customers and clients, as well as managers. If nothing is done, the secretaries will face even more pressure and stress and their work performance will go down further as they struggle to keep up with the work flow.**

The placement officer undertakes a work analysis exercise and identifies that the secretaries are unable to do all the tasks associated with their jobs, particularly the faxing, photocopying and collating.

The placement officer recommends to the enterprise that it create one additional job to do all the faxing, photocopying and collating, and that the job be offered to a person with a disability. Alternatively, depending on an assessment of the actual work volume and the identification of peak periods, the placement officer might suggest one full-time post and one or two part-time posts.



**In work analysis, you should remember that:**

- **the objective is to assist people with disabilities to find suitable jobs**
- **people with disabilities can contribute significantly to performance improvement**
- **the enterprise creates the jobs**
- **the enterprise needs advice and guidance in this job creation process**
- **enterprises operating under quota laws will welcome work analysis interventions as a way to enable legal obligations to be met**
- **work analysis can lead to work trial and work experience opportunities and to related opportunities for on-the-job training**
- **jobs for people with disabilities should not be jobs offered out of charity or conscience.**

## CHAPTER 5:

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### THE BENEFITS OF JOB ANALYSIS

As described in chapter 2, job analysis is a systematic and detailed process of breaking down work performed into a number of detailed tasks. It involves examining the demand side of labour markets to find out what types of workers are needed by enterprises if the companies are to perform efficiently.

For enterprises, job analysis has many general uses including:

- supporting general recruitment and selection processes
- supporting the job matching process
- appraising staff performance
- assisting in staff promotion exercises
- identifying training needs.

As a placement officer, your concern is with job analysis for matching purposes. More specifically, your role is to use job analysis as a tool to assist employers to identify jobs that people with disabilities can do, thereby assisting more disabled people to find suitable jobs. In order to do this you need to have a broad understanding of its uses and benefits and how it can be used to the advantage of people with disabilities.

Job analysis is a tool that can provide enterprises with the means to deal with:

- individual issues and problems which arise in the enterprise
- organizational needs, particularly in restructuring exercises
- legal requirements
- workplace labour-management issues.

All four of these areas are of concern to people with disabilities.

### Job Analysis and the Individual Worker

Job analysis makes it easier for enterprises to manage their human resources (personnel) function in a systematic and structured way. As such, it also makes it easier to engage workers with disabilities on grounds of their potential contribution to the business, rather than due to a legal obligation or on grounds of charity or conscience.

Job analysis assists **individual** people with disabilities by:

- improving their prospects for placement in meaningful, rather than token, jobs, through a matching process that meets the requirements of both the job seeker with a disability and an enterprise with job vacancies
- providing the means to modify job descriptions so as not to exclude people with disabilities
- providing a basis for broadening disabled people's job horizons while also moderating unrealistic expectations on the part of both individuals and enterprises
- highlighting the induction and on-the-job training (or job coaching) that people with disabilities may need to enhance their contribution to the enterprise.

### Job Analysis and the Enterprise as a Whole

Job analysis makes an important contribution to the enterprise as a whole, particularly in times of restructuring, organizational change or technological innovation.



In times of organizational change, particularly if job losses are involved, people with disabilities are too often the first to be laid off. By contrast, organizational change and restructuring can also provide opportunities for new jobs for disabled people. In both circumstances, job analysis can assist people with disabilities by:

- ensuring downsizing and retrenchments are handled objectively and without discrimination
- identifying new jobs that provide challenges and opportunities for advancement for people with disabilities such as, for example, jobs with computers and their applications
- providing opportunities for workers with disabilities to benefit from multiple-skilling and job broadening. This involves enabling disabled workers to undertake new tasks and responsibilities beyond those specified in their original job descriptions and so contributes to a sense of having a career rather than having a job.

### **Job Analysis and the Law**

Job analysis can be used to help to determine whether enterprises comply with laws and regulations. This is particularly important for people with disabilities who frequently face discrimination and unequal treatment in accessing employment opportunities and in employment itself.

