



business value

advancement



employees



in business terms

# Business Value Assessment for **Workforce Development Organizations**

HANDBOOK

**Business Value Assessment for  
Workforce Development Organizations**

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A Product of the  
**The Aspen Institute**  
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Project

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# ACKNOWLEDGMENTS

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Dear Reader:

After two years of being designed, tested, reviewed and reworked, this Handbook and the tools for demonstrating the business value of workforce programs are ready to be shared with workforce development practitioners.

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It is our great hope that this work will be useful to many workforce development organizations as they continue their work that is so important in today's economy and society. We thank you all for your dedication to this field.

Sincerely,

Maureen Conway

Director, Workforce Strategies Initiative

# INTRODUCTION

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This Handbook provides general guidance and instructions for using a set of tools to measure the value that a workforce development organization delivers to its business clients. The Handbook and tools are the product of two years of collaborative effort by a group of employer and workforce development leaders, convened by the Aspen Institute's Workforce Strategies Initiative. Early in the developmental process, the group concurred on a framework of questions that covered the primary ways that business seeks value from workforce services. Their question framework is:

Do workforce services improve the skills of the workforce?

- Do workforce services help retain and expand a qualified workforce?
- Do they contribute to the quality of the business product or service?
- What are the costs to businesses participating in the programs?
- What turnover costs do workforce services help businesses save through retention and improved workforce?

Working group participants agreed that these questions covered the basis for the types of value they seek from a workforce program. Then, the group set to trying to figure out how these sources of value could be reasonably and fairly estimated, without placing undue burden on the employer or workforce organization. This stage of the developmental process took a little longer, but in the end, there were a variety of things that the workforce organizations and their employer clients were able to capture using reasonably simple measurement techniques. A sample of these is highlighted in the box below. This Handbook is designed to introduce some of the simple tools and measurement approaches that were used in these trial-run Business Value Assessments.

## Things we learned in HEALTHCARE

- Retention: A full 79.4 percent of scholarship-sponsored Radiologic Technologists (RTs) hired in 2003 and 100 percent of those hired in 2004 were employed a year after their start dates. In comparison, 56 percent of RTs hired in 2003 and 84 percent of those hired in 2004 from other sources were employed one year after their start dates. The scholarship RTs were also rated comparably on performance.
- Quality: In-home patient clients from a customer survey were more satisfied with aides trained by the workforce program than aides of other providers.
- Job Performance: Between 60 and 90 percent of managers of entry-level employees from a disadvantaged worker program rated the employees about as likely as or more likely than traditional hires to demonstrate selected soft skills; having these employees in the workforce resulted in overall time and cost savings.

### The kinds of things we learned in MANUFACTURING

- Retention: Basic manufacturing skills-training and placement services were linked to retention almost twice the company's rate; significant turnover costs were saved.
- Job Performance and Satisfaction: A vocational English as a Second Language (ESL) training evaluated by supervisors led to improved employee soft skills and communication, and to supervisors' rating their perceptions of the job and the overall work environment as improved.
- Job Performance and Productivity: A series of lean manufacturing training activities resulted in improved communication, teamwork, productivity and related costs savings.
- Efficiency: Math skills training was linked to improved scrap, on-time delivery, and efficiency rates.
- Soft Skills and Retention: Employees in career preparation courses were more likely to show flexibility, problem-solving, and confidence, and to remain employed longer than employees who did not attend training; significant turnover costs were saved.

## Background

Today's workforce programs recognize that they have two essential client groups—the *workers* that they connect to jobs and advancement pathways and the *businesses* that employ these workers. Many workforce practitioners can track and demonstrate the value of their services to workers. Programs measure such results as the percentage of workers placed in jobs, workers' wages at placement, short-term employment retention, and wage gains and promotions over time. These indicators measure outcomes that are important to the mission of a workforce program.

However, workers do not succeed when businesses do not succeed. Furthermore, businesses are at a competitive disadvantage if their workers are not capable. It is therefore key to understand how well workforce services meet business needs. Yet, typical workforce programs' ability to track and demonstrate the value of their services to business, in business terms, is very limited. In an attempt to fill this gap, the Aspen Institute's Workforce Strategies Initiative, in collaboration with an experienced group of workforce development professionals and their business clients (referred to as the Learning Group), has developed what we hope is a practical approach for programs to begin measuring and learning about the ways in which they provide value to their other important client—business.

## Scope of the Business Value Assessment Framework

This Handbook provides guidelines, tips and tools for your workforce development program to conduct a basic type of evaluation, which we call a **business value assessment**. A business value assessment has the following essential characteristics:

- It is designed to evaluate one discretely-defined workforce development program, process or set of services.
- The expected results of the workforce development event are evaluated in terms of business value.
- Your business client plays a critical role in designing and implementing the assessment.
- The focus is on using one or more assessment methods that balance practicality, feasibility and relevance with the need for an appropriate level of evaluation rigor.

This Handbook provides general guidance in conducting an assessment and specific guidance in using the tools developed by the Learning Group. The Handbook is organized as follows:

- **Part 1 – Planning Your Business Value Assessment** outlines key questions to consider in planning an assessment and includes a planning worksheet. Working through this section

should help you determine whether you would like to use the Excel Tool, a questionnaire approach, or some combination of assessment methods. It will also help you think critically about which assessment opportunities are more or less feasible. This section contains a planning worksheet that summarizes the key issues to consider.

- **Part 2 – Using the Excel Tool** provides an introduction to the Excel Tool and a more thorough discussion of what can be measured with the Tool. **The Excel Tool is an automated Excel file template** for gathering workforce and business data and presenting employee performance and monetary results for a selected set of business value criterion. There are item-by-item instructions for using the Excel Tool and suggestions for how the Tool can be used and customized for a variety of contexts.
- **Part 3 – Using Questionnaires** provides an outline of basic questionnaire methods and some specific examples for evaluating employee performance and the business results of your workforce programs and services. This section contains a planning worksheet to help you think through the Questionnaire design and management process.

## Why Conduct a Business Value Assessment?

The Excel Tool and questionnaire guide in this toolkit provide templates that your workforce-business partnership may customize as the basis for some or all of your specific business value assessment. The business value assessment framework and toolkit can be used for a number of purposes, such as:

1. **Develop or reinforce workforce-business partnerships.** A fundamental premise of the business value assessment framework is that your workforce program uses a partnership approach in designing and offering workforce development services for targeted businesses. We intend the guidelines and tips in this Handbook to be useful in building and reinforcing these types of workforce-business partnerships by guiding your workforce program to ask about and understand your business clients' interests and values. The Excel Tool and the questionnaire examples can be copied or shared with business clients, so that your workforce program can tangibly demonstrate the types of information and results that can be pursued.
2. **Marketing.** With the approval of “champion” business partners, your workforce program can use workforce results measured in their contexts to demonstrate your business value to other potential business partners or for other promotional purposes.
3. **Program development.** Your workforce program can gather information about the performance of your program participants. This information can be used at one or several points in time to monitor program performance and to modify the workforce program to meet the needs of both program clients and business employers.
4. **Staff development.** In order to educate frontline workforce staff on how the program client and business-employer needs intersect, your staff can participate in gathering information about the performance of program participants relative to: the costs of your program services, your business clients' expected employee performance, and the costs of your business clients' alternative sources for workforce services.

5. **Program design.** Designing an assessment involves typical program design activities such as defining expected results, strategies, and methods to achieve these results and what successful results will look like. Using the guidelines in the Handbook and its accompanying tools to design an assessment augments a sound program design framework.
6. **Establishing a basis for charging fees.** Determining the value that your business clients derive from your workforce services can be an important element of designing and implementing fees for services and diversifying the financing of your programs.

Notwithstanding the variety of potential uses for this toolkit's components, every assessment should be designed and conducted with at least one specific purpose in mind. Identifying the primary and secondary purposes for conducting your business value assessment is a critical first step in your assessment planning.

## Who Should Participate in a Business Value Assessment?

This business value assessment framework is designed for workforce practitioners and their business clients who want to assess the value of workforce development in business terms. This manual is written primarily for the workforce practitioner, on the assumption that this person will initiate and manage the assessment process.

**Workforce practitioners** are the professionals who provide workforce training and career advancement services to job seekers and employed workers. Workforce practitioners may hold a range of positions, such as program directors, policy directors, client services staff, business services representatives, instructors, curriculum developers, evaluation staff, or resource development staff, among others.

Workforce practitioners may represent community-based (non-profit) organizations, community colleges, vocational or technical schools, staffing agencies, public workforce system staff, Workforce Investment Board directors, or labor unions, among others.

**Business clients** are local companies or organizations, which employ the job seekers or workers you serve. Business clients may be business executives, human resources professionals, training managers, operations managers, or quality assurance managers, among others.

Business clients' fundamental relationship to you, the workforce practitioner, is as employers of job seekers or workers. Therefore, they represent any company, firm or institution that provides jobs for the local labor market.

Business clients play a key role in the assessment process, described more fully in the sections that follow. Workforce organizations with weak connections to their local employers may find that these relationships need to be strengthened before an assessment can take place.

## Limitations

**This framework may not serve all industries equally well.** The ideas, guidelines and tools in this toolkit arise from the experience of organizations working in the healthcare and manufacturing sectors. We hope that their experience can be applied to other industries, however, and that the tips

and information here can guide knowledgeable workforce leaders in industries other than healthcare and manufacturing in conducting a business value assessment relevant for their situation.

**This Handbook is not designed to train you in evaluation methodology.** Rather, we present robust, common-sense assessment guidelines for a specific topic – how to assess the business value of workforce services. We believe that knowledgeable results-oriented workforce practitioners will be able to understand and implement a solid, basic business value assessment to fit their specific situation using these generic guidelines. **Furthermore, the toolkit is not designed to be an exhaustive or academic evaluation resource.** This is a practical guide to designing assessments. We do not present in-depth explanations of complex topics or methods that are intended to produce an exhaustive or rigorous product.

## You Can Help Improve and Expand This Toolkit

To supplement this toolkit, we have developed an On-line Resource Center. This area of our Web page ([www.aspenwsi.org/BVAresources](http://www.aspenwsi.org/BVAresources)) will be home to case examples of organizations that have conducted Business Value Assessments, sample questionnaires, and additional tips and guidance on different questionnaire approaches, new ideas about how to modify or adapt the tools to specific situations, and other information to support organizations conducting Business Value Assessments. You can help us build this resource by sharing your experience with us. Please send information about Business Value Assessments you conduct, including items such as what specific items you tried to measure, what you were able to learn, and any “lessons learned” or tips you might share with others trying to conduct a similar assessment.

In addition, we intend to continue to gather feedback over the coming year about the toolkit, and develop a revised version based on continued input. Please also share any feedback you may have about this Handbook and the Excel Tool and how we can improve them. Contact us with questions and suggestions using our on-line feedback form at [www.aspenwsi.org/BVEmail.asp](http://www.aspenwsi.org/BVEmail.asp)

Thank you!

# PART 1: PLANNING YOUR BUSINESS VALUE ASSESSMENT

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This section provides discussion and examples that further illuminate and exemplify the following primary lessons regarding planning a business value assessment:

- Define the *business* objective that the workforce service is designed to achieve.
- Determine what data would indicate that the *business* objective is being achieved.
- Determine whether the data are currently available, who will collect them, and by what method.
- Consider how the data will be analyzed – what range of results would be considered “success?” What is the benchmark that the results of the workforce service will be compared against?
- Note any major changes in the company operating environment and how these will influence the observed results.
- Consider what level of resources will need to be committed to the assessment process, and whether this level is reasonable given the scope of the workforce service.
- If possible, plan the assessment before service delivery begins.

## Define Your Workforce Program and Business Value Assessment Approach

You should evaluate one workforce “program” at a time (e.g., training course for incumbent workers; pre-employment training for individuals hired by an individual company. If you are considering evaluating more than one of your workforce programs, even if it is delivered to an individual company, you should design a separate assessment for each program and its corresponding group of employees.

### **Special Case: Assessment of one program serving multiple businesses.**

You may want to assess your “overall” results of one particular workforce program or set of services, to which multiple businesses subscribe. You may want to get an idea of the business value results of the program overall (e.g., the total retention cost savings for all the employers combined), and/or you may want to provide a report to each business, with only the results of your services to their specific company.

We caution you to carefully consider whether you can, and should, design one generic assessment design for multiple business clients. Simply put, even in a common industry or occupation, each business or company may have different and specific work settings, procedures or intervening events, which may affect your generic assessment design and results. Similarly, employers may have varying levels of interest in different business outcomes. For example, one may be interested in

improving service quality, while another is looking to reduce turnover costs. Since a good deal of the data collection burden will fall on the employer, it is imperative that each participating employer is interested in the question the assessment intends to address.

## Define the Business Objective and Indicators of Achieving that Objective

If it is possible, you should plan your business value assessment in the early stages of your workforce program. The following considerations may be helpful as you review your program objectives to assess whether or not they contribute business value to your business client:

What is the **business problem** that your program or services is designed to alleviate? How does this problem affect your business client's business costs or business success?

What is the **program objective** in terms of the individuals you serve? What results do you expect to see from the workers who participate in the program? What do you expect this workforce program to help these workers do, and how well, and how will it be noticeable on-the-job?

What are the estimated **specific results or changes** you expect as a result of this workforce program? How will this change the current situation your business partner is facing? In what timeframe do you expect to see these changes or results?

