

2

JOB ANALYSIS AND DESIGN

CHAPTER OBJECTIVES

After studying this chapter, you should be able to:

Describe the uses of job analysis information for human resource managers.

Discuss the various steps in conducting job analysis and methods of job data collection.

Describe the contents of a job description and a job specification.

Discuss the various approaches to setting performance standards.

Outline the key considerations in job design.



POWERPOINT® SLIDES

Canadian Human Resource Management includes a complete set of Microsoft PowerPoint® files for each chapter. (Please contact your McGraw-Hill Ryerson representative to find out how instructors can receive these files.) In the lecture outline that follows, a reference to the relevant PowerPoint slide for this chapter is placed beside the corresponding lecture material. The slide number helps you to see your location in the slide show sequence and to skip slides that you don't want to show to the class. (To jump ahead or back to a particular slide, just type the slide number and hit the Enter or Return key.)



LECTURE OUTLINE (with PowerPoint® slides)

Job Analysis and Design
Slide 1

INTRODUCTION

Human resource specialists need to understand the actual characteristics that presently exist in each job

Job Analysis
Slide 2

- **Job analysis** is the systematic study of a job to discover its specifications and skill requirements for use in wage-setting, recruitment, training or job-simplification purposes

Job Analysis Terminology
Slide 3

- **Job** is a group of related activities and duties; one or more people may do the same job at an organization
- **Position** is a collection of tasks and responsibilities performed by an individual

HR Activities Relying on
Job Analysis
Slide 4

MAJOR HUMAN RESOURCE MANAGEMENT ACTIVITIES THAT RELY ON JOB ANALYSIS INFORMATION

1. Improve productivity

- Efforts to improve employee productivity levels necessitate careful study of jobs

2. Eliminate discrimination

- Elimination of unnecessary job requirements that can cause discrimination in employment

3. Creation of recruitment materials

- Creation of job advertisements used to generate a pool of qualified applicants

4. Person-job matching

- Matching of job applicants to job requirements

5. Planning

- Planning of future human resource requirements

6. Training

- Determination of employee orientation and training needs

7. Compensation

- Fair and equitable compensation of employees

8. Performance standards

- Identification of realistic and challenging performance standards

9. Re-design jobs

- Re-design of jobs to improve performance, employee morale, or quality of work life

10. Performance appraisal

- Fair and accurate appraisal of employee performance

Steps in Job Analysis
Slide 5

Phase 1: Preparation
Slide 6

STEPS IN JOB ANALYSIS

PHASE 1: PREPARATION FOR JOB ANALYSIS

1. Familiarization with the Organization and Its Jobs

- Before studying jobs it is important to have an awareness of an organization's objectives, strategies, structure, inputs, and desired outcomes
 - Unionized organizations require that job analysis steps meet the provisions of the collective agreement
 - May also study industry and government reports about the jobs to be analyzed

2. Determine uses of Job Analysis Information

- Job analysis plays a critical role for many HR functions
 - Important to determine specific objectives, e.g., selection, training, designing performance appraisal and compensation systems

3. Identify Jobs to be Analyzed

- Due to resource and time constraints need to determine jobs that are targets for job analysis, e.g., jobs that are critical to the success of an organization, jobs that are difficult to learn

Phase 2: Collection of
Information
Slide 7

PHASE 2: COLLECTION OF JOB ANALYSIS INFORMATION

4. Determine Sources of Job data

- **Human sources**
 - Job incumbents, supervisors, job experts, work colleagues, subordinates, customers
- **Non-human sources**
 - Existing job descriptions and specifications, equipment design blueprints, equipment maintenance manuals and records, training and safety manuals, organization charts and other company records, National Occupational Classification, videos, professional journals, Internet

5. Data Collection Instrument Design

- **Job analysis schedules**
 - Checklists that seek to collect information about jobs uniformly
 - Questionnaires are used to uncover the duties, responsibilities, human characteristics and working conditions, and performance standards of the investigated jobs
 - Various standardized forms are available for job analysis including Functional Job Analysis, O*NET, Fleishman Job Analysis System, Position Analysis Questionnaire, and Critical Incident Method, with FJA and the PAQ as particularly popular.