Job analysis can assist people with disabilities in their quest for fair treatment under the law by:

- assisting in the implementation of quota schemes. For example, where the law indicates that a proportion of jobs in an enterprise must be allocated to people with disabilities, job analysis can assist the employer to identify suitable jobs
- contributing to the application of non-discriminatory legislation. For example, job analysis can help to ensure that pay is based on the job rather than on the person performing it

- assisting in ascertaining whether an enterprise qualifies for financial incentives such as subsidies and tax concessions. For example, if an enterprise employs people with disabilities who have lower productivity than non-disabled people doing the same jobs, job analysis can help to determine productivity.

### Job Analysis and Labour Relations

Job analysis can make an important contribution to enterprise-level labour relations by providing a useful tool for the prevention and resolution of disputes.

Job analysis can assist people with disabilities in their relations with management by:

- providing information to prevent individual disagreements escalating into larger conflicts. For example, if a disabled worker threatens to take his case to the labour court because he claims he is being paid less than a non-disabled worker doing the same job, job analysis can be used to show whether, in fact, the jobs are the same.
- reducing conflict. For example, in cases where workers with disabilities fear being dismissed on the introduction of new machinery because new tasks will be involved, job analysis can help to identify the new tasks to be performed and can show how workers with disabilities can be retrained to do these tasks.



**Job analysis is not a threat to people with disabilities or an infringement of their rights. Done properly, and in consultation with individual workers and their supervisors, it can be a powerful tool to support the employment of people with disabilities.**

## CHAPTER 6:

# THE ELEMENTS OF JOB ANALYSIS

Job analysis is a systematic process involving five main elements:

<b>Purpose:</b>	What is the general nature of a particular job? Why is it important?
<b>Tasks:</b>	What are the major tasks of the job? How complex are they? How do they relate to other jobs in the section or department?
<b>Environment:</b>	What is the working environment in which the tasks are performed?
<b>Working conditions:</b>	What working conditions apply to this job?
<b>Qualifications:</b>	What education, knowledge, skills and attributes are required for the performance of this job?

These five elements apply to the analysis of **all** jobs for **all** people.

More specific and detailed application is necessary, however, where jobs for people with disabilities are concerned. For example:

- knowing that a job requires a worker to move around is not enough. The **degree** of mobility required in the job is an essential factor in determining its suitability for a person with a physical disability.
- the level of hearing ability required for a job, and the extent to which the need for hearing can be replaced by sight in the job, could determine whether it is suitable for a person with a significant hearing impairment.

To do this effectively you need to know a lot about the work-related aspects of disability.

### The purpose of the job

Job analysis requires that each individual job is understood in the overall context of the enterprise or organization. You do not need to make a detailed analysis of actual tasks at this stage. The emphasis is on **why** the job exists and how it contributes to the overall performance of the enterprise. For example:

- Where does the job fit in to the overall work effort of the enterprise?
- Is the way in which the job is currently organized the only way in which it can be organized? Is this intrinsic to the job or could it be changed to enable it to be performed by a disabled person?
- Is it a job with a service orientation?
- Is it a direct production job in which the worker produces one part of a final product?
- Is it a team job?

### Tasks

The next stage is to identify the specific tasks involved in a job. This is a major element of job analysis. The questions you need to ask include:

- What tasks does the worker actually do in this job?
- What are the most frequently repeated tasks?
- How many different tasks does the worker have to perform?
- What is the sequence of tasks?
- What tools and equipment are used? Are computers used?
- Which tasks involve close cooperation with other workers?

As a placement officer concerned with finding jobs for people with disabilities, it is not sufficient for you to identify what tasks are performed. You must do this with a degree of precision. For example:

- Your analysis identifies that a job involves lifting boxes and carrying them to a delivery room. To be precise about what is involved in this task you will need to find out:

- the frequency of lifting (number of times per hour, day or week)
- the weight to be lifted (in kilograms)
- the distance over which the boxes have to be carried (in meters).