### Make sure your expected results relate to the program objectives

This guideline may seem obvious, but it is noteworthy enough that we suggest you stop at various points during the planning process to review your business value assessment plan and the tools you plan to use, and confirm:

We are proposing that we will see \_\_\_\_\_ as a result of the workforce services. Can we really expect this? Was our workforce program designed to achieve this specific result? Can we really "link" this result to our workforce services?

For example:

Can you expect a "Workplace Communications" course to affect productivity? Can you expect to see a noticeable result on company or unit productivity if only a small group of workers participate? Can the data collection methods available to you pick up a difference in productivity among participants in the course and relate that to company performance? Are there other, more straightforward indicators that the company might find of interest?

## Involve Your Business Client in the Planning

The business value assessment framework is designed for workforce programs with active relationships with their business client(s). **While the workforce provider will usually play the coordinating role** in the design and implementation of the business value assessment, **your business client must be involved.**

## Identify your business client's expectations and state them concretely

Consult your business client as early as possible during your program planning about his or her specific objectives for the workforce program. State what you believe the course will accomplish and probe how the business client expects these objectives to meet his or her needs. Ask, for example:

How do you expect to see the results of this program in your bottom line?

Are you looking for results in employee retention, skills, productivity, or efficiency, or some other employee performance result? Can you estimate what result you expect?

Are you looking for lower costs in some area, improved competitiveness, or some other monetary result? Can you estimate what result you expect?

**Include the appropriate business “stakeholders”.** Your primary contact at the business may be the CEO, human resource manager, operations manager or other executive-level representative. It may be important to include other relevant managers and staff in the design of the assessment who are primarily responsible for the supervision and management of the employees in the workforce program. They will offer a unique, “on-the-ground” perspective, and it will probably be critical to have their support for the assessment project.

## Obtain your business client's commitment to a business value assessment

**Discuss what resources a business value assessment requires.** It is important to consult with the business about the effort and resources they can commit to the assessment. A business value assessment requires information that must be gathered from the business' records (e.g., information from employee records and accounting cost information).

- Consult with your business client about what information they must provide for various aspects of a typical assessment. For example, ask the business:

Can you provide employment start and end dates for the selected employees for an assessment of employee retention?

Can you provide information about the jobs or units each employee completed for an assessment of efficiency?

Can you provide information about turnover costs and/or your business' contribution to the costs of the workforce program for an assessment of the cost-benefit results of retention for your business?

- Use the sample Excel Tool forms in this Handbook, or a sample questionnaire, to show the business exactly what information is required to assess different kinds of results.
- Discuss any problems the business has accessing or gathering the data, or sharing proprietary information.
- Be realistic, but creative, in proposing solutions for problems with access to data.

## Discuss how you intend to use the assessment results

You will be exposed to your business client's "bottom line" reasons for using your workforce services by consistently involving the business in your planning of the workforce program and the accompanying business value assessment. The assessment, and sometimes your implementation of the workforce program, may expose you to proprietary information (e.g., work procedures, cost information and product value information) or confidential information (e.g., employee information). It is important to discuss in what specific ways **data confidentiality** will be an issue and what procedures your business client expects you to follow in handling any proprietary or confidential information. You may also have your own ideas about using the results of the assessment, for example, to improve your programs or services, or for promotion or marketing. It is important to state these expectations up front and ensure that your business client is comfortable with these uses of the assessment information.

## Identify What You Will Compare Your Results Against

There are essentially two options for comparison purposes. You can assess whether employees "improved" by comparing your results to outcomes during a period of time before the workforce services. In this Handbook, we refer to this type of comparison simply as "**before-and-after.**" Comparison time frames are typically used for workforce programs or training designed to improve the performance of incumbent workers, that is, employees already on-the-job.

You can also assess whether employees are "better" on some element by comparing their results to other, similar employees who did not receive workforce services. We refer to this type of comparison design as **comparison group**. Comparison group designs are useful for most types of workforce programs.

In general, we do not recommend using general industry performance data as a benchmark against which outcomes can be compared. General industry data represents average performance for an industry as a whole, and may be very unrelated to the experience of the specific organization with which you work. For example, you may know that long term care facilities in your area have a 50 percent annual turnover rate among their nurses aides. You may also know that 75 percent of the aides you trained and placed with the "Loving Care Nursing Home" (LCNH) stayed on the job for at least one year. This information, however, would tell you little about whether or not you have provided value. While your trainees outperformed the industry average, you still have no idea how this measures up against the specific experience of LCNH prior to their relationship with you.

The issue of selecting an appropriate comparison group or benchmark deserves your careful attention and thought – and you will see different approaches reflected in the examples contained in this Handbook.

## Determine Timeframe for Before-and-After Comparisons

The timeframe for a before-and-after comparison plays a critical role in the success of this type of assessment. The workbook allows for complete flexibility in determining timeframe periods – both in terms of timing and duration. You will need to select a period **before** the workforce service for which you will collect pre- or benchmark data. In addition, you will need to select another period,

**after** the service, for which you will collect post- or outcome data. These periods can be days, weeks or months (e.g., as short as one day or as long as six months). They can be immediately before and after the service, or you can decide to have a time lag before and/or after the service. Think about the following as you discuss timeframe with your business client:

When would they expect to see results in the workplace (based on the items under discussion for measurement)? How much time (if any) needs to pass after the service?

On what time basis are relevant data available? Should you think in terms of days, weeks or months?

Is the work environment, relative to the type of data to be measured, highly regular, or are there large variations from day-to-day or week-to-week? If it is highly regular, you may be able to use shorter time periods. If there are large short-term variations, or the organization has seasonal ebbs and flows in its business, you should discuss how long the before-and-after periods should be, so that they are more likely to reflect changes due to the workforce service, rather than changes due to fluctuations in the type of work being performed. Your business client will need to feel comfortable with these assumptions.

Did the service occur during a period of unusually low or high production that is unrelated to the workforce service? Did the service occur simultaneously with another major change within the business, such as the acquisition of new equipment, or a new contract, reorganization of work groups, or a management change? Consider these questions in selecting your timeframe and, importantly, in evaluating whether assessment is feasible at all.

## Consider Data Collection Issues

Several considerations are important as you design your business value assessment framework, so that the assessment is practical and feasible as it relates to gathering the information required to assess your results.

### **Will the business be able to provide the necessary information/data?**

To be feasible, your business value assessment should be based primarily on information that the business already stores in its employee records, financial/cost-accounting records, or in production and performance management systems.

**As a second option, use questionnaires to gather new data for the assessment.** Consider the Excel Tool as the method for answering your specific assessment questions as your first option, as it relies on data that is typically present in business employee records and information management systems. Sometimes, however, the needed data is not available or accessible. In this case, questionnaires may need to be designed and implemented in order to generate new data that can shed light on how well the business objective is being met.

### **Will other circumstances interfere with the assessment?**

**Other events or factors.** There may be other events or circumstances in your business client's work setting that compete for time, resources and data collection effort.

Is the business conducting other activities, such as a company-wide employee satisfaction survey or the conversion to a new computer management system or network that will coincide with your planned data collection?

Can the data collection effort for the assessment of the workforce services be “piggy-backed” on other data collection efforts?

What “system” or process can be arranged during the first attempt at gathering the information, so that it can be replicated for other assessments with a repeat business client? How is doing this assessment helpful in preparing you and the business client to more regularly assess the results of workforce initiatives?

**Other parts of the organization may need to be involved.** Ask your business contact if other parts of the organization need to be aware of or involved in the data collection effort.

Do you need authorization to access and gather data?

Does some other department (e.g., IT) need to help gather the data?

Do you need authorization to access employees for questionnaires?

## Decide If the Effort For the Assessment Is Appropriate

A simple consideration of the costs and benefits of the assessment will help determine if the benefits your business client may observe from the business value assessment are in balance with the costs the business will incur to participate in the assessment.

- **The typical effort the business will have to expend to complete the Excel Tool** includes: gathering and reviewing employee records from files or a computerized system, inputting a half-dozen to a dozen items for each employee in the Tool, gathering or estimating a range of cost-accounting information, and inputting it into the Tool.
- **The typical effort the business will have to expend for management or employee questionnaires** includes: consulting with you to design the questions, obtaining authorization to distribute and collect the questionnaire, distributing and promoting it to employees, and collecting the questionnaires and collaborating with you on analysis and reporting.

Once you have outlined the basic scope and design of the business value assessment, consider the following questions:

Do the potential costs to conduct the assessment, in terms of the business’ staff time and financial resources, exceed the potential business value expected from the workforce program?

Does the effort and scope of the assessment put undue strain on the workforce-business relationship?

Do you propose to analyze more assessment results than the number of objectives for the workforce program?

Does the assessment require information the business already stores (easier), or does it require collection of new information, e.g., surveys (harder)? Can this be restructured?

### **What if the benefits of the proposed assessment are less than the cost or effort to conduct it?**

It is important to strike a balance between a practical and meaningful business value assessment and the effort and resources required to conduct it. Issues to consider as you review the level of effort include:

#### **Have you included too many assessment elements?**

Are you trying to assess too “large” a scale relative to the scope of the workforce initiative? For most workforce development programs, the number of employees in each event is too small to expect statistical rigor. Rather, the focus is on quantifiable evidence of whatever magnitude.

If there is more than one assessment objective, did you prioritize them in consultation with the business?

Are you adding assessment objectives that satisfy your interests, but are of no concern to the business?

For most businesses, any demonstration that costs have been saved is a meaningful result, and multiple analyses of business value may not be necessary.

#### **If the business is burdened by the data collection responsibilities, how can you help gather the required information?**

Can your staff spend time on-site to do the records review?

Who else at the business can help, other than the business executive?

#### **Is the assessment important for your relationship with the business?**

Does the relationship-building aspect outweigh – or not – the effort to conduct the evaluation?

Can the business use the assessment results for other purposes, as well? If the results help them understand a particular aspect of their business success, the assessment may offset a cost they might otherwise incur for this information or analysis.

# ASSESSMENT PLANNING WORKSHEET

Person completing this form:

Date:

## (1) DESCRIBE THE WORKFORCE PROGRAM YOU WILL ASSESS

### WORKFORCE PROGRAM (name):

Description of the program (e.g., type of workforce program – new worker or incumbent; content of training or services; dates training or services were administered; who received training or services – occupation or position(s); number of job seekers or workers):

Staff assigned:

### BUSINESS CLIENT (company):

Address:

Primary contact:

Phone,

Other staff involved:

Description of the business, as relevant to the workforce program (e.g., number of employees; volume of work; type of work setting; what staff are important/relevant to this workforce program and/or assessment process; other details relevant to this program):

## (2) DESCRIBE WHAT YOU WILL ASSESS IN TERMS OF BUSINESS VALUE

**STATE THE OBJECTIVES OF THE WORKFORCE PROGRAM.** What was this program designed to accomplish for the business (e.g., from curriculum or program description)? On what specific aspects do you expect employees to improve or perform well?

**ARE YOUR OBJECTIVES RELATED TO RETENTION OR ADVANCEMENT?** Do you expect the workforce services to help retain and expand a qualified workforce? Describe specific changes you expect to see, stated in numbers, percents and so on.

Turnover/retention:

Attendance:

Increase in new hires:

Something else:

Job advancement:

Diversity:

Consider which method(s) you will use for gathering data and assessing results:

**Excel Tool**  
**Questionnaire**  
**Other method**

**How does this show up in the "bottom line?"** In what ways do you expect to "see" related cost reductions, resource or time savings, increases in sales/revenue, or other results in dollar terms?

**ARE YOUR OBJECTIVES RELATED TO QUALITY, PRODUCTIVITY OR EMPLOYEE SKILLS?** Do you expect the workforce services to contribute to the quality of business products or services? Describe specific changes or improvement you expect to see in the work setting, stated in numbers, percents and so on.

Efficiency:

Accuracy/error:

Technical job skills:

Productive time:

Certification, exams:

Overtime:

Consider which method(s) you will use for gathering data and assessing results:

- |   |   |
|---|---|
| <input type="checkbox"/> Customer satisfaction: | <input type="checkbox"/> Employee satisfaction: |
| <input type="checkbox"/> Employee initiative:   | <input type="checkbox"/> Teamwork:              |
| <input type="checkbox"/> Problem-solving:       | <input type="checkbox"/> Communication:         |
| <input type="checkbox"/> Something else:        |   |

Consider which method(s) you will use for gathering data and assessing results:  
**Excel Tool**  
**Questionnaire**  
**Other method**

**How does this show up in the "bottom line?"** In what ways do you expect to "see" related cost reductions, resource or time savings, increases in sales/revenue, or other results in dollar terms?

**DO YOU EXPECT SOME OTHER RESULT(S)?**

**(3) DESCRIBE THE EMPLOYEES AND WHAT THEY WILL BE COMPARED WITH**

Which type of comparison is most suitable to assess the results you expect? Indicate one or both options.

- Comparison group of employees (describe below)       Before-after workforce program time periods (dates):

Describe the groups of workers that are the basis of this assessment.

**WORKERS WHO RECEIVED THE WORKFORCE SERVICE:**

No. of workers:

Occupation/position:

Hire date(s):

Dates participated in the workforce service:

Other relevant information for workforce group:

**Time period(s)** to be encompassed by the information you will gather for this group of employees:

"Before" period:

"After" period:

**WORKERS YOU WILL COMPARE THE RESULTS WITH:**

No. of workers:

Occupation/position:

Hire date(s):

Other relevant information for comparison group:

**Time period(s)** to be encompassed by the information you will gather for this group of employees:

n/a

"Before" period (dates):

"After" period (dates):

**(4) CONFIRM THE METHODS YOU WILL USE TO ASSESS YOUR RESULTS**

Use this section to confirm each of your result indicators with the method(s) for assessing it and the source(s) of data, and to consider other important details. For each result, consider whether your workforce program was designed to achieve these specific results, and whether the assessment can provide reasonably concrete assessment of these specific results.