6. Choice of Data Collection Method

There is no best way to collect job analysis information. Trade-offs

between time, cost and accuracy are associated with each method

- **Interviews**
 - Slow and expensive, however, it allows the interviewer to explain unclear questions and probe into uncertain answers
- **Focus Groups**
 - Allow the ideas of 5 to 7 people knowledge about the job to build off of each other during a 1 to 2 hour session
- **Mailed questionnaires**
 - Allows many jobs to be studied at once, at little cost, however there is less accuracy due to incomplete responses, misunderstood questions and unreturned questionnaires
 - Electronic surveys are increasingly used
- **Employee log**
 - Can be quite accurate, however they are not a popular technique as they are time-consuming, and may be viewed as a nuisance resulting in resistance and declining accuracy over time
- **Observation**
 - Slow, costly and potentially less accurate, however, may be necessary when language barriers exist or to confirm results of other methods
- **Combinations**
 - Often two or more techniques are used concurrently to ensure high accuracy at minimum cost

PHASE 3: USE OF JOB ANALYSIS INFORMATION

The information collected about various jobs is put into usable forms including:

- job descriptions
- job specifications
- job performance standards
- competency models

Phase 3: Use of
Information
Slide 8

JOB DESCRIPTION

A recognized list of functions, tasks, accountabilities, working conditions, and competencies for a particular occupation or job

- **Job identity**
 - Includes job title, job location, job code, job grade, and status
- **Job summary and duties**
 - Summary is a narrative that concisely summarizes the job
 - Duties and job responsibilities are clearly stated
- **Working conditions**
 - Description of the physical environment, hours of work, safety and health hazards, travel requirements etc.
- **Approvals**
 - Reviewed for accuracy by selected jobholders and supervisors

Job Description
Slide 9

JOB DESCRIPTIONS VS. SPECIFICATIONS

- The difference between a job description and a job specification is one of perspective.
 - **Job description** defines what the jobs does--profile of the job
 - **Job specification** describes what the job demands of employees who do it and the human factors required. It is a profile of the human characteristics needed by the job. These requirements include experience, training, education, physical demands, and mental demands

Job Specifications
Slide 10

JOB SPECIFICATIONS

A written statement that explains what a job demands of jobholders and the human skills and factors required

- Should include specific tools, actions, experiences, education and training
 - Includes clear behaviour statements, e.g., “lifts 40-kg bags”

Job Performance
Standards
Slide 11

JOB PERFORMANCE STANDARDS

The work performance expected from an employee on a particular job

- Standards become objectives or targets for employee efforts
- Criteria against which job success is measured
- Sources of standards include:
 - **Job analysis information**
- Alternative sources:
 - **Work measurement**--methods for evaluating what a job’s performance standards should be, i.e., the normal performance of average workers. May involve use of historical data, time studies and/or work sampling
 - **Participative goal-setting**--process of goal setting where managers develop performance standards through discussion with subordinates

Competency Models
Slide 12

COMPETENCY MODELS

- Competency-based job descriptions and specifications have become increasingly popular
 - **Competency** is a knowledge, skill, ability, or behaviour required to be successful on the job
 - competencies are broader in scope than KSAOs e.g., problem solving, communication, leadership
 - a **competency framework** describes a group of competencies required in a particular job, most jobs have between 10 and 15
 - key differences include: competencies may be job spanning, they may vary in importance across job roles (as seen in **competency matrices**), and they contribute to the success of the organization

Job Design: Key
Considerations
Slide 13

in addition to success on the job

Organizational
Considerations
Slide 14

JOB DESIGN

Key Considerations in Job Design:

- **Organizational Considerations**
 - **Efficiency:** Stress efficiency in effort, time, labour costs, training, and employee learning time. Includes principles of scientific management and industrial engineering
 - **Work Flow:** Sequence of and balance between jobs in an organization
- **Ergonomic Considerations**
 - Focuses on how human beings physically interface with their work.
 - Multi-disciplinary using principles from biology (anatomy and physiology), the behavioural sciences (psychology and sociology), and physics and engineering
 - Focuses on fitting the task to the worker in many instances rather than simply forcing employees to adapt to the task
 - Can lead to significant improvements in efficiency and productivity (Saturn) and are also important to maintain safety at the workplace (aging workforce issues)

Ergonomic Considerations
Slide 15

Employee Considerations
Slide 16

Employee Considerations

- **Autonomy:** Independence, having control over one's work and one's response to the work environment
- **Variety:** The worker has the opportunity to use different skills and abilities, or perform different activities
- **Task Identity:** The feeling of responsibility and pride that results from doing an entire piece of work, not just a small part of it
- **Feedback:** Information that helps employees evaluate the success or failure of an action or system
- **Task Significance:** Knowing that the work one does is important to others in the organization or to others

Optimal Job Specialization
Slide 17

HOW MUCH JOB SPECIALIZATION IS OPTIMAL?

As jobs become more specialized, productivity climbs until behavioural elements such as boredom offset the advantages of further specialization

Specialization Advantages

- Specialization increases productivity to a certain point
- Specialized jobs take less time to learn, frustration is decreased and feedback is increased
- Provides jobs for workers with limited skills

Specialization Disadvantages

- Employee satisfaction drops and boredom causes errors or resignations to occur

Increasing Quality of Work
Life
Slide 18

- Routine jobs hold less appealing to educated or affluent workers

INCREASING QUALITY OF WORK LIFE

- **Job Rotation**
 - Moving employees from one job to another to provide more variety and to learn new skills
- **Job Enlargement**
 - Expanding the number of related tasks in a job to increase the job cycle and draw on a wider range of employee skills
- **Job Enrichment**
 - Adding more responsibilities and autonomy to a job, giving the worker greater power to plan, do, and evaluate job performance
- **Employee Involvement and Work Teams**
 - Work is increasingly being organized around teams and processes
 - Self-managed and autonomous work teams are increasingly used

Environmental
Considerations
Slide 19

ENVIRONMENTAL CONSIDERATIONS

- **Workforce Availability**
 - Efficiency considerations must be balanced against the abilities and availability of the people who perform the work
- **Social Expectations**
 - The acceptability of a job's design is influenced by the expectations of society and workers
- **Work Practices**
 - Set ways of performing work arrived at from tradition or from the collective wishes of employees

Meeting Job Analysis
Challenges
Slide 20

JOB ANALYSIS IN TOMORROW'S "JOBLESS" WORLD

Global competition, changing technology and worker profiles and rapid increases in knowledge requirements for many jobs have made accurate and timely job descriptions difficult.

- To meet these challenges one possibility is a future-oriented style
 - When describing job activities and specifications i.e. focus on both present and future requirements
- Job analysis will continue to be relevant for legal compliance purposes



ANSWERS TO REVIEW AND DISCUSSION QUESTIONS

1. Suppose you work for an organization that does not collect job analysis. What arguments will you make to introduce it? What methods of collecting job analysis information will you recommend and why?

Job analysis information is needed to help design jobs necessary for an organization to be productive. The job analysis information is used to write a job description and job specification, and is the basis for HR strategy and functioning. An improvement in the task definition will result in greater productivity and profits. Figure 2-1, p. 52, gives the major HR activities that rely on job analysis information. The choice of job analysis methods depends on the specific HR goals (see Figure 2-5, p.60). For example, interviews and questionnaires are best suited for designing a compensation system, while interviews and employee logs are best suited for employee counselling.