In identifying the tasks it is necessary to use words that describe the behavior required. For example, it is too vague to use terms such as *handles boxes, delivers messages, arranges correspondence*. Instead, use words that indicate the actual behavior required, such as *lifts, carries, bends, stretches, walks, stands, writes, talks, listens, calculates, counts, sorts, climbs, ...*

Next, you should elaborate the task by specifying its dimensions and context. For example:

- “Stands for periods of 40 minutes, without sitting, at a counter where many customers require quick service”
- “Sits and receives telephone calls, up to 20 per hour, and writes short messages for each call”.

Precision is crucial. Without precision in the process of task identification it will be much more difficult to:

- determine whether the job can be performed by a person with a disability
- identify which tasks might be eliminated from a job to make it more suitable for a person with a disability
- achieve an accurate job match. An inaccurate job match could possibly result in a worker with a disability failing to hold a job after placement
- identify what adaptations to the work environment, tools and equipment would make it more suitable for a person with a disability.

Here is an example of how precision in job analysis could help a person with a disability:

**Job analysis identifies that a major task in a hospital job is to collect cash from customers and then take it to a central cashier for checking and the issue of a receipt. A person with a physical disability that restricted his walking ability was placed in this job. However, he found it too difficult because of the distance to be walked each time from the cash collection point to the central cashier. The repeated walking was exhausting and the worker left the job.**

Better job analysis could have saved this situation. The distance to be walked and the number of transactions per hour and per day should have been identified with precision. The job analyst could then have suggested some minor reorganization of the workplace, such as placing the central cashier closer to the cash collection point.

### The environment

The above example shows that, as well as identifying specific tasks, job analysis involves specifying the working environment in which the job is performed. For example:

- Is the job performed in a small area? One room? Several rooms? The whole building? Indoors and outdoors?
- What is the physical environment with regard to noise, dust, lighting, temperature?
- What is the pace of work?
- What interaction is required with other workers?
- Are co-workers available to assist if necessary?
- How accessible is the workplace and the particular workstation?
- What interaction is required with customers?
- What is the nature and extent of supervision?

## Working conditions

Workers with disabilities, like other workers, are interested in the terms of employment concerning pay, hours of work, overtime requirements, leave allowances, social security benefits, sickness benefits and other allowances.

As well as these, workers with disabilities need to know additional things, such as flexitime arrangements, the availability of transport, medical benefits and work breaks. These issues may influence the decision of a person with a disability to take or refuse a job, even if there is a good match concerning specific tasks involved in the job. For example, a person with a physical disability may take a long time to get ready to go to work in the morning. A flexitime arrangement would allow the person to go to work a little later in the mornings and to make up the time later in the day.

## Qualifications

When you have analysed the other four elements you should go on to examine the qualifications required for the job. This should not be left to the enterprise alone. Frequently, enterprises overstate the qualifications required, with the result that many people with disabilities are excluded. For example:

- A hotel may require a maintenance gardener to have a university degree in horticulture. This qualification is considerably higher than that necessary for the effective performance of the job
- An enterprise may stipulate that applicants for a cleaner's position must have completed six years of secondary schooling.

Both examples over-specify the actual qualifications for the job. You should discuss such cases with employers with a view to encouraging the employer to be more realistic in setting the job specification. Encourage the employer to concentrate on essential skills and abilities, not formal education qualifications.

In assessing qualifications consideration should be given to **education, knowledge, skills, physical attributes, intellectual attributes** and **sensory attributes**.

### Education

This refers to the level of schooling and post-schooling a person may have. It is usually identified by the number of years and the specific subjects or fields studied. Many enterprises insist on the completion of secondary schooling or a university degree as **essential** for almost every job. Many people with disabilities, particularly in developing countries, do not have access to education, often because of the way in which education is delivered. Even if their intellectual capacity is high, many people with disabilities miss out.