**RESULT 1 (Describe):**

- |                |   |                     |                                      |                                    |                                |
|----------------|---|---------------------|--------------------------------------|------------------------------------|--------------------------------|
| <b>Method:</b> | <input type="checkbox"/> Excel Tool       | <b>Data source:</b> | <input type="checkbox"/> Paper files | <input type="checkbox"/> Database  | <input type="checkbox"/> Other |
|                | <input type="checkbox"/> Questionnaire(s) |                     | <input type="checkbox"/> Supervisor  | <input type="checkbox"/> Employees | <input type="checkbox"/> Other |

**Employees:** Describe the employees who received services, how many, job titles, etc.:

- Comparison:**  Before-After (dates):  
 Comparison employees (how many, job titles, etc.):

**Notes:**

(continues on next page)

**RESULT 2** (Describe):

**Method:**  Excel Tool **Data source:**  Paper files  Database  Other  
 Questionnaire(s)  Supervisor  Employees  Other

**Employees:** Describe the employees who received services, how many, job titles, etc.:

**Comparison:**  Before-After (dates):  
 Comparison employees (how many, job titles, etc.):

**Notes:**

**RESULT 3** (Describe):

**Method:**  Excel Tool **Data source:**  Paper files  Database  Other  
 Questionnaire(s)  Supervisor  Employees  Other

**Employees:** Describe the employees who received services, how many, job titles, etc.:

**Comparison:**  Before-After (dates):  
 Comparison employees (how many, job titles, etc.):

**Notes:**

Will you conduct a basic, one-time assessment? Does this assessment involve multiple businesses or several points in time?

- Basic, one-time** business value assessment
- Assessment of one program serving **multiple businesses**
- Assess results at **several points in time**

**(5) OTHER THINGS TO CONSIDER**

Discuss these considerations with your business client. Refer to the Handbook for more specific discussion points and examples. Make note of who is assigned to tasks, timelines or dates, and other important issues.

Are there issues of **data confidentiality**?  No  Yes (describe):

Are there **events that might disrupt** the assessment or data collection?  No  Yes (describe):

Are the **assignments and deadlines** for gathering data clearly specified?

Excel Tool – Employee information	Who?	When: __ / __ / __
Excel Tool – Cost information	Who?	When: __ / __ / __
Questionnaires – Distributing	Who?	When: __ / __ / __
Questionnaires – Collecting	Who?	When: __ / __ / __
Questionnaires – Analyzing	Who?	When: __ / __ / __

**Other things to consider:**

## (6) NEXT STEPS

Review pages 1 to 3 of the Planning Worksheet and make notes about what you need to do next to implement your business value assessment. For each item, consider **who** and estimate a deadline for **when** you need to take action on the item.

**Who else do we need to involve** in the planning and implementation of this assessment? What do we need to talk to them about?

What are **things we still need to find out** in order to make progress?

What **resources** do we need?

**Who will take the lead to** move things forward and manage the process? If there is more than one “lead,” what is each responsible for?

What are the **deadlines** for specific next steps?

## PART 2: USING THE EXCEL TOOL

---

In this section, we describe the basic components of the Excel Tool, beginning with a **description of each of the pre-set indicators** the Tool is designed to measure and how to include your own **custom measures**. The amount of time you will want to spend reading these sections will depend on your own personal comfort with spreadsheets and outcome measurement. You may feel that some worksheets are self-explanatory, but for others you may want more guidance. We suggest that you use these sections describing the worksheets as a reference to orient you to the Excel Tool in a manner that you might use (or not use) with other software guides.

### Basic Components of the Excel Tool

The Excel Tool is a package of forms and reports that operate in Microsoft Excel. Based on our Learning Group findings, the Excel Tool encompasses the employee and cost information that typical business clients will find meaningful for assessing the business value results of your workforce services. The Excel Tool forms and reports require only a basic familiarity with Excel. The forms in each worksheet are designed to print out in an easy to read format to allow greater versatility in organizing data collection and reviewing results.

The Excel Tool includes a worksheet that offers a brief set of instructions, and is followed by the worksheets and forms described below:

**Worksheet 1: Assessment Details:** Describe details of your business client’s work setting and the workforce program or services on this page. This description of the “context” is important for deciding the appropriate business value assessment design and for interpreting your results.

**Worksheet 2: Excel Tool Setup:** Select whether you will use the Excel Tool for an assessment for one business client or for multiple business clients. You can also select additional results to supplement the Excel Tool pre-set results on this page.

**Worksheet 3: Employee Information list:** This page is where you input the information that is used to calculate the business value results that display on your Report of Results. Depending on which results you choose to assess, you will complete some or all of the columns of data for each employee in your workforce and/or comparison groups.

**Worksheet 4: Business Investment in Workforce Services:** Input the cost information that represents the cash or in-kind contributions your business client made for the workforce services being assessed. This information is used to calculate the “cost-benefit” results displayed on the Report of Results.

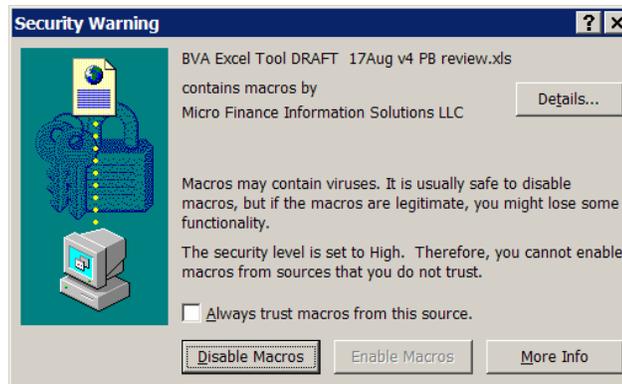
**Worksheet 5: Costs of Turnover Per Employee:** Input the cost information that represents your business client’s costs of turnover and employee replacement. This information is used to calculate the “cost-benefit” results displayed on the Report of Results.

**Worksheet 6: Report:** Your results display on this three-page report.

- Page 1 focuses on results for comparison groups, especially retention, employee quality and advancement, and related turnover cost-benefit results.
- Pages 2 and 3 accommodate before-and-after time comparison results, as well as comparison group results. However, they focus on other types of results – efficiency, quality, employee skills, and related business cost and revenue results.

### Excel macros and security

Your system settings may disable macros necessary for the proper functioning of the automated features in the Excel Tool. You must enable macros in order for all the automated features to work as expected, if this or a similar notice appears when you open the Excel Tool:



1. Exit and then relaunch Excel.
2. On the **Tools** menu, click **Macros** and then **Security**.
3. On the **Security Level** tab, select “Medium.” Each time you open an Excel file with macros, you will be asked if you want to Disable or Enable macros.

The Excel Tool was configured by an authorized software programmer. You can review the security certificate by selecting **Details** from the Security Warning message (shown above).

The following illustration depicts the basic relationships between the Excel Tool worksheets:

Data sources for report page 1

Business Value Assessment Excel Tool  
**BUSINESS COST FOR WORKFORCE SERVICES**

7 Offsets to Costs -- Credits, subsidies, grants or other offsets to the business' total cost for the workforce program

a. Tax credits  
1. Amount of tax credit per eligible employee  
2. Multiplied by number of employees eligible for credit

b. Employment subsidies

c. Grant money to the business

d. Other offsets the business receives

Business Value Assessment Excel Tool  
**COSTS TO HIRE AND REPLACE AN EMPLOYEE**

Business Value Assessment Excel Tool  
**REPORT**

1 How many employees are considered for retention assessment? <sup>1</sup>

2 How much did the business spend, per employee, for the workforce services (Form #4)? (or, input the cost per employee at left)

3 How much did the business spend to replace an employee (Form #5)? (or, input the cost per employee at left)

4 How much did the business spend hiring each group of employees?

5 Which group represents higher turnover, and turnover costs? The calculations for 5b, 5d and 5f require a turnover cost figure in item #3 above.

a) How many employees from each group remain 3 months after hire? <sup>2</sup>

b) What is the cost of turnover for employees who were gone before 3 months (using the cost figure from #3 above)?

c) How many employees from each group remain 6 months after hire?

Business Value Assessment Excel Tool  
**EMPLOYEE INFORMATION LIST**

Employer	(b) Name or ID	(c) Position	(d) Unit/Dept./Supervisor	(e) Group	(f) Start Date	(g) End Date	(h) Invol. Term.	(i) Minority	(j) Still Employed	(k) Months Employed	(l) Do not use	(m) Do not use	
GROUP TOTALS				Employees in Program (T)	0	n/a	n/a	0	0	0	0	n/a	n/a
				Employees to Compare (C)	0	n/a	n/a	0	0	0	0	n/a	n/a

Business Value Assessment Excel Tool  
**EMPLOYEE INFORMATION LIST**

Employer

(b) Name or ID

(c) Position

(d) Unit/Dept./Supervisor

(e) Group

(f) Start Date

(g) End Date

(h) Invol. Term.

(i) Minority

(j) Still Employed

(k) Months Employed

(l) Do not use

(m) Do not use

GROUP TOTALS

Employees in Program (T)

Employees to Compare (C)

Data sources for report pages 2 and 3



**Skills BEFORE the Workforce Services**<sup>3,4</sup>

1 What is the efficiency of these employees, i.e., the ability to meet or exceed expected work output?

a) How much output, on average, does each employee produce? n/a

b) What is the average efficiency rate, per employee? That is, what percent of the expected output does each employee produce? n/a

2 What amount of scrap, or waste, is associated with these employees? And what is the estimated cost of this waste?

a) How much scrap, on average, does each employee produce? 0.0

b) What is the average rate of scrap, per employee? That is, what percent of total output is waste? n/a

c) What are the average company sales (per week, month, etc.)? This figure will be used to calculate the cost of scrap/waste. \_\_\_\_\_ per \_\_\_\_\_

d) What is the estimated cost of these employees' scrap, as a portion of the average company sales (using the amount from item #c above)? n/a

Period BEFORE the Workforce Program								Period AFTER the Workforce Program				
(a) Employee Name or ID	(m) Actual Output	(n) Expected Output	(o) Good Output	(p) Total Hours	(q) Indirect Hours	(r)	(s)	(t) Actual Output	(u) Expected Output	(v) Good Output	(w) Total Hours	(x) Indirect Hours
<b>GROUP TOTALS</b>	0	0	0	0.0	0.0	n/a	n/a	0	0	0	0	0
	0	0	0	0	0	n/a	n/a	0	0	0	0	0

**Business Value Assessment Excel Tool REPORT**

	Employees of Workforce Program	Employees for Comparison
1 What is the <u>efficiency</u> of these employees, i.e., the ability to meet or exceed expected work output?		
a) How much output, on average, does each employee produce?	n/a	n/a
b) What is the average efficiency rate, per employee? That is, what percent of the expected output does each employee produce?	n/a	n/a
2 What amount of scrap, or <u>waste</u> , is associated with these employees? And what is the <u>estimated cost</u> of this waste?		
a) How much scrap, on average, does each employee produce?	0.0	0.0
b) What is the average rate of scrap, per employee? That is, what percent of total output is waste?	n/a	n/a
c) What are the average company sales (per week, month, etc.)? This figure will be used to calculate the cost of scrap/waste.	_____ per _____	
d) What is the estimated cost of these employees' scrap, as a portion of the average company sales (using the amount from item #c above)?	n/a	n/a

## Pre-Set Indicators Included in the Excel Tool

The following describes the pre-set indicators that are included in the Excel Tool and the data that you will need to track these indicators. All employee information listed below must be provided on a per-employee basis for the employees within the workforce group. The Excel Tool accommodates either overall estimates for comparison group information or per-employee data, which can be entered for each individual within the comparison group. If your assessment is based on comparing before-and-after information, you need data for each employee covering both the “before” and “after” time periods.

### Employee retention and turnover cost-benefit results

What are the levels of retention among employees with the workforce program, as compared to other employees (e.g., three months, six months, 12 months and the average months’ tenure)?

**NEED:** Hire dates and termination dates for each employee in workforce program, hire dates and termination dates for each employee in comparison group, OR estimate of comparison group retention rate (for three months, six months, and/or 12 months).

**NOTE:** This indicator is pre-set in the Excel Tool for comparison group design only (not before-and-after comparisons).

How much did the business spend hiring employees with the workforce program, as compared to other employees?

**NEED:** Cost of the workforce services to the business and the cost of losing and replacing an employee.

**NOTE:** The Excel Tool calculates actual costs using worksheets with line item costs, and it accepts total per-employee estimated costs.

Are there higher or lower costs related to turnover among the employees with workforce program, as compared to other employees?

**NEED:** Hire dates and termination dates for each employee and the cost of losing and replacing an employee (per the calculations above).

### Employee quality and advancement

How does the need for corrective action among employees with the workforce program compare to other employees, for example in the number of terminations for cause or in disciplinary actions?<sup>2</sup>

**NEED:** Which employees received disciplinary actions and/or were terminated for cause.

What are the levels of diversity among employees with the workforce program, as compared to other employees?

**NEED:** Minority or diversity status of each.

How does attendance among employees with the workforce program compare to other employees, for example in the number of days unexcused or tardy?