2. Define job descriptions and job specifications, illustrating how the two are related, yet different.

Job descriptions indicate what the duties, activities, and responsibilities of jobs are. Job specifications outline the human characteristics needed to perform the job successfully. Both rely on the Job Analysis for their information.

3. Why are clear job specifications important? What are the costs of imprecise specifications?

Well-developed job specifications inform HR planners, recruiters, and interviewers what to look for. Lacking clear job specifications, planners, recruiters, and interviewers have to rely on guess work, resulting in poor employee–job match.

4. How can performance standards be set for production jobs when job analysis information is insufficient? How would you set standards for a research scientist if you were chief scientist?

Performance standards on production jobs can be set in a variety of ways. Historical data can be used to determine what actual performance has been and that figure can serve as a standard, particularly in stable work environments with little technological change. Time study can be used by studying the time it takes to do individual tasks. These tasks are timed repeatedly using the standard method to arrive at the rated job

time. To this figure allowances are added for production delays, breaks, and other nonproductive time to determine the standard time for the job. With this time figure known, analysts can compute the standard output.

In setting the standards for a research scientist, the chief scientist probably would want to use some form of participative goal setting. Under this approach the scientists discuss the job and the subordinate suggests likely standards. After review and discussion with the chief scientist, these standards are modified to the point that the standards are realistic and accepted.

5. What factors need to be considered when redesigning jobs? Of these, which is (are) most important?

The factors to consider are efficiency, workflow, ergonomic considerations, employee considerations, autonomy, variety, task identity, feedback, and task significance. While efficiency is important, the needs of employees as well as environmental realities also affect job redesign efforts.



ANSWERS TO CRITICAL THINKING QUESTIONS

1. Suppose you were assigned to write the job description in a shirt factory in British Columbia employing mostly Chinese immigrants who spoke little English. What methods would you use to collect job analysis data?

Perhaps the best approach is by direct observation. From observations, the analyst can complete the job analysis schedule and write up a job description. The job description then can be checked with the supervisor to ensure that no important aspects of the jobs are overlooked.

2. You work in the human resource department of a large brewery in Atlantic Canada. You are in the process of writing job descriptions for all managerial and supervisory staff. One manager who is in the production division of the brewery refuses to complete a job analysis questionnaire.

(a) What reasons would you use to persuade that individual to complete it?

The best approach is to explain how the data is to be used. Most managers want the human resource department to do the best job it can during recruiting, compensating, training, and other human resource activities. The analysts might be able to convince the manager that a lack of completed job descriptions will reduce the level of service the department can provide this and other managers.

(b) If, after your best efforts at persuasion failed, you still wanted job analysis information on the manager's job, how would you get it?

Direct observation might be a good start. It can identify many of the activities and the proportion of the manager's time each took. Discussions or completed questionnaires by other managers who did similar work can provide further insight. Finally, the manager's superior can be asked to complete a questionnaire about the subordinate manager's job.

3. Suppose you have been assigned to design the job of ticket clerk for a regional airline in Ontario. How would you handle the following trade-offs?

(a) Would you recommend highly specialized job designs to minimize training or very broad jobs with all clerks cross-trained to handle multiple tasks? Why?

(b) Would you change your answer if you knew that employees tended to quit the job of ticket clerk within the first six months? Why or why not?

Since airline ticket clerks often face bursts of activity just before a plane arrives followed by periods of relative calm, it would seem advisable that each clerk be fully cross-trained to handle the peak workload.

However, if employees who were fully cross-trained tended to quit in a short time, the airline might be better off training people in only narrow specialties. The more specialized jobs would require less training and take less time to master at a satisfactory level of performance. Although this may create some congestion at the time of check-in, the airline's loss of people would not be as costly and replacements could be trained quickly to fill in highly specialized jobs that become vacant.

4. Assume you are told to evaluate a group of jobs in a boat-building business. After studying each job for a considerable amount of time, you identify the following activities associated with each job. What job-redesign techniques would you recommend for these jobs, if any?