For those who have access to schools or education in other forms, the level of education achieved gives a broad indication of intellectual capacity but does not by itself indicate the presence of the specific knowledge, skills and abilities required to do a particular job.

### Knowledge

This refers to those things a person must know in order to perform a job. It is not the same as education. As noted above, education level is often an indicator of general intellectual capacity. Knowledge refers to the specific information required to perform a particular job, for example, knowledge of:

- financial procedures
- particular computer programmes
- first-aid procedures
- road laws
- disciplinary procedures.



## Skills

A skill is the ability to do something involving mind-body coordination. For example:

- Riding a motorcycle
- Operating a keyboard
- Using a sewing machine
- Cooking food.

A key element of job analysis is to identify the **specific** and **essential** skills required to perform a job to an acceptable level. This involves identifying first the tasks and then the skills required for each task.

Like everybody else, people with disabilities have proven capacity to acquire skills. Skills of all types can be taught through a sequence of instruction, demonstration, supervised practice, repetition, and then supervised and, eventually, unsupervised practice on-the-job.

## Physical attributes

Some jobs require specific physical attributes such as the ability to walk, stand, lift or climb. Others (e.g. police, airline attendants) have requirements concerning height and weight. Your task is to ensure, as far as possible, that requirements for physical attributes do not exclude people with disabilities who in other respects satisfy the job specification. The emphasis should be on making reasonable accommodations to enable workers with disabilities to have the opportunity to participate.

### **Intellectual attributes**

Some jobs require specific intellectual attributes such as the ability to calculate, plan, assess, concentrate, comprehend, analyse, decide and judge. Some people with disabilities, particularly those with learning disabilities, may face some difficulties in meeting such requirements. As a placement officer your task is to discourage and minimize exclusion. People with learning disabilities **can** perform tasks that require a range of intellectual abilities. In some cases, this will require structured and repetitive training but there is ample evidence that such training can be highly effective.

### **Sensory attributes**

Some jobs require specific sensory abilities, including the ability to see and hear. Examples of such jobs include traffic police and taxi-drivers. It is important, however, to be open-minded to ensure that people with disabilities are not excluded unfairly from jobs, based on their sensory impairments. For example, people with hearing impairments have proven to be excellent waiters and many blind people are highly competent interpreters, computer programmers and operators.

## CHAPTER 7:

# HOW TO DO JOB ANALYSIS

Job analysis involves five basic steps:

- Step 1** Consider the enterprise as a whole
- Step 2** Decide which jobs to analyse
- Step 3** Collect information
- Step 4** Record information
- Step 5** Analyse and interpret the collected information.

### **Step 1            Consider the enterprise as a whole**

Information on the enterprise as a whole is essential to find out what is possible. Your aim is to identify which parts of the enterprise offer the best prospects and opportunities for persons with disabilities. You should start the process of job analysis by finding out:

- What is the purpose and goals of the enterprise?
- What are its products and processes?
- How big is it?
- What is happening at present?
  - Is it growing or contracting?
  - Is it developing new products?
  - Is it introducing new technology?
- What is the culture of the enterprise?
  - Is it dominated by economic considerations?
  - Are social objectives important?
- Are people with disabilities currently employed in the enterprise?
  - How many?
  - In what jobs?
- Have people with disabilities been employed there before?
  - In what jobs?
  - Why did they leave?

### **Step 2            Decide which jobs to analyse**

Once you have a general knowledge of the enterprise, its products, processes and job opportunities, you can then decide whether to analyse all jobs or whether to be selective. Clearly, to analyse all jobs is a major and time-consuming task. You should focus on those jobs that offer the best opportunities for people with disabilities.

Where there are a number of jobs with the same position (e.g. sales assistant, clerical officer) it will not be necessary to analyse every job to determine its suitability for a person with a disability. Usually, the jobs will be fairly similar, so the analysis of a small sample will often be sufficient to assess the opportunities for people with disabilities.