**NEED:** Number of days each employee was absent unexcused and/or were tardy.

How does job advancement among employees with the workforce program compare to employees from other sources, for example in the number of promotions or in salaries?

**NEED:** Which employees received promotions, each employee's starting salary and/or current salary, or salary at termination for each employee.

### **Employee skills and their impact on business costs and revenue**

Are employees with the workforce group more efficient compared to other employees? That is, what is their ability to meet or exceed expected work output in units, tasks completed, and time to complete tasks or produce output after the workforce program compared to before?

**NEED:** The number of units produced or tasks completed by each employee and/or the total number of hours each employee worked.

Do employees with the workforce group have greater accuracy compared to other employees? That is, do they have less scrap, waste, or error, and require less related re-work or repeated task completion after the workforce program compared to before?

**NEED:** The number of bad units produced or unsatisfactory tasks completed by each employee and/or the number of units or tasks by each employee that required re-work or re-doing.

And, does the accuracy of the employees with the workforce group save money or generate revenue, compared to other employees after the workforce program compared to before?

**NEED:** The average company sales value (per week, month, etc.), and employee error data.

Do employees with the workforce group spend less unproductive time compared to other employees after the workforce program compared to before?

**NEED:** The number of hours each employee did not spend directly on productive tasks and the total hours worked by each employee.

And, does the productivity of the employees with the workforce program save money compared to other employees after the workforce program compared to before?

**NEED:** The average rate of pay for these employees and the employee rate of unproductive time.

How much overtime do employees with the workforce program spend compared to other employees after the workforce program compared to before?

**NEED:** The number of hours of overtime worked by each employee.

How many employees with the workforce group successfully achieve a skill assessment milestone compared to other employees, for example, passing a required exam or achieving a certification, after the workforce program compared to before?

**NEED:** Which employees have achieved a skill certificate or passed an exam.

## Worksheet 1: Assessment Details

The **Assessment Details** page requests information that allows you to describe the business client to whom you provided the workforce services, your organization, the details of the workforce program, and the assessment you are conducting. This “record-keeping” information is helpful for both keeping track of assumptions you and your business client made in planning the assessment, as well as sharing the results with others interested in your work and outcomes.

Some of the information you enter in the Assessment Details page (Company, Workforce Program, Occupation and Time Period of Assessment) will be **automatically inserted into the titles** in the other forms.

### Describe your business client(s)

Figure 1 shows the information on the Assessment Details page that relates to your business client or employer-company. If your assessment includes more than one business client, complete the Assessment Details page for the business client you consider “primary” to your workforce program. Provide information about other business clients in the “Company Information” box, as you see fit.

- Company name – Input the “primary” company name here. List the company names of the other business clients on the Excel Tool Setup page.
- Unit/division.
- Contact person.
- Contact information: phone number, fax, e-mail and physical address.
- Company information.

<b>Business:</b>	company name Widget World			
	unit/division			
<b>Primary Contact:</b>	name	phone (incl. ext.)	fax	e-mail
	Adam Reynolds	555-8923		
	street	city	state	zip code
	1239 Industrial Blvd	Pittsburgh	PA	15210
<b>Business Info:</b>	automotive parts company; approx. 100 production employees  <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p><b>Company Info:</b></p> <ul style="list-style-type: none"> <li>-Company product(s) or service(s) &amp; annual production</li> <li>-Size of workforce</li> <li>-Unit/division description</li> <li>-Is there dedicated HR and/or Accounting staff?</li> <li>-Other relevant details</li> </ul> </div>			

**Figure 1: Assessment Details page, business client information**

When you select the **Company Information** box, a text box pops up and lists some of the details you should consider in describing your business client's work setting in relation to your workforce program.

**NOTE:** "Instruction pop-up boxes" disappear when you move out of the cell into which you are typing information, and they do not print. If the box obscures the information you are typing, use the mouse to move the box to another spot on-screen.

## Describe your workforce program

There is a similar format into which you should enter information about the workforce organization and program:

- Workforce organization.
- Contact person.
- Contact information: phone number, fax, e-mail and physical address.
- Program name, for services or program being assessed.
- Number of employees trained or served.
- Occupation category(ies) of the employees trained or served.
- Description/details of the workforce program or services being assessed. As in the employer segment, a pop-up box prompts you for certain types of information.

## Worksheet 2: Excel Tool Setup

### Setup the Excel Tool for multiple business clients

The Setup page has several options for setting up the Excel Tool when your workforce business value assessment includes more than one business or when you want to add additional assessment measures to those already pre-set in the Report.

If your assessment includes more than one business client, you must input each business/company name on the Setup page (Figure 2), to be able to input their employee and cost information, as well as to produce a report for them.

- Business 1 is the business whose name you input on the Assessment Details page. This business name is automatically entered in the first row on the Setup page.
- You can add business names to this list on the Setup page at any time. You must input the additional business name, however, before you can add any data about the business to the Excel Tool (e.g., on the Employee Information List).

**Configure For a Multiple-Employer Assessment**

If your assessment includes more than one business, input the additional business names, one per box. The names you input in this list become the "dropdowns" to select by business name, on subsequent pages. See the *Handbook* for detailed instructions.

1	Widget World	<p>The name of the "primary" business from the Assessment Details page, will be automatically displayed here as business name #1.</p> <p>Use the Assessment Details page, if you need to change or remove business name #1.</p>
2	LGH	
3	City of Lancaster	
4	Armstrong	
5		
6		
7		
8		
9		
10		

**Figure 2: Excel Tool Setup for assessments including multiple businesses**

**Select additional and custom measures**

The Excel Tool includes several additional pre-set measures, or you can design your own, to supplement the pre-set measures that already appear on the Report.

You may select up to four additional measures, displayed as Option 1, 2, 3 and 4, depending on the comparison design of your assessment. You may add such indicators to your assessment report at any time; that is, you do not necessarily have to decide to use additional measures when you first begin using the Excel Tool. After you select your additional measure(s), the Excel Tool is modified, equipping you to add data and see your results. See the section on Employee Information for further information on inputting data for custom measures and the Report section for information on how the custom results will be displayed.

**Selecting additional measures for comparison group design**

If you use a group of employees as a comparison to the workforce group, you may select up to four additional measures to display on the Report, as explained below (see also Figure 3).

- For **Option 1** and **Option 2**, the results display on Page 1 of the Report as results 9 and 10.
- For **Option 3** and **Option 4**, the results display on Page 3 of the Report as results 4 and 5. Because you are not using a before-and-after time comparison, disregard Page 2 of the Report.

**Add Indicators to the Report Page**

If you want to supplement the pre-set indicators on the Report page, select them from the drop-down menus below. You may select up to four additional indicators. See the *Handbook* for detailed instructions about selecting indicators for the type of comparison you are using (e.g., before-and-after or comparison group), and about creating custom indicators.

Select the additional indicators you want to appear on page 1 of the Report **You must use data of this type, for the indicator(s) you selected:**

(p.1) #9

(p. 1) #10

Select the additional indicators you want to appear on pages 2 and 3 of the Report

(p. 2,3) #4  (Y)es or (N)o for each employee

(p. 2,3) #5  Number or amount per employee

**Figure 3: Excel Tool Setup, for additional results**

**Selecting additional results for before-and-after comparison design**

If you are comparing results before and after the workforce program, you may only select up to two additional results to display on the Report, as explained below.

- Disregard Option 1 and **Option 2**, which are for comparison groups only.
- For **Option 3** and **Option 4** the results display on Pages 3 and 4 of the Report, results before the workforce program and after, respectively, as Results 4 and 5.

**Additional results you can select**

Ten additional pre-set results are included in each of the drop-down lists in the Custom Results portion of the Setup page. These additional business value results include the following:

- **Advancement:** Average starting salary, average salary increase or ending salary, or number and percent who received promotions or otherwise advanced;
- **Attendance:** Total and average number of days unexcused or total and average number of times tardy;
- **Corrective Action:** Total and average number of disciplinary actions; and
- **Skills and Efficiency:** Average time per task, unit or job; number and percent who successfully achieved a skill assessment milestone (e.g., passed a required exam or achieved a certification); total and average overtime hours or wages; or total and average tasks, jobs or units that require repair or re-doing.

In addition, you can create your own custom results:

- **“Other result:** Number and percent who your result here.” (This result is for “Y/N” data).

- “**Other result:** Total and average, your result here.” (This result is for numeric data).

If you select either of these two customizable result options from the Setup page, you will be asked to type in some text to describe the result:

- A descriptive label for your result, which will be displayed on the Report in the appropriate row; and
- A one- or two-word label for your data, which will be displayed on the Employee Information form in the appropriate column.

### Worksheet 3: Employee Information List

The **Employee Information** list is the essential form in this package for gathering data that allows you to assess the benefits resulting to your business client from their partnership with you in the workforce development program. By inputting several key pieces of information about each employee who participated in the workforce program and in the comparison group, the Tool calculates and presents the results on the **Report** page.

Entering employee information and then viewing the results is quite straightforward. Identifying the appropriate information to collect and collecting it are the complicated parts of the process. In addition to the planning section of this Handbook, check the On-line Resource Center on our Web site for examples and ideas relating to various types of employee information that can be collected and used in a Business Value Assessment. Please see [www.aspenwsi.org/BVAresources](http://www.aspenwsi.org/BVAresources).

There are three categories of employee information on the Employee Information form, as shown in Figure 4:

- **Basic Employee Information** is used by the Tool to categorize employees. The data fields are “Company,” employee “Name or ID,” “Position,” “Unit/Dept/Supervisor,” and “Group” (connoting whether they are part of the workforce program group or the comparison group).
- **Employee Quality Information** is used by the Tool to calculate retention, turnover and the additional results you select. The data fields are employee “Start Date,” “End Date,” “Involuntary Termination” (e.g., fired for cause), “Minority” status, “Still Employed” or not, “Months Employed,” and data for the specific additional result(s) you selected on the Setup page.
- **Employee Skills and Performance Information** is used by the Tool to calculate production results before and after the workforce program for the workforce program group and a comparison group. The data fields are “Actual,” “Expected” and “Good” production; “Total” and “Indirect” hours; and data for the specific additional result(s) you selected on the Setup page.

The instructions below are detailed, so that you can refer to them as you collect the specific information you need for the results you have chosen to assess.

**IF MULTIPLE EMPLOYERS:** Use the dropdown list to select which employees are counted in the GROUP TOTALS. All employees will still display in the list.

Include All Employers ▼

Employer Business Client Name	(a) Employee Name or ID	(b) Position	(c) Unit/Dept/ Supervisor	(d) Group T or C	(e) Start Date	(f) End Date	(g) Invol. Term.	(h) Minority	(i) Still Employed	(j) Months Employed	(k) Salary - starting	(l) Skill assessment
<b>GROUP TOTALS</b>		Employees in Program ('T')		24	n/a	n/a	0	24	16	579	n/a	8
<b>GROUP TOTALS</b>		employees to Compare ('C')		0	n/a	n/a	0	0	0	0	n/a	0
1	Laborers Local 224	XXX-44-8645		T	Oct-02			Y	Y	35		N
2	Laborers Local 224	XXX-64-0776		T	Oct-02	Dec-02		Y		1		N
3	Laborers Local 224	XXX-48-5479		T	Oct-02			Y	Y	35	9	N
4	Laborers Local 224	XXX-62-6926		T	Oct-02	Mar-03		Y		4		N

Employee Skills and Productivity Information

Employer Business Client Name	(a) Employee Name or ID	Period BEFORE the Workforce Program						Period AFTER the Workforce Program								
		(m) Actual Output	(n) Expected Output	(o) Good Output	(p) Total Hours	(q) Indirect Hours	(r) Driver's license	(s) Obtained GED	(t) Actual Output	(u) Expected Output	(v) Good Output	(w) Total Hours	(x) Indirect Hours	(y) Driver's license	(z) Obtained GED	
<b>GROUP TOTALS</b>		0	0	0	0.0	0.0	16	14	0	0	0	0	0	0	22	20
<b>GROUP TOTALS</b>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	Laborers Local 224	XXX-44-8645					N	N							Y	N
2	Laborers Local 224	XXX-64-0776					Y	Y							Y	Y
3	Laborers Local 224	XXX-48-5479					N	Y							N	Y
4	Laborers Local 224	XXX-62-6926					Y	N							Y	Y
5	Laborers Local 224	XXX-46-9188					N	N							Y	N
6	Laborers Local 224	XXX-70-8898					Y	N							Y	Y

Figure 4: Portions of the Excel Tool Employee Information form

**(A) Basic employee information**

The first four data columns request identification and tracking information for the workforce or comparison employees. You may choose to exclude some or all of this basic employee information, based on the purposes of your assessment. The only data in the first four columns that is required for other portions of the Excel Tool is the Employer/Company Name.

**Employer/Business Client Name.** Select the company name at which the employee is employed from the drop-down list in the input cell/row (see Figure 5 Item B).

If you do not input an employer or company name for each employee on the list, that row of data will not be included on the Report.

If the data in this field is highlighted in light blue, the employer or company name that you entered is not included on the Excel Tool Setup page. The (exact) employer or company name must be included on the Setup page, or all data and reports related to that employer name will not be calculated.

**Name or ID.** Input the employee name or identification number.

**Position.** Input the employee position or title.

**Unit/Dept/Supervisor.** Input the employee position or title.

**Filtering the Employee Information list by the Employer Name.** If you are conducting an assessment that involves multiple business clients, use the Employer/Business Client name drop-down list in Excel row 3 to select which employee records to display (see Figure 5, item A).