(a) Sailmaker. Cuts and sews material with very little variety in the type of work from day to day. Job is highly skilled and takes years to learn.

(b) Sander. Sands rough wood and fibreglass edges almost continuously. Little skill is required in this job.

(c) Sales representative. Talks to customers, answers phone inquiries, suggests customized additions to special-order boats.

(d) Boat preparer. Cleans up completed boats, waxes fittings, and generally makes the boat ready for customer delivery. Few skills are required for this job.

The sailmaker's job is probably viewed as a craft. To make the job more specialized might deprive the sailmaker of variety in types of sails or reduce the amount of task identity.

The sander has a boring job that is physically demanding. Since it is easy to learn, rotation with the boat preparer's job may add variety, and reduce boredom and fatigue. Job rotation and possibly some job enrichment (e.g., checking for quality) may improve it.

Sales representatives normally have a job with a high degree of variety, task identity, autonomy, and feedback. The job probably could not be specialized, and there is probably little need to expand the job through the addition of other behavioural principles.

The boat preparer's job probably could be expanded through job rotation (perhaps with the sander). Also, this employee could be made a "troubleshooter" and do the final quality control check.

5. What are the key performance dimensions of the instructor who is teaching this course? How will you go about setting performance standards for the individual? Establish performance standards and associated time-bound, specific objectives in any of two areas of your choice.

The Figure "Competency Model for a University Instructor" below provides guidelines for establishing suitable performance dimensions. Students can download this Figure from the book's Online Learning Centre

<http://www.mcgrawhillconnect.ca>

For developing performance standards, the dean of faculty may want to use some form of participative goal setting.

Competency Model for a University Instructor

The key clusters for a university instructor include course design, use of appropriate teaching methods and aids, choice of pedagogy, evaluation of learning, knowledge of material, student counselling, and maintenance of learning climate. Competencies in each of these clusters will have to be defined clearly and different levels of proficiency indicated to assess the instructor's performance. The above clusters reflect only the "teaching" dimension of an instructor's job. Other performance dimensions such as research, administrative activities, and community service will have to be detailed in a similar manner. Below is a sample cluster for course design.

Cluster: Course Design

| | |
|--|---|
| Course Objectives Ability to provide clear course objectives and expectations to the students in simple and easy to understand language. | Proficiency Rating 0 Is unable to perform basic task. 1 Can adapt an existing course outline, making slight changes. 2 Can make major adaptations to an existing course outline, including new objectives. 3 Can make up own course outline without any help from outside or without referring to any existing outlines. 4 Is considered an expert in this area; can advise junior instructors on how to develop outlines that clearly communicate course objectives to the students. |
| Responsiveness to Students Ability to incorporate student needs and desires into the course design. | Proficiency Rating 0 Does not include any student needs or desires when designing the course; uses the same outline irrespective of the audience (e.g., inexperienced students, mature students). 1 Can make minimal adaptations to the course to meet student needs. 2 Can survey student needs and incorporate some of their needs or desires if consistent with own objectives. 3 Can survey students and modify own course in light of suggestions emerging from them. 4 Considered an expert in designing student-responsive courses and can advise and train others. |
| Course Structure Ability to provide detailed guidelines for various course requirements, including datelines for these. | Proficiency Rating 0 Does not provide any dateline or guidelines for various course requirements; no well-thought-out course sequencing. 1 Can design outlines that provide datelines for key assignments and some guidance for major course requirements. The course is fairly well sequenced. 2 Can design outlines that provide clear guidelines for all course requirements. The course material is well sequenced. 3 Can design course outlines clearly explaining requirements and course sequencing; communicates these to the students and ensures that there are no misunderstandings. 4 Considered an expert instructor who can design comprehensive and clear course outlines with all necessary guidelines; can train or coach others in this area. |



ETHICS QUESTION

Comments to Instructors

There is no right or wrong answer to this question. It is for class discussion purposes.