### **Step 3            Collect information**

In collecting information about a job you should find out:

- the actual job tasks
- which tasks are essential and which peripheral to the job how tasks are actually performed
- how much time is spent on each task
- why the tasks are important
- what materials and equipment are used
- what procedures have to be followed
- the working conditions
- the working environment
- the critical skills required for each task.

While collecting the above information you should also be thinking about what accommodations might be required to enable a person with a disability to do the job. For example:

- Will some modification of working hours be required, such as starting time, finishing time, length of breaks?
- Is there scope for some tasks to be performed by others without the job becoming meaningless?
- Is there scope for an exchange of tasks with another job?
- Will materials and machinery need to be adapted?
- Will tools and equipment need to be adapted?
- Will the particular workstation require some modification?

As noted in Chapter 6, you should also be aware that some employers overspecify the job qualifications. Others use outdated job descriptions or are phrased in a way which excludes some people with disabilities. For example, a job description that requires a waiter to *listen carefully to customers' orders and write these on an order docket* excludes the investigation of other ways of finding out what the customer wants and recording the order so as to enable a person with a hearing impairment to do the job. With minor changes to the job description and some adaptations to the tools of the job (e.g. a menu with photographs) this job could be performed by a deaf person.

Information should be collected from a number of sources and in a variety of ways. For example, you can:

- interview the employer
- interview supervisors and co-workers
- interview people who have done the job before
- observe the job being performed
- do the job yourself.

### Interview the employer

The employer will have a general idea of the job tasks and the abilities required to perform them. This may be based on a written job specification or, alternatively, the employer's experience with the job.

If the job has not been done before by a disabled person, you will need to discuss it in detail with the employer to determine whether the job, with or without modifications, is suitable.

As noted earlier, in many cases, employers rely on outdated job descriptions which exclude people with disabilities. Interviewing employers and convincing them to consider *how* to employ disabled persons, rather than *how not* is a part of the job analysis process.

### Interview supervisors and co-workers

Supervisors and co-workers usually have a better practical knowledge of a job than the human resources (personnel) manager or other senior managers.

Supervisors and co-workers will be in a better position to explain **all** tasks of the job in **all** situations.

For example, it would be hard to find out the exact time pressures associated with a particular job from a job description or from interviewing a human resources manager. A job in the packing section of an enterprise will be different when there is a rush order, as compared with the normal pace of work.

Supervisors and co-workers have detailed knowledge of time pressures, overtime requirements, teamwork, rest periods and quality standards, among many things. All of these are vital factors in deciding which people with disabilities are best suited for particular jobs.

### Interview people who have done the job before

People who have done the job before, or who have done similar jobs, can tell you what the job is really like. They can give you important information, not just about the specific tasks involved but also about their feelings and concerns about the job. These might include the positive benefits of being part of a team, job satisfaction, working with supportive colleagues and being rewarded for high performance. They might also tell you about negative aspects of the job, such as isolation, monotony, stress, lack of support and the implications of sub-standard performance. All this information will help you to decide if the job is suitable for a person with a disability. If you can find someone with a disability who has experience of this job (or one similar to it), they will be able to give you very useful information.

### Observe the job being performed

Where possible you should observe a person actually performing all the tasks associated with a job. This will provide a good indication of the physical, sensory and intellectual attributes required for the effective performance of the job. This in turn will help you to develop a profile of the people with disabilities who would be able to perform the job to an acceptable standard.

Observation can also be used to verify information collected from supervisors, co-workers and managers.

Observation, however, does not tell you what a person **feels** about a job and how it **affects** the person doing it. Observation alone is not enough and should be supported by other approaches to collecting information.

### Do the job yourself

If possible, you should do the job yourself. Even a short period of actually performing the tasks – lifting, counting, walking, listening and so on – will help you to confirm your observations. It will also give you another perspec-

tive on your interviews with others and will give you a better understanding of the job. In these ways it will assist you in relating your analysis to the employment needs of people with disabilities.