**IF MULTIPLE EMPLOYERS: Use the dropdown list to select which employees are counted in the GROUP TOTALS. All employees will still display in the list.**

Employer Business Client Name	(a) Employee Name or ID	(b) Position	(c) Unit/Dept Supervisor	(d) Group T or C	(e) Start Date	(f) End Date	(g) Yr	(h) Months Employed
<b>GROUP TOTALS</b>				24			6	579
<b>Employees in Program ('T')</b>				0			0	0
<b>Employees to Compare ('C')</b>								
1	Laborers Local 224	K-44-8645		T			Y	35
2	Laborers Local 224	XXX-64-0776		T			Y	1
3	Laborers Local 224	XXX-48-5479		T			Y	35
4	Laborers Local 224	XXX-62-6926		T	Oct-02	Mar-03	Y	4
5	Laborers Local 224	XXX-46-9188		T	Oct-02		Y	35
6	Laborers Local 224	XXX-70-8898		T	Oct-02		Y	35
7	Laborers Local 224	XXX-66-2780		T	Oct-02		Y	35
8	Laborers Local 224	XXX-70-8114		T	Oct-02		Y	35
9	Laborers Local 224	XXX-54-0101		T	Oct-02	Dec-02	Y	1
10	Laborers Local 224	XXX-70-9085		T	Oct-02	Jun-03	Y	7

**Name of Employer**  
Select the name of the business client that employees this employee, from the dropdown list. You may add business names to this list on the SETUP sheet.

**Figure 5: Business name dropdown lists**

Only the employee records/rows for workers employed at the employer/company you select using this drop-down option will be displayed. However, the data that you input is still present and may be viewed again by selecting “Include All Employers” from the same drop-down list.

## **(B) Employee quality information**

This information is used by the Tool to present retention results and several other results that may be useful for your purposes: rate of involuntary turnover (e.g., termination for cause), diversity rate, and any additional results you select on the Setup page. You may exclude some or all of this employee information, based on the purposes of your assessment, but the Report is affected if some of this information is not completed, as described in the following item-by-item instructions.

**Group (T or C).** Input "T" for employees who participated in the workforce program, i.e., "T" for trained. Input "C" for employees who were not served by the program but are included for comparison to the workforce program employees, i.e., "C" for comparison.

The Tool recognizes capital or lowercase letters t, T, c and C, but gives an error message if you enter any other value.

The Tool does not include in the results any employee with a blank value in the Group column.

**Start Date.** Input the employee's date of hire, i.e., "start date." At a minimum, input the month and four-digit year of hire.

Use four digits for the year (YYYY). If you input two-digit years, Excel defaults to the current year (e.g., interprets 12/04 as 12/2005). The Tool accurately recognizes a variety of date formats using months and 4-digit years (e.g., Dec 2004, 12/1/2004 and 12/2004).

The Tool does not calculate retention results if the Start Date is blank.

**End Date.** Input the date the employee ended his or her employment with the business, i.e., "termination date." At a minimum, input the month and four-digit year of termination. As with the Start Date, use four digits for the year (YYYY).

If the employee is still employed at the business, leave End Date blank.

**Involuntary Termination.** Input "Y" if the employee was fired or terminated for cause. If the employee voluntarily "quit," resigned, or is still employed at the business, input "N" or leave the cell blank.

The Tool recognizes capital and lowercase letters y, Y, n and N, but gives an error message if you enter any other value.

If involuntary termination is not of interest to your assessment, simply do not input this information and the rate of involuntary termination will not be displayed on the Report in Item 7.

**Minority.** Input "Y" if the employee is known to be a member of a minority group important for the business' diversity. If the employee is not a member of a relevant minority group or minority status is unknown, input "N" or leave the cell blank.

The Tool recognizes capital and lowercase letters y, Y, n and N, but gives an error message if you enter any other value.

If the diversity rate is not of interest to your assessment, simply do not input this information and the diversity rate will not be displayed on the Report in Item 8.

**Still Employed.** The Tool automatically determines if the employee is still employed at the business from the value in End Date; therefore, this cell is restricted and you may not input information.

If you do not enter an End Date for the employee, the Tool presents “Y” in Still Employed. If you enter an End Date for the employee, the Tool leaves this cell blank, i.e., the employee is not still working for that employer.

**Months Employed.** The Tool automatically calculates the total months elapsed from the Start Date, i.e., the total months employed at the business.

If you input an End Date for the employee, the Tool calculates the months between the Start Date and End Date. If you did not input an End Date for the employee, the Tool calculates the months between the Start Date and the actual current date.

**Data for Additional Results.** The columns marked (k) and (l) accommodate data for the additional results that you select on the Setup page.

When you select an additional result on the Setup page, columns (k) and/or (l) will be labeled with a “header” for your employee data.

Depending on the additional result that you select, the data input cells will limit your data to either “Y(es)” or “N(o)” data or numeric data that indicates an amount per employee. You can detect the type of data you must input by clicking in the (k) or (l) header row.

## **(C) Employee skills and performance information**

This section of the Employee Information form accommodates data to calculate efficiency results, error or “scrap” results, indirect or non-productive time, and any additional results you select on the Setup page. This information is used by the Tool to present skills and productivity results that are typical for business environments that monitor production or services per unit or per hour.

**“Before” and “After” data.** If you are using a before-and-after comparison design, you must define the time period before and after the workforce program during which you will assess results, so that you can assess the affect of the workforce program after it is completed. See the box in “Planning Your Business Value Assessment” chapter on choosing before and after time periods.

The same five columns that appear under the header “Period BEFORE the Workforce Program” also appear under the header “Period AFTER the Workforce Program.” These columns are explained below only once.

- Use consistent data units. For each of these data fields, you are asked for “totals during the evaluation time period.” You will specify the data in “number of \_\_\_ done” or in hours. If you are inputting data for before and after the workforce program, use the same units in both time periods. For example, do not use hours for the data before the workforce program and minutes for the data after the program.
- Using only one time period for comparison group assessments. If you are using a comparison group, you may want to compare skills and productivity between the two groups, e.g., to assess whether the workforce or comparison group has less error. In that case, it makes most sense for you to put your employee skills and productivity data in the columns under the header “Period AFTER the Workforce Program.”

**Actual Output.** Input the total number of units or parts, the total amount of output, or the total tasks completed by the employee.

Actual Output is used to calculate the employee's efficiency and what proportion of his or her output is "waste," error or scrap. These results are shown as Items 1 and 2 on Pages 2 and 3 of the Report. If you do not input Actual Output, these items will not be calculated on the Report.

**Expected Units.** Input the expected output – that is, the number of units or parts, the amount of output, or the volume of tasks the employee was expected to complete during the evaluation period. The expected output may be the same for each employee in this occupation. If so, input the same value in each employee record.

Expected Output is used to calculate the employee's efficiency, Item 2 on Pages 2 and 3 of the Report. If you do not input Expected Output, this item will not be calculated on the Report.

**Good Output.** Input the total number of good or acceptable units or parts, amount of output, or the tasks completed by the employee.

Good Output is used to calculate what proportion of the employee's output is "waste," error or scrap, Item 1 on Pages 2 and 3 of the Report. If you do not input Good Output, this item will not be calculated on the Report.

**Total Hours.** Input the total number of hours the employee worked during the evaluation time period.

Total Hours is used to calculate indirect time, an indication of the amount of time dedicated to non-productive tasks, shown as Item 3 on Pages 2 and 3 of the Report. If you do not input Total Hours, this item will not be calculated on the Report.

**Indirect Hours.** Input the number of indirect hours, or hours the employee spent on non-productive tasks, during the evaluation time period.

Indirect Hours is used to calculate indirect time, an indication of the amount of time dedicated to non-productive tasks, shown as Item 3 on Pages 2 and 3 of the Report. If you do not input Indirect Hours, this item will not be calculated on the Report.

**Data for Additional Results.** The columns marked (r), (s), (y) and (z) accommodate data for the additional results that you select on the Setup page.

When you select an additional result on the Setup page, columns (r), (s), (y) and/or (z) will be labeled with a "header" for your employee data.

Depending on the additional result that you select, the data input cells will limit your data to either "Y(es)" or "N(o)" data or numeric data that indicates an amount per employee. You can detect what type of data you must input by clicking in the (r), (s), (y) or (z) header row.

## **(D) Group totals**

The Tool automatically calculates a "running total" for each of the data fields. These Group Totals are in the two gray-highlighted rows between the "header" rows and the first employee data input rows (Figure 4, item D). These rows are protected, that is, they contain formulas that you are

restricted from accessing or modifying. You will see the totals for the Workforce Group and the Comparison Group accumulating in these rows as you add data for each employee.

### **How to use the Employee Information form for multiple business clients**

These instructions apply, if your assessment includes more than one business client.

**Use the Setup page first.** You must first add the additional business client/company name on the Excel Tool Setup page. If the (exact) employer or company name is not included on the Setup page, no data or reports related to that employer name will be calculated.

## **Worksheet 4: Business Investment in Workforce Services**

The Excel Tool uses the data entered on the **Business Investment in Workforce Services** form to calculate the retention cost-benefit results on the **Report** form. Consistent with the purpose of “documenting demand-side (business) outcomes,” the Business Investment in Workforce Services form details typical costs businesses spend or incur in hosting workforce development services. You, the workforce service provider or trainer, may cover some or all of the costs. However, **only the actual costs your business client incurs** should be estimated or calculated on this form.

The cost components of the Business Investment in Workforce Services form are quite detailed. This is intended to encourage you and your business client to think about the wide range of possible costs the business pays or contributes for its involvement with the workforce program. The guiding principle in assessing business value, however, is to develop measures that are reasonable and fair, not necessarily to include every possible contingency or cost. Keep in mind the scale of the workforce program and whether it is important to break out costs that do not amount to significant contributions by your business client.

If you do not wish to calculate the item-by-item costs that your business client contributes, you can estimate totals for certain categories of cost on the Business Investment in Workforce Services form or you can input an overall estimate per-employee directly on the Report in lieu of using the Business Investment in Workforce Services form.

This section may be used with either an incumbent worker training intervention or a new hire intervention.

**Provide the information at the correct level of detail.** The various cost categories on the Business Investment in Workforce Services form require information at different levels, e.g., total costs for a group and average costs for one employee. Regardless of the level of detail in each category, the total cost is calculated on a per-employee basis. Review each cost category carefully to understand at what level of detail to provide the costs.

- **Total costs for a workforce group or session:** Development costs, program delivery costs, direct fees, and offsets to costs.
- **Average cost per employee:** Work release costs, direct fees, hiring costs, and offsets to costs.

**Input either item-by-item costs or estimated subtotals.** The Excel Tool accommodates both known item-by-item costs and estimated subtotals for each of the cost categories on the costs forms. Input known item-by-item costs in the right-hand column and estimated subtotals in the left-hand Subtotal column/cell.

There are seven categories on the Business Investment in Workforce Services form:

1. **Number of employees**, which is needed to calculate costs on a per-employee basis.
2. **Direct fees** the business pays for the workforce program.
3. **Program development costs** the business contributes for the creation of the workforce program.
4. **Program delivery costs** the business incurs to implement the workforce program for the session being evaluated.
5. **Work release costs** the business pays to provide employee release for the workforce program.
6. **Hiring costs** for a new employee from the workforce program to prepare the new employee to work productively.
7. **Offsets to costs** the business applies to reduce its net total cost of the workforce program.

Each of these are described in detail below.

### **(1) Number of employees**

If you completed the Employee Information List, the number of employees in the workforce group will **automatically display** in the right-hand cell. If you did not, you must first input the number of employees in the workforce program in the left-hand cell marked "Input Number of Employees," in order for the Excel Tool to calculate a cost per-employee. This section of the Business Investment in Workforce Services accommodates users who do not complete the Employee Information list.

### **(2) Direct fees**

Input the pre-determined or contract fee(s) your business client paid for the workforce program, including:

**Per-employee fees.** The fee paid per-employee, which is multiplied by the number of employees from the workforce program for a total of per-employee fees.

**Group/package fee.** The total fee paid for the workforce program or services.

Add any notes or comments that describe the direct fees, as appropriate, in the "Notes" area.

### **(3) Program development costs**

Estimate your business client's contribution to training needs analysis, identifying program objectives, developing the curriculum, the purchase of equipment or space dedicated to the program, or other "front-end" costs to develop or create the workforce program.

The **Subtotal** sums the item-by-item costs your business client contributed to the original creation of the workforce program. An estimate can be inserted for overall contribution to development in the left column. These are total costs, not costs per-employee.

Add any notes or comments that describe the development costs, as appropriate, in the “Notes” area.

**Development costs are not included in the total** Business Investment in Workforce Services or used to calculate retention cost-benefit results on the Report. Development costs are included on the form for reference. However, they are not included in the calculation of the overall costs for workforce services. Our experience shows that different situations require different amortizations for program development costs.

**To include development costs in the total** Business Investment in Workforce Services, calculate a per-employee development cost and add it to cost per-employee from Item 9 of the Business Investment in Workforce Services form. Input this new figure in the “Estimated Cost per Employee” cell on the Report, for Item 2. This estimated value will replace the value calculated on the Business Investment in Workforce Services form.

#### **(4) Program delivery costs**

Input or estimate the money or in-kind value your business client contributed to program delivery, including: the purchase, rental or cost to use company equipment for this training session; the rental of space or cost to use company space; payment of salary or fees for the instructor; the cost of meals or refreshments; the cost of student texts or materials; organizational or administrative costs or salaries; or other costs related to program delivery.