WEB RESEARCH

Comments to Instructors

These exercises have been designed for students to demonstrate their computer and Internet skills to research the required information. Answers will vary



INCIDENT 2.1: HILLARY HOME APPLIANCES CORPORATION

Incident Comments

This incident illustrates the necessity of performing a job analysis to help redesign the jobs to improve productivity. HR plays a key role in job analysis and job design to improve productivity.

1. What prompted the HR manager to make the statement?

The HR manager realized that productivity was suffering. To improve productivity, there needs to be a job analysis to redesign jobs. By redesigning the jobs, both performance and morale can be improved.

2. If you were the HR manager, what arguments will you provide to convince the two supervisors of the desirability of job analysis and employee involvement teams?

Job analysis provides the necessary information to the managers to plan for future HR requirements and help determine training needs. Greater employee involvement will help motivate employees to work on their own. It can reduce monotony while create a greater sense of task significance to the team members.



EXERCISE 2-1: A GOOD WORK ENVIRONMENT

Comments to Instructor

Most students will have had some work experience and will be able to list some work-related enjoyable situations. Answers will vary.



CASE STUDY: MAPLE LEAF SHOES LTD. - AN EXERCISE IN JOB ANALYSIS

Answers to Discussion Questions

1. What is your evaluation of Lance's approach to the project?

The major positive point is that Lance made an attempt to interview all the senior managers of the organization (although he did not succeed in this). Some of the questions used by Lance also are proactive in tone (e.g., “What are the major challenges facing Maple Leaf Shoes in the next five years?”). He also seems to be working under the assumption that for a human resource department to be effective, it should meet the expectations of its clients (in this instance, other managers, decision makers, and staff). The use of personal interviews should help to gather “rich” information (as opposed to merely large “chunks” of information). This is because other nonverbal cues and symbolic gestures can give additional insights into the respondent's frame of mind.

However, Lance's approach has more weaknesses than strengths. The student may point out a number of theoretical and methodological flaws in Lance's approach. The following are given as sample items:

- The question checklist used by Lance is too short and does not give much insight into the human resource function.
- The free-response format used by Lance for all questions makes the responses incomparable with each other. Thus, forming any overall conclusion on any of the questions may be hard.
- Several job analysis steps listed in Figure 2-2, p. 50, have not been followed.
- Only three out of five managers responded; the interview with Clark seems useless given the number of interruptions and his nonfamiliarity with the day-to-day challenges facing the human resource manager and the staff.
- Lance didn't meet with subordinates (a major “customer” of human resource management), unions, and the large number of people who work outside head office.
- Apparently Lance has no plan to look at the records of the company to gain insights into the past practices.

- At the end of the three interviews, Lance still does not have any clear idea of job duties, performance standards, criteria for evaluating the effectiveness of the human resource department function in this organization, and physical and other special attributes needed for the human resource manager.

At this point, the instructor may want to ask students what conclusions they can form based on the three interviews. While there may not be complete agreement among the members of the class, the following may emerge as some tentative conclusions:

- The human resource department (HRD) at Maple Leaf shoes has not contributed much to job design, organizational planning and change, or employee planning.
- Controlling the cost of production is a high priority in this firm if it is to prosper (and even to survive in the long run).
- Unions in the organization are getting increasingly militant, and dealing with them is an urgent priority for the new human resource manager.
- Several members of the company have a poor, negative, or low opinion of the human resource department; until now the human resource department in the firm has played a low-key, record-keeping role (poor cousin image?).
- There is a need to establish more systems and procedures covering various aspects of staff management.
- Human resource department staff strength at Maple Leaf, in comparison to other similar-sized organizations, seems low.
- Those pieces of information are important; however, these by themselves are inadequate for the purpose of designing job descriptions and specifications and identifying performance standards.

2. What would you do if you were in Lance's position right now?

Interviews are useful; however, a greater number of them need to be done, especially with all categories of employees, union officials, customers, colleagues, and subordinates of the human resource manager.

Staff in other regions should also be contacted either through mail questionnaires or telephone interviews. The latter might be more expensive although it will increase the response rate. A combination of the two (that is, a mail questionnaire followed by a telephone reminder or follow-up) may be a good approach as it can protect the anonymity of the respondent and lead to more frank responses.

A longer and more exhaustive interview schedule should be designed focusing on, among other things:

- What is the purpose of the job?
- What is being done currently?
- How work is being done currently?
- What are the primary duties?
- What are the other duties?
- What constitutes successful performance of duties?
- What constitutes acceptable performance of duties?
- How much training is needed for these duties?
- What are the human resource manager's responsibilities?
- What physical and human attributes are critical and desirable for the position (e.g., initiative, attention, judgment)?
- Is experience important for the job?
- Can training be substituted for experience?
- What are some unusual psychological and other demands on the human resource manager?

Past human resource department records should be looked at to gauge the effectiveness and gaps in performance of the human resource department; these could give some insights into the responsibilities of the position. For example, the union may be able to provide information on the number, type, and seriousness of employee grievances in the past; details of safety violations may also be available from the company itself or by contacting the local government agencies. Employee turnover, absenteeism, and productivity data should give some indications to the researcher about the magnitude of the challenge awaiting the new human resource manager.

Publications such as *NOC*, human resource magazines and reports, the job descriptions of human resource management in other similar organizations, etc., may also give additional insights into what is being done elsewhere and what *should* be added to the responsibilities of the human resource manager at Maple Leaf Shoes (subject to organizational goals and resource constraints, of course).

While interviewing managers and staff, ask for past critical incidents reflecting effective or ineffective human resource management. This could help in attempting to identify job specification and performance standards.

It may be useful to introduce the notion of job competencies to Maple Leaf Shoes, which would require the analysis of characteristics of high performers.



CASE STUDY: CANADIAN PACIFIC AND INTERNATIONAL BANK - *REDEFINING JOBS FOR FUTURE*

Answers to Discussion Questions

1. Assume that you are invited as a consultant by CPIB. What procedures would you introduce that would ensure that the restudied job information was correct?

A variety of job analyses can be used to verify that the changed job descriptions are accurate. Through use of electronic questionnaires, the job incumbents can be surveyed periodically to determine what aspects of the existing job description is inaccurate and why there are different views of their jobs. Differences may be due to differing expectations between CPIB and former CCTC employees. To check whether the job information is correct, the jobs could be studied by job experts through observations and interviews. Work colleagues and customers could also be interviewed individually or in groups to determine if the information is accurate.

2. Given the ability of most managers to “communicate” directly with the computer, can CPIB use this to its advantage in collecting job analysis information?

CPIB can computerize the collection of the job analysis data. Both existing job descriptions and specifications can be posted on the Intranet within CPIB. As well, a

job analysis questionnaire, like Figure 2-4, p. 56-58, can be completed through the computer by the job incumbents. This would also make it easier to analyze and compare the survey results, and can be more readily adopted to usable forms such as job descriptions and job specifications.

3. What additional skills and competencies would you focus on while planning a training program for CCTC staff? How should CPIB establish performance and skill standards for CCTC staff?

Traditional job specifications focus on competencies associated with high job performance. Competencies relevant to the CCTC staff also would include problem solving, analytical thinking, and leadership. Broader conceptualizations of competencies include beliefs and values. For the CCTC staff, an important competency is the degree to which their values are compatible with that of CPIB. For the CCTC staff, the performance standards can be established through work measurement and participative goal setting. Based on their job description, work measurement can be based on historical data, time study, and/or work sampling. Where the tasks do not have obvious standards, participative goal setting can be used. Employees at CCTC can gain insight on CPIB's expectations and rewards can be tied to the meeting of these performance goals.