In addition to conducting interviews, observing others doing the job and doing the job yourself, information can be obtained by other means, such as:

- questionnaires and checklists completed by employers and workers
- examination of work diaries. This can provide information on the time spent on each task within a job
- a review of critical incidents. For example, you could ask a worker questions such as, *What was the most important thing that happened in your job in the last month? What was the most dangerous? The most difficult? The most satisfying? The most disappointing?*

### **Step 4            Record information**

Once the job tasks have been identified, observed and analysed, you need to record this information in a systematic manner. This is usually done in the form of a job description and job specification. The more detailed the information collected and recorded, the better the chances of identifying a disabled person suitable for the job.

As you prepare the job description and job specification you should:

- avoid over-estimation of requirements because this is likely to exclude people with disabilities
- distinguish between requirements which are essential and those which are desirable or preferred
- provide scope for people with disabilities to develop their potential. Don't exclude them because they do not meet the exact requirements



- focus on the job in the first instance. Then look at what accommodations can be made to make it more suitable for a person with a disability
- use simple concise language. Try to avoid the use of technical terms.

### **Step 5            Analyse and interpret the collected information**

When you have finalized the job description and job specification in a way that does not exclude people with disabilities, you can use this information to decide which people with disabilities should be considered for the job. You may not always find a **perfect match**, but if you have written the job description and job specification to avoid the exclusion of people with disabilities, you are likely to identify an acceptable match.

If possible, refer two or three people for each job vacancy. It might stimulate the employer to offer a second job or a work trial to a suitable candidate. Those who are unsuccessful will gain valuable experience of the interview process.

Remember that if the enterprise has not employed people with disabilities before, it is important that you do everything possible to make the first placement a success.



## CHAPTER 8:

# PREPARING A JOB ANALYSIS CHECKLIST

Your work in job analysis will be easier if you follow a checklist. You should design the checklist to bring together all elements of a job and all the attributes the job seeker should have in order to perform the required tasks.

Your checklist can be divided into seven main parts:

- Enterprise information**
- Job title and conditions**
- Job tasks and special characteristics**
- Environment characteristics**
- Job requirements**
- Employer information**
- General comments.**

You can use the following examples to prepare your own checklist. After a trial period you will be able to modify and improve it to suit your own situation.

### Enterprise information

- **Enterprise**
  - Name
  - Address
  - Telephone number
  - Fax
  - E-mail
  - Contact person (Name, Title)
- **Number of staff**
  - Total
  - Male/female
  - Number of workers with disabilities
- **Main products/services**

### Job title and conditions

- **Job title**
- **Wages**
  - Hourly
  - Weekly
  - Monthly
- **Hours**
  - Per day
  - Per week
  - Per month
- **Full or part-time**
- **Day or evening work**
- **Weekday or weekend work**
- **Benefits**
  - None
  - Sick leave
  - Medical benefits
  - Paid leave
  - Dental benefits

Meals  
Transport assistance  
Discounts  
Other

- **Number of employees in this same position**
- **Number of employees during the same working hours**
- **Opportunities for career advancement**
  - Nil
  - Low
  - Possible
  - Probable
  - No procedures in place

### Job tasks and characteristics

- **Lifting and carrying**
  - Very light
  - Light
  - Average
  - Heavy
  - Comments
- **Concentration**
  - Breaks after less than two hours
  - Every two to three hours
  - Every three to four hours
  - After four hours or more
  - Comments
- **Work pace**
  - Slow pace
  - Steady pace
  - Sometimes fast
  - Continuous fast
  - Comments

**- Number and sequence of tasks**

- One task only
- Two to three tasks in sequence
- Four to six tasks in sequence
- Seven or more tasks in sequence
- Comments

**- Changes in daily routine**

- No task change
- Two to three task changes
- Four to six task changes
- Seven or more task changes
- Comments

**- Availability of task reinforcement**

- Frequent (hourly)
- Intermittent (daily)
- Infrequent (weekly)
- Minimal (receipt of pay)
- Comments