**If your program is conducted more than once for this business client**, include only the costs your business client contributed for this “session.”

The **Subtotal** is the estimated and/or known item-by-item costs your business client incurred to implement the workforce program. These are total costs, not costs per-employee.

Add any notes or comments that describe the program delivery costs, as appropriate, in the “Notes” area.

#### **(5) Work release costs**

Input or estimate the costs related to releasing an employee from work that were incurred by the business client, including:

**Average wages, paid release.** The wages paid for one employee to attend the workforce program for the number of hours of the program.

**Average overtime wages.** The overtime wages paid for employee(s) to cover the shift(s) not worked by one employee attending the workforce program.

**Average temporary worker wages.** The wages paid to temporary worker(s) to cover the shift(s) not worked by one employee attending the workforce program. Include in the per-employee total any one-time costs associated with using a temporary worker (e.g., placement fee, equipment or uniform, per diem, etc.).

**Value of lost production or business.** The dollar amount of lost production related to the employee's attending the workforce program.

**Other costs for employee release.** Any other costs related to employee work release.

Add any notes or comments that describe the work release costs, as appropriate, in the "Notes" area.

The items will sum in a **Subtotal**. Items a, b and c are per-employee costs, which are multiplied by the number of workforce program employees and added to Items d and e.

Alternatively, you may leave all items blank and enter an overall estimate for this category in the left column.

## **(6) Hiring costs**

Input or estimate the average costs your business client incurs to screen one new employee who is hired through the workforce program and the average costs to prepare them to work productively. Consider only the average per-employee costs that relate to new employees hired through the workforce program.

For example, if the workforce program conducts a pre-employment test, such as a drug screening that the employer does not repeat, then the cost of a drug screening would not be included here. If, in the absence of the workforce program, the employer ordinarily would pay for a drug screening, then that information is recorded in a different part of the workbook (see section on Worksheet 5: Costs of Turnover Per Employee).

**Pre-employment skills/aptitude testing fees.** The cost to administer and score pre-employment test(s) for one employee hired through the workforce program.

**Drug screen/background check fees.** The costs for drug screenings, background checks and any other such pre-employment screenings for one employee hired through the workforce program.

**New employee orientation.** The cost of wages for the new employee to attend a typical or formal orientation, the wages of the manager or HR staff who conduct the orientation, and charges for space or other materials associated with orientation.

**Initial on-the-job training period.** The employee wages paid for the typical number of days during which a new employee hired through the workforce program is considered in-training on-the-job. Also include the wages for supervisors or trainers dedicated to this training.

**Performance differential during orientation period, as portion of employee wages.** The employee wages "lost" due to less-than-expected productivity during the typical number of days a new employee hired through the workforce program is considered in-training on-the-job.

**Other costs.** Any other costs related to screening and providing orientation and on-the-job training to a new employee from the workforce program to prepare them to work productively.

Add any notes or comments that describe these costs, as appropriate, in the "Notes" area.

Items a, b, c, d and e are all per-employee costs, which are multiplied by the number of workforce program employees.

## **(7) Offsets to costs**

Input or estimate the specific tax credits, subsidies, grants, or other income or incentives your business client used to reduce the overall net cost for the workforce program. These costs are subtracted from the total cost your business client pays for the workforce program.

**Tax credits.** The tax credits (e.g., Work Opportunity or Welfare-to-Work Tax Credits) claimed by your business client for employing eligible workers that were hired through the workforce program. Input the average or specific tax credit amount per qualifying employee and the number of qualifying employees hired through the workforce program for which the tax credits were claimed. The Excel Tool multiplies these items for the total amount of tax credit.

**Employment or training subsidies.** Input the average or specific subsidies (e.g., WIA, TANF, or VA subsidies, and/or WIA or TANF ITAs) per qualifying employee, as well as the number of qualifying employees hired through the workforce program for which your business client received these subsidies. The Excel Tool multiplies these items to arrive at the total subsidy received.

**Grant money.** The total grant money your business client applied to the cost of this session of the workforce program (e.g., WIA incumbent or dislocated worker training grant or economic development grant).

**Other offsets.** Input any other offsets your business client applied to the costs of the workforce program. Add any notes or comments that describe these offsets, as appropriate, in the “Notes” area.

## **(8) Total business investment in the workforce program**

The **Total** is the combined estimated and known item-by-item costs your business client applied to the cost of the workforce program. This total includes program delivery costs, work release costs, direct fees, and costs to hire employees from the workforce program, minus the amount of offsets your business client applied to the program.

NOTE: Program development costs are not included in the total costs for the workforce program.

## **(9) Investment per employee by the business for the workforce program**

The cost-per-employee equals Item 8, “Total Business Investment in the Workforce Program,” divided by the number of employees in the workforce program, as shown in Item 1 of this form.

## **Worksheet 5: Costs of Turnover Per Employee Form**

The Excel Tool uses the data entered on the **Costs of Turnover Per Employee** form to calculate the retention cost-benefit results on the **Report** form. As with the **Business Investment in Workforce Services** worksheet, the cost components of the Costs of Turnover Per Employee form are fairly detailed. This is intended to encourage you and your business client to think about the full spectrum of costs the business incurs in hiring new employees or replacing employees who leave the organization. There are opportunities to insert estimates for categories of cost when a less detailed level of analysis seems appropriate.

If you have an overall estimate per-employee that you would prefer to use, you can input this estimated cost on the Report, in lieu of using the Costs to Hire and Replace and Employee form.

**NOTE:** If you are assessing an incumbent worker training program, the Costs of Turnover Per Employee may not be of immediate interest to your business partner, unless one of the objectives of your workforce partnership is to affect retention or turnover.

There are four cost categories on the Costs of Turnover Per Employee form:

1. **Separation costs** the business incurs from losing an employee.
2. **Vacancy costs** the business incurs to cover shifts for one lost employee.
3. **Recruitment/screening costs** the business incurs to recruit and screen an employee.
4. **Orientation costs** the business incurs to orient and train a new employee to work at the expected level of productivity.

Detailed instructions for each category follow.

### **What costs should be reported?**

For the cost categories on this form, provide information based on:

**Per-employee costs.** The “typical” costs associated with losing one employee and hiring a new employee to replace the lost employee. If your business already analyzes this cost, it may also be referred to as an “average cost of turnover” or something similar.

**Relevant occupation or position.** Turnover costs vary at different staff levels; i.e., it may cost more to recruit a top-level manager than an entry-level employee. The information you provide in this form should be based on costs to lose and replace an employee in a same or similar occupation or position as the employees you are assessing in the workforce program.

**Hiring from the typical source(s).** The costs you input on the Costs of Turnover Per Employee form represent the average costs of an employee from any source from which the employees are usually hired, e.g., walk-in applications, temporary services, response to a specific advertisement, or workforce organizations.

**Do not include** costs or payments you make for employees you hire from the workforce program that you are assessing. These costs are represented on the Business Investment in Workforce Services form. Review both costs forms to clearly understand the distinction.

#### **(1) Separation costs**

Input or estimate the costs of losing an employee in this occupation. Consider, for example, separation pay, change in unemployment tax rate, Human Resources administrative costs, the wage costs for an exit interview, and any other relevant separation costs.

Add any notes or comments that describe the separation costs, as appropriate, in the “Notes” area.

## (2) Vacancy costs

Input or estimate the costs of not having one employee in this occupation available to work, i.e., the costs to cover shifts for one lost employee.

**Average number of days to replace an employee in this position.** The Excel Tool will multiply the daily wages and other vacancy costs by the average number of days the position is vacant. If you are using the automated Excel Tool to calculate the costs and do not input an average number of days vacant, the subtotal will only calculate one day.

**Average daily overtime wages for an employee(s) that fills in.** The wages paid to one or more on-staff employees to cover one day's shift for a lost employee.

**Average daily wages for temporary laborers which exceed the average daily wage for this position.** The wages paid to temporary worker(s) to cover one day's shift for a lost employee. Report only those wages that exceed the average wage for the position that is vacant.

**Other costs for vacancy, average per day.** Any other costs related to vacancy.

Add any notes or comments that describe the vacancy costs, as appropriate, in the "Notes" area.

The **Subtotal** is the estimated and/or known item-by-item costs to accommodate the vacancy of one typical employee.

## (3) Recruitment/screening costs

Input or estimate the costs to recruit and screen one new employee for this occupation.

**Advertising costs.** The cost to advertise for one employee.

**Recruiting fees.** The cost to pay for recruiting services for one employee.

**Pre-employment skills/aptitude testing fees.** The cost to administer and score a pre-employment test(s) to recruit one qualified employee. May include the costs for the average number of failed pre-employment tests.

**Drug screening/background check fees.** The costs for the number of drug screenings, background checks, and any other such pre-employment screenings administered to recruit one qualified employee. May include the costs for the average number of failed pre-employment screenings.

**Other recruitment/screening costs.** Any other costs related to recruitment and screening applicants to recruit one qualified employee. Consider, for example, wages for time spent interviewing the average number of applicants required to recruit one qualified candidate, hiring bonuses or incentives, and any other relevant costs.

Add any notes or comments that describe the recruitment and screening costs, as appropriate, in the "Notes" area.

The **Subtotal** is the estimated and/or known item-by-item costs to recruit and screen one typical employee.

#### (4) Orientation costs

Input or estimate the costs to prepare one new employee to work productively in this occupation or position.

**New employee orientation.** The cost of wages for the new employee to attend a typical or formal orientation, the wages of the manager or HR staff who conduct the orientation, and charges for space or other materials associated with orientation.

**Employee literature and forms; company literature.** The cost for providing a new employee with company literature and forms, for example, benefits information and procedures manuals.

**Initial on-the-job training period.** The employee wages paid for the typical number of days during which a new employee is considered in-training on-the-job. Also, estimate the wages for supervisors or trainers dedicated to this training.

**Performance differential during orientation period.** The employee wages “lost” due to less-than-expected productivity during the typical number of days a new employee is considered in-training on-the-job.

**Other costs to process a new employee.** Any other costs related to providing orientation and on-the-job training to a new employee to prepare him or her to work productively.

Add any notes or comments that describe the orientation costs, as appropriate, in the “Notes” area.

The **Subtotal** is the sum of the estimated and/or known item-by-item costs to prepare one typical employee to work productively. If all cells are left blank, an overall estimate of orientation costs can be entered in the left column.

#### (5) Cost to replace one employee in this occupation

The **Total** is the combined estimated and known item-by-item costs to replace one employee in this occupation or position. This total includes separation, vacancy, recruitment/screening and orientation costs.

### Worksheet 6: Report

The Report has three sections and prints out three sheets. The first sheet has the results for retention, turnover, and diversity, and is most relevant for assessments that involve a comparison group. The second sheet looks at skill and performance indicators of interest and assesses these before the workforce service. The third sheet looks at similar measures after the workforce service. The second and third sheets are the main sources of results for before and after assessments. The third sheet, however, can be used for both comparison group and before and after assessments.

In the upper right corner of the Report page is a drop-down menu with the list of employers. Be sure to check that the employer whose results you would like to see is selected.

**Item 1: Number of people included in both Workforce Group and Comparison Group.** This item on the report page shows the number of people who are included in both the workforce group and the comparison group, if applicable. It is a good idea to check and make sure that number corresponds to the number of people for whom you intended to enter data for this employer.

## Explanation of the retention results

The Excel Tool Report estimates the difference in retention performance between a workforce group and a comparison group. If cost information is also entered, the Tool will also calculate “cost-benefit” results on the Report. Cost data can be entered on the **Costs of Turnover Per Employee** page and the **Business Investment in Workforce Services** page or directly on the report page as estimates in designated cells. The notation “n/a” will display for any result that can not calculate because data are missing (e.g., you did not input any comparison employees on the Employee Information list). Below we review each item in this section.

**Item 2: Per employee investment business has made in hiring from workforce program.** This item shows the per employee investment the business has made in hiring from the workforce program. This information is drawn from the Business Investment in Workforce Services worksheet in the workbook. Alternatively, you can enter an estimate of this cost in the green dotted box in the far right column. If you enter an estimate in that box, you will see the number displayed in the left column with a notation after the number to remind you that it is an estimate.

**Item 3: Business’ per employee turnover cost.** This item shows the business’ per employee turnover cost for employees who have the same or comparable positions as those employees who received services from the workforce program. This figure can be calculated using the Cost to Replace and Hire worksheet, or an estimate that the employer typically uses can be inserted in the far right column. It is important to remember that the figure used here should be specific to the level of worker being considered as part of the assessment. For example, many nursing homes will estimate a much higher per-employee turnover cost for Registered Nurses (RNs) than they will for Certified Nursing Assistants (CNAs). Significantly over- or under-estimating turnover costs will give an erroneous result when considering the monetary benefits of the workforce program.

**Item 3a** shows the per employee investment the business has made in hiring workers from sources other than the workforce program. This information is drawn from the Cost of Turnover Per Employee worksheet in the workbook. Again, if you would like to enter an estimate instead of calculating on the sheet, you may do so in the box to the far right. As above, many businesses have a rule-of-thumb number that they use as their hiring cost, but care should be taken that the estimate pertains to the level of employee under consideration.

### **Item 4: How much did your business client “spend” hiring each group of employees?**

This item provides a comparison of the total “cost” for each group of employees. This cost calculation is based on the hiring costs for each group (Item 2 for the workforce group and Item 3a for the comparison group) and is simply the result of the number of employees in the group multiplied by the relevant per-employee hiring cost.

**Item 5: Which group represents higher turnover costs?** Once each new employee is hired – whether they are with the workforce program or are hired from other sources – we assume that it costs your business client the same amount to replace him or her and hire a new employee if they terminate employment.

Therefore, cost-benefit Items 5b and 5d are calculated using the Costs of Turnover Per Employee, or “turnover costs” per employee. The cost per employee is multiplied by the number of employees

who left during the time period referenced for a total cost in each of the workforce and comparison groups:

**5b** number of employees who left within three months from hire multiplied by the turnover cost per employee.

**5d** number of employees who left within six or 12 months from hire multiplied by the turnover cost per employee (simply click the button for six months or 12 months to see the result that is of interest).

In 5e and 5f, we take a slightly different approach to looking at the same issue. We consider how well the hiring investment for the workforce group and the control group compare by viewing that investment in light of retention results. In 5e, we see how many of the originally hired employees are still working for the company and then calculate 5f:

**5f** employees still employed at the time of the report divided by total cost of hiring all employees within that cohort (Item 5e divided by Item 4).

**Considerations for the Excel Tool employee retention results**

**How the Excel Tool accommodates “estimated” retention rates.** It is not always feasible for your business clients to provide you with an actual comparison group of employees with which to compare retention rates. The Excel Tool accommodates this circumstance by allowing you to input “estimated” retention rates on the Report for your comparison.

IF MULTIPLE EMPLOYERS: The Report form accepts estimated costs and rates for only one business at a time. (1) Use Copy Report for a separate Report; then (2) input estimates for the

	Copy Report	Employee of Workforce Program	Employee of Comparison
5 Which group represents higher turnover, and turnover costs? The calculations for 5b, 5d and 5f require a turnover cost figure in Item #3 above.			
a) How many employees from each group remain 3 months after hire?	19 (79%)	0 (82%est.)	Est. average rate: 62%
b) What is the cost of turnover for employees who were gone within 3 months of hiring (using the cost figure from #3 above)?	n/a	n/a	
c) How many employees from each group remain 6 months after hire?	17 (71%)	n/a (54%est.)	Est. average rate: 54%
d) What is the cost of turnover for employees who were gone within 6 months of hiring (using the cost figure from #3 above)?	n/a	n/a	
e) How many employees from each group are still employed (at the time this report was prepared)?	16 (67%)	0 n/a	Est. average rate:
f) What is the average cost for each employee who is still employed? (If no employees remain, this is the total amount spent on hiring for the group.)	\$0	\$0	

**Figure 6: Retention results on the Excel Tool Report**

Figure 6 highlights several aspects of retention results and the Excel Tool Report page.

**Where to input estimated values.** In this example, the business client has provided estimates of his or her usual retention rates for three-month and six-month retention, and these figures are entered in the cells to the right marked “Est. average rate” (Figure 6, item A). When a value is entered in the cells for estimated values, this value is transferred to the column for “Employees for Comparison” and is followed by a notation “(est.)”

**Three-month, six-month or 12-month retention results.** The Excel Tool Report is pre-set to present three-month retention rates from the Employee Information records. We found that this

period corresponds to many companies' probation periods, and that, for a number of employers, employment beyond 30 days is a good indicator that a new hire was adequately prepared for the job. You can also review both six-month and 12-month retention using the Report, Item 5c on Page 1. However, you can only print either six- or 12-month retention using the “toggle” button in Item 5c as shown in Figure 6, item C. That is, you can not print six- and 12-month retention results simultaneously.

### **Explanation of the employee quality and advancement results**

As noted above, for many employers, retention is a good proxy to indicate the general quality of employees. However, the Excel Tool Report includes several options in addition to retention that may be of interest in assessing general employee quality. These include attendance, disciplinary actions and advancement.

**Item 7** on Page 1 of the Report is “involuntary turnover,” or the number of terminations for cause. This result will automatically be included on the report page.

Other items relating to general employee quality and advancement can be selected when entering information on the Setup page. Options for these additional results are described in the section on Worksheet 2 that describes Additional and Custom measures.

### **Explanation of the Excel Tool employee skills results**

Employee skills results, and how they show up in business costs and revenues, are presented on Pages 2 and 3 of the Excel Tool Report.

- If you are using a **before-and-after comparison design**, you will use both Page 2 and Page 3 of the Report for “before” and “after” employee skills results, respectively.
- If you are using a **comparison group design only**, you will likely use only Page 3 of the report for employee skills results, i.e., you are comparing the results “after,” or as a result of, the workforce program.

The type of output or tasks that you can assess using the Excel Tool must have one or more of these elements:

- The output or task can be counted.
- A predefined level of output or number of tasks to complete that is expected for each worker, job or position within a set amount of time.
- A pre-defined standard of quality that defines the output or task as “acceptable” or not.

**Item 1: What is the efficiency of the employees?** Efficiency relates to the employees' ability to meet or exceed expected output, in units or tasks completed, in a given time period. Efficiency can also be thought of in terms of “goal completion” or “using capacity.”

**1a** average amount of output/units or tasks completed.

**1b** average percent that the actual output/units or tasks completed represents as a proportion of the expected output or tasks completion.

4/5 From the Setup page, you can select additional results to assess employee efficiency.

If you select “Average time per task, unit or job” to assess employee skill results, you would look for decreases in the average time per task or unit over time, or better rates among workforce group employees than comparison employees.

**Item 2. What amount of scrap or waste is associated with the employees?**

**Accuracy** relates to how much of the employees’ work meets expected quality standards. The inverse of accuracy is **error**. Error, otherwise known as “scrap” or “waste,” is the result that the Excel Tool calculates at the group level.

2a average amount of scrap, waste output/units, or “unacceptable” tasks completed.

2b average percent that scrap, waste output/units, or “unacceptable” tasks completed represents from the employees’ total output.

4/5 From the Setup page, you can select an additional result to assess employee error (i.e., accuracy).

If you select “Total, and average, tasks, jobs or units that require repair or re-doing,” (and it represents a different measure of accuracy than scrap or waste that is considered “unrecoverable loss” for your work context), you should consider carefully how changes in this outcome should be interpreted.

**Item 3. What amount of these employees’ time is not spent directly on productive tasks?**

**Direct time**, as it is referred to in manufacturing, relates to how much of the employees’ time is spent directly on productive tasks. The inverse of direct time is **indirect time**. Otherwise known as “non-productive time,” indirect time is calculated at the group level in the Excel Tool.

3a average number of indirect time, in hours.

2b average percent that the indirect hours represent as a proportion of total hours worked.

**Items 4 and 5. Additional employee skills results.** From the Setup page, there is one additional pre-set result that may be appropriate for assessing your workforce program’s effect on employee skills: “Number and percent who successfully achieved a skill assessment milestone (e.g., passed a required exam or achieved a certification).”

**Explanation of the employee skills estimated cost-benefit results**

The Excel Tool Report has several “monetized” results which allow you and your business client to estimate the value of change in waste product, the value of change in efficiency, and the value of change in non-productive time, over time or comparing the workforce group employees to other employees.

The cost-benefit items 2d and 3d on Pages 2 and 3 of the Excel Tool Report use estimated “monetizers” that, once input, are applied to each of the employee skills results.

The notation “n/a” will display for any result that cannot calculate because data are missing (e.g., you did not input any comparison employees on the Employee Information list).

**2d. What is the estimated cost of the waste?** The “cost of waste” (also known as the cost from errors made or unacceptable work) is an amount of company sales or revenue that is either unrecoverable or is revenue foregone because waste is an accepted part of the work environment.

In order to estimate the “cost of waste,” your business client must provide his or her sales or revenue, for a set period of time (e.g., per week, month or year). You will input this value in Item 1c. This value is then multiplied by the error or scrap rate for an estimated dollar value for the “cost of waste.”

**3d. What is the estimated cost of non-productive time?** The “cost of non-productive time” (also known as indirect time) are the labor costs lost to non-productive time. In order to estimate the “cost of non-productive time,” your business client must estimate the average hourly rate of pay for the typical employee in the occupation(s) included in the assessment. You will input this value in Item 3c. This value is then multiplied by the average hours of indirect time for an estimated dollar value for the “cost of non-productive time.”

## Share Your Excel Tool Results with Us

These Excel Tool results are a first-of-its-kind attempt to help workforce programs see what dollar value their programs represent for their business clients. We will update the toolkit and the On-line Resource Center as we receive feedback from practitioners like you about the ways your business clients try to estimate the dollar value of your workforce services. Contact us with questions and suggestions using our on-line feedback form at [www.aspenwsi.org/BVAmail.asp](http://www.aspenwsi.org/BVAmail.asp)

Thanks you!

## PART 3: USING QUESTIONNAIRES

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The benefits resulting from workforce services may not be measurable based on data that are collected by your business client as a matter of course. Sometimes new data must be collected from workers, supervisors or customers to answer important questions about the results of a workforce development service. In these cases, you and your business client may want to consider whether a special questionnaire-based data collection project is appropriate.

The types of questions that you may need to collect new data via questionnaires to inform include those that ask for opinions about workplace performance in areas for which data do not exist. These commonly include, but are not limited to: soft skills (such as confidence or communications), technical skills and knowledge, and satisfaction (employee, supervisor and customer). Some examples of these types of questions include:

- Are employees performing job tasks more confidently following a workforce service?
- Have employees demonstrated improved skills or knowledge on the job following a workforce service?
- Are customers more satisfied with services provided by employees following a workforce service?

As we introduce *Using Questionnaires* to the **Business Value Assessment toolkit**, we want to stress that the methodological rigor associated with traditional survey evaluation is likely to be neither feasible nor expected by your business client. This is because employers regularly make business decisions based on what they have described to us as imperfect yet timely, relevant and defensible information. The guidance in this Handbook is derived from reflecting on issues and practices that were commonly experienced among the Learning Group partnerships who implemented questionnaire-based data collection projects to inform assessment questions, and thus it is beyond our scope to provide detailed information about traditional survey methodology. Practitioners should be able to use this guidance, in conjunction with discussions about expectations of rigor with your business clients, to construct useful, locally credible questionnaires for business value assessment.

### Consider Other Sources of Information for Your Assessment

While you and your business client may ultimately decide to collect new data via a questionnaire, this should not be your first choice of business value assessment method. Using questionnaires is time- and resource-intensive and involves designing a questionnaire tool; asking employees, supervisors and/or others to complete it; and key-entering and analyzing questionnaire responses. Furthermore, while questionnaires can provide meaningful and relevant quantified results, they are

still imprecise methods for assessing business value results, because most questionnaires gather stakeholders' impressions and opinions, rather than factual data.

Consider first whether your business client has other (existing) sources of employee or management information that are appropriate for assessing the outcomes deemed relevant to the workforce service that has been provided.

Look at the Excel Tool for pre-programmed results you can assess, and the employee, performance, and cost information you will need to assess those results.

Look at the instructions for custom results you can assess with the Excel Tool and the information you will need to assess those results.

Check the On-line Resource Center ([www.aspenwsi.org/BVAresources](http://www.aspenwsi.org/BVAresources)) for case examples and more ideas about how you can gather concrete evidence of your workforce service results.

Consider if any of the options from the list above – alone or in combination – provide appropriate and sufficient data for you to assess the business value of your workforce services without using a questionnaire. If you decide that a questionnaire is the most feasible way to address your questions about business value, read through the remainder of this section of the Handbook and then work with your business client to complete the Questionnaire Planning Worksheet at the end of this section.

## Fundamental Issues in Questionnaire Development

Our experience suggests several fundamental issues to consider as you proceed with developing a business value assessment questionnaire.

### **Frequently evaluate your developing questionnaire against your program and assessment objectives**

As part of your planning and decision to use a questionnaire, you should review Part 1: Planning Your Business Value Assessment, and complete the *Assessment Planning Worksheet* included at the end of Part 1 to outline your workforce program objectives and the results your business client expects to see. Frequently, refer back to the program and assessment objectives and confirm that the questionnaire you are designing relates back to your original objectives as directly as possible.

### **Keep your questionnaire simple**

Keep the whole process as simple and streamlined as possible. Questionnaires tend to take longer and involve more effort than anticipated, frequently becoming much more complex than necessary. Do not let the design process stretch out so long that interest and focus are lost. Here are several ideas for simplifying your questionnaire design and implementation. More information can be found at the *On-line Resource Center*.

**Computer-based questionnaires.** If computers are used on a daily basis by those you wish to query in your business client's work setting, you might want to use a free or low-cost Web-based service to design and implement your questionnaire. These allow respondents to complete questionnaires online. They also tabulate responses and produce standard reports. Some of these Web-based survey

design and implementation sites include: [www.surveyz.com](http://www.surveyz.com), [www.surveymonkey.com](http://www.surveymonkey.com), [www.zoomerang.com](http://www.zoomerang.com), and [www.questionpro.com](http://www.questionpro.com).

**Paper-based questionnaires.** If your questionnaire will be paper-based, Microsoft Word and Microsoft Excel have many options for simple but clear questionnaire formatting. In addition to the examples in this Handbook, you can download and modify free templates from <http://office.microsoft.com/templates/>.

**Writing questions.** Use examples to jumpstart your questionnaire design process, rather than writing your own “from scratch.” You can build upon examples from the On-line Resource Center. You will also find many examples of questions online (e.g., the Employee Survey Library at [www.surveyz.com](http://www.surveyz.com)) and in reference books.

### Keep your questionnaire brief

Limit the number of questions on your questionnaire in order to reduce burden on your business client’s staff, reduce the burden of tabulating and analyzing results, and increase the likelihood of getting completed questionnaires. Consider these guidelines for evaluating the appropriate length of your questionnaire:

How many business value items are you assessing? How many questions do you have for each result? Limit the number of questions that relate to each result.

If you use more than one question to assess your results in any business value category, do the questions evaluate distinctly different aspects or is the outcome so important that you need to see it confirmed via different questions?

Will respondents have to answer multiple questionnaires? For example, will one supervisor complete two separate questionnaires for two employees? Will employees complete a questionnaire before and then again after training? Consider reducing the number of questions, because the total questionnaire burden will increase in these cases.

Do you have the time and capacity to key-enter and analyze the number of questions for the number of returned questionnaires that you expect?

How long do you expect your report or presentation of results from the questionnaire to be? Rule of thumb –half a page for each question you ask (i.e., a paragraph explanation and a table or graph).

### Review and re-review each question critically

Writing good questions is much harder than most people think! This Handbook does not attempt to entirely cover this complex topic, but rather provides examples to jumpstart your thinking about question writing and gives you some basic guidelines. The following Question Writing Checklist highlights what you should focus on as you write your questions. You can also check the On-line Resource Center for additional information.

### Question Writing Checklist

**Ask: “Does this question relate to our objectives?”**

Does this question relate to one of our workforce program objectives?

Does this question relate to one of our business value objectives or expected business value results?

**Ask: “Does this question give information that helps us present business value results?”**

How will this question give evidence of our results?

Do I have any or enough questions about “how much” or “how many” changes, or time or resource savings that have occurred from the workforce program?

How do I envision reporting the responses from this question or response category?

**Ask: “Can the respondent understand this question?”**

Is the language simple, and clear? Are the sentences short? Are instructions clear? Keep in mind the typical respondent’s reading skill level and comfort with English language.

Will employees interpret the question similarly? Are definitions provided for terms or concepts that the respondent might not understand or that can be interpreted more than one way?

Does this question ask about only one topic or aspect?

Is the question worded “positively?” Check for “no” or “not” in your question, which can cause respondents to respond exactly opposite of their true response because of confusion.

**Ask: “Are the response categories/scales appropriate?”**

Do the response categories (i.e., the items that the respondent circles or checks to indicate a response) relate to the question?

Do you use only one or two different response scales consistently throughout the questionnaire to avoid confusion? Examples include: [Yes / No], [Rarely / Sometimes / Frequently], and [More Likely / About as Likely / Less Likely].

Do you avoid putting the response scale components in the questions? For example, with an [Almost Always / Sometimes / Almost Never] response scale, the statement, “My supervisor always sets clear goals,” would be impossible to answer with this scale.

## Evaluate Your Capacity for Questionnaires

Confirm that you have adequate capacity to design, implement and interpret the results of your questionnaire project. For each of the following capacities, consider both the skills and the time that are necessary for your questionnaire. You may determine that the capacity is present in your staff, or you may decide that you need to seek (and pay for) assistance from a consultant.

### Questionnaire design capacities

This Handbook provides guidelines and the On-line Resource Center offers examples of a variety of types of questions and formats, but there are no ready-made questionnaire templates for all situations. Assign someone who has knowledge of both the workforce service and business' objectives to design your questionnaire. This person must be able to integrate basic questionnaire design principles with your program objectives and what your business client wants you to assess.

### Analysis capacities

As you review your questionnaire, you must determine: "Can we analyze and interpret the questionnaire data?" The individual who will perform data analysis and write reports should also be involved with design and/or review of the questionnaire before use.

### Data entry

Who can review the completed questionnaires for accuracy and valid responses prior to data entry?

Who will enter the completed questionnaires into a computer database (e.g., Excel)?

How much time will this review and data entry of responses take?

### Tabulation (e.g., statistics)

Who understands simple statistics well enough to provide meaningful data output?

Who knows how to use Excel<sup>1</sup> to produce simple data output, including counts, percentages, means, medians, tables, frequency tables, two-way tables and charts?

Does this person also have an understanding of the business' objectives for acquiring the workforce service?

### Interpreting and reporting results

Who can interpret and understand the questionnaire results when they are presented as counts, percentages, means, medians, tables, frequency tables, two-way tables and charts?

Who can prepare a brief and meaningful report about the questionnaire results in relation to the assessment question(s)?

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<sup>1</sup>Microsoft Excel is a readily available database and data charting software that is adequate for typical business value assessment uses. SPSS and SAS are other commonly used data analysis software packages.

### Assistance from outside your organization.

Will you need a consultant or assistance from outside your organization, or from staff who are not involved on a daily basis in the workforce programs for your business client, to analyze and interpret the results?

This person should be involved in questionnaire design and implementation, so he or she can knowledgeably interpret the results.

## Decide Who You Want to Answer Your Questionnaire

You must identify the group of staff at your business client who should answer your business value assessment questionnaire.

Who has the perspective, opinion or feedback that will help you assess whether your workforce services resulted in improvements, changes or other business value in the work setting?

This is your **respondent** and determines what kind of questionnaire you will design: one targeted for employees, supervisors, customers or human resources staff.

Our experience from the Learning Group suggests that typical business value assessments most often use an employee or supervisor questionnaire. Therefore, the majority of our guidance is focused on employee and supervisor questionnaires.

### “Employee” and “supervisor” defined

For the purposes of business value assessment questionnaires, **employees** are the workers who attended the workforce program(s) or workers in similar positions as the workforce group, if we are referring to a comparison group of employees.

“Supervisor” is defined relative to the specific workforce situation that is the focus of your business value assessment. **Supervisors** manage and oversee the groups of workers who attended the workforce program and/or who are being used as a comparison group. Supervisors may hold titles such as managers, team leaders or supervisors; they have interactions with the workers, such that they are able to give their opinions or perspectives on whether the workforce program results can be seen on-the-job.

### Employee questionnaires

Employee questionnaires ask employees to reflect about their use of knowledge or skills acquired from the workforce services. These instruments might ask employees to answer questions on topics such as the following:

Whether the employee believes he/she is performing better or differently (due to the workforce services) for the specific tasks.

Whether the employee feels that he/she can perform job tasks more confidently, quickly, or accurately, and by how much (e.g., a lot, somewhat or a little),

Whether the employee can estimate how much more quickly or accurately (e.g., minutes or percentages) he or she performs these job tasks.

Whether the employee feels he or she can communicate better, read and write better on-the-job, or troubleshoot and repair problems better (due to the workforce services).

How the employee thinks his or her improved skills and/or knowledge show up in his or her day-to-day work (e.g., less time spent on tasks, fewer problems, ability to do new tasks, etc.).

Whether the employee can estimate by how much these changes affect his or her day-to-day work (e.g., a lot, somewhat, a little, in minutes, or in hours).

### **Supervisor questionnaires**

Supervisor questionnaires ask supervisors to rate employees' use of knowledge or skills acquired from the workforce services and how this affects the work setting or their own jobs. These instruments might ask supervisors to answer questions on topics such as the following:

Whether employees are performing better or differently after the workforce services for specific tasks.

Whether employees perform job tasks more confidently, quickly, or accurately, or, whether employees perform job tasks more confidently, quickly, or accurately than employees who did not receive the workforce services? By how much (e.g., a lot, somewhat or a little).

Whether supervisors can estimate how much more quickly or accurately (e.g., minutes or percentages) employees performs specific job tasks.

Whether supervisors report that employees are able to communicate better, read and write better on-the-job, or troubleshoot and repair problems better after the workforce services or, compared to employees who did not receive the workforce services.

Whether new skills or knowledge show up or affect supervisors' or employees' day-to-day work (e.g., less time spent on tasks, fewer problems, etc.).

Whether supervisors can estimate by how much these changes are evident in day-to-day work (e.g., a lot, somewhat, a little, in minutes or in hours).

### **Deciding between supervisor or employee questionnaires**

You may choose to ask employees about their own experience; to ask supervisors for feedback about their employees' performance; or to ask both supervisors and employees for their feedback indicating what business value your workforce service provided. Your choice of questionnaires depends on the specific situation for assessment, your business client's needs and expectations, and which type of questionnaire is the most feasible to accomplish with the least burden that will give you the most reliable and credible results?

## Define a Benchmark or Something to Compare Against

**Benchmarking** comparisons help you know that the results you observe are likely to be linked with your workforce services and should not be the result of randomness or some other factor in the work setting. For example, by comparing employee performance or experiences in time periods occurring before and after the workforce services, you can assess whether a group of employees “improved.” By comparing the performance or experiences of employees who received a workforce service to other, similar employees who did not receive workforce services, you can assess whether employees “are better” on some element. Scan the questionnaire examples in the *On-line Resource Center* for ideas about including a comparison element in your business value questionnaire design.<sup>2</sup>

It is important that you carefully discuss with your business client the variety of other factors that may affect performance between different employee groups or in different time periods. Examples of these include things like changes in work activities or assignments to employees that are unrelated to skill level or training, changes in equipment or company procedures, changes in the flow of work due to contracts or other factors, among others. Your business client must feel confident that these other factors will not overwhelm any change believed to be due to the workforce service.

### Basic types of comparison

There are four primary comparison options for workforce business value questionnaires. They are explained briefly here. Examples and further information for each option are presented at the *On-line Resource Center*.

### Ask the same questions twice and compare the differences

One way to assess the results of your workforce services is to use the same questionnaire twice and report the differences in the responses as your results.

1. In a **before-and-after** design, you ask the questions from your questionnaire before the workforce program and then ask the same questions from the same questionnaire after the program. For example, if you ask this question before and after the workforce program...

*How many minutes, on average, do you spend completing the Error Report form?*

...the difference between the reported time spent completing Error Report forms before and after the program are your business value results. That is, if all things were equal, asking the same questions twice would give you the same responses. However, with your workforce services as the “treatment,” when you ask the same questions twice – once before the workforce service and again afterward – you should get different responses, and these differences indicate the results of your program.

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<sup>2</sup>See WSI Update 3 for a brief discussion of the evolution of benchmarking methodology used by members of the working group that informs this Handbook.

2. In a **comparison group** design, you ask the same questions for the employees who were part of the workforce program and employees who were not part of the program. For example, you ask supervisors to rate two employees: one from the workforce program and another for comparison...

*How much time (minutes/hours), on average, do you spend correcting this employee's completed tasks each week?*

...the difference between the reported time spent for each employee is your business value result.

### **Respondents report the differences from the workforce program**

Another comparison option is to ask the respondent to report about the differences that are observed pursuant to the workforce program. What the respondent observes as different is assumed to be the results of your workforce program.

1. In a **retrospective** design, you ask the respondent how the situation is different after the workforce program compared to what they remember about the situation before the program. For example:

*Compared to before training, do you need [more help, less help, about the same amount of help] setting up the machine?*

2. In a **"comparison to the average"** design, you ask the respondent to compare against an "average" employee who did not attend workforce services. For example:

*Compared to employees hired from other sources, how well does this employee resolve conflicts [better, worse, about the same]?*

## **How Many Responses Is Enough? – Sample Sizes and Response Rates**

In survey methodology for political surveys or nationwide evaluation surveys, there are statistical determinants of how many respondents you must have; in common terms, people speak of "sample size" and "response rates." For typical workforce business value assessments, it is unlikely that you will be able to meet these rigorous statistical standards. Rather, think about sample size and response rate as concepts to help you consider your results "in context." So, for the purposes of our work with basic workforce business value assessment questionnaires:

**"Sample size"** relates to the group of people you want to answer your questionnaire. For example, if you plan a questionnaire for the 17 supervisors and managers of 63 recently trained workers, the sample size is 17. A pool of 17 responses may seem very small, but it is an appropriate sample size if it is comprised of all relevant supervisors and managers.

**"Response rate"** is the number of people who complete your questionnaire from the total you give it to, expressed as a percentage. So, if 15 of these 17 supervisors complete your questionnaire, your response rate is 88 percent, and you will probably be fairly confident that you got responses from the range of perspectives you wanted.

There are no rigid guidelines for considering sample size or response rate. Rather, the guidelines are based on your business client's perspective and what he or she considers credible and useful. Here are some ideas for discussing sample size and response rates with your business client:

What percentage or number of responses will you consider to be a reasonable and credible indication of the workforce program's results? Are there other factors we should consider?

How many workers received the workforce services? Were there enough that we can reasonably expect the workforce services to contribute to a noticeable difference in the workplace, or is it appropriate to reconsider the feasibility of assessment or the unit of assessment (e.g., workplace versus individual workers)?

Would it be useful to look at this (small) group of employees now and consider those results along with the next group we serve? Will this information be useful for you to understand the value of our services?

If supervisors will compare their impressions of the workforce group against another group of workers, consider:

How many similar employees who did not receive the workforce services are available to compare against? Are there enough to allow a reasonable comparison, so that we are comfortable the workforce services contributed to the results?

If you want to assess the results of the workforce program on the overall work environment, consider:

Did enough employees participate in the workforce program, as a proportion of the total workforce or the workgroup of interest, to see a change?

Whatever decision is the result of your discussing the "size" of the group included for the assessment, keep this discussion in mind when interpreting the results.

## Strategies to Optimize Questionnaire Administration

There are several issues to consider while you plan your questionnaire with your business client, so that you can effectively gather information about the business value of your workforce services.

### Accommodate your business client's staff

Using questionnaires with employees in a business setting presents several issues, including issues of burden, authority to ask for employees' input, and information privacy.

Do you have to request permission from someone, other than your primary business client contact, to distribute questionnaires to employees, e.g., someone at a higher level or someone who directly manages the employees?

Take several minutes