**- Availability of co-worker support**

- None
- Intermittent
- Frequent
- On-going
- Comments

**- Task assistance: Prompts**

- No prompts
- Intermittent
- Frequent
- On-going
- Comments

**- Task assistance: Supervision**

- Very limited
- Intermittent

Frequent

On-going

Comments

**- Visibility to customers/public**

- Customers not visible
- Occasionally visible
- Frequently visible
- Constantly visible
- Comments

**- Type of tools and equipment**

- Simple
- Complex
- Mechanical
- Electrical
- Electronic

**- Use of tools and equipment**

- Infrequent
- Very frequent
- Under supervision
- Without supervision

**Environmental characteristics**

**- Work access**

- Full access
- Reasonable access
- Limited access (modifications required)
- Comments

**- Orientation**

- Confined to a small area
- One room
- Several rooms
- Entire building
- Comments

### - **Temperature**

Normal  
Sometimes hot (or cold)  
Frequently hot (or cold)  
Almost always hot (or cold)  
Comments

### - **Noise**

Normal  
Sometimes excessive  
Frequently excessive  
Almost always excessive  
Comments

### - **Lighting**

Normal  
Sometimes poor  
Frequently poor  
Almost always poor  
Comments

### - **Dust**

Normal  
Sometimes excessive  
Frequently excessive  
Almost always excessive  
Comments

### - **Mechanical hazards**

None  
Few  
Some  
Many  
Comments

### - **Chemical hazards**

None  
Few  
Some  
Many  
Comments

### - **Housekeeping**

Poor  
Reasonable  
Good  
Excellent  
Comments

### - **Protective clothes and equipment**

Not necessary  
Necessary but not provided  
Provided but not used  
Provided and used  
Comments

## **Job Requirements**

### - **Appearance (grooming, neatness)**

Not important  
Reasonably important  
Highly important  
Absolutely essential  
Comments

### - **Verbal communication**

None required  
Unclear speech is acceptable  
Key words are needed  
Clear speech in sentences  
essential  
Comments

### - **Functional writing**

None required  
Write key words, figures and/or  
symbols  
Write sentences  
Write fluently  
Comments

## - Functional reading

- None required
- Read key words, figures and/or symbols
- Read sentences
- Read fluently
- Comments

## - Watching requirements

- None required
- Limited visual attention
- Frequent visual attention
- Constant visual attention
- Comments

## - Listening requirements

- None required
- Limited ability required
- Reasonable ability required
- High level ability required
- Comments

## - Initiative requirements

- Rarely has to take initiative
- Sometimes
- Frequently
- Almost always
- Comments

## - Social interaction

### (with other workers/customers)

- None
- Limited contact (e.g. cleaner)
- Moderate
- Frequent
- Constant (e.g. shop assistant)
- Comments

## - Calculations

- None required
- Simple counting
- Simple addition/subtraction
- Complex calculations
- Comments

## - Object discrimination (e.g. size, shape, texture)

- Not important
- Low level required
- Reasonable level required
- Highly important
- Comments

## - Ability to tell the time

- Not required
- Need to identify work breaks
- Accuracy to the hour
- Accuracy to the minute
- Comments

## - Ability to cross streets

- Not required
- Minor street, no traffic lights
- Major road, traffic lights
- Major road, no traffic lights
- Comments

## Employer information

### - Financial support required

- None required
- Desirable
- Absolutely essential
- Comments

### - Job accommodations

Negative approach  
Indifferent  
Supportive with reservations  
Very supportive  
Comments

### - Special requirements (things the individual employer regards as essential)

Punctuality  
Appearance  
Politeness  
Loyalty  
Listening and visual ability  
Other  
Comments

### - Job description and job specification

Available  
Not available  
In progress  
Comments

### - Labour turnover

Very low  
Average for industry  
High  
Very high  
Comments

### General comments

- **General willingness to employ people with disabilities.**
- **Particular issues or problems in placing people with disabilities in this enterprise.**
- **Particular benefits in placing people with disabilities in this enterprise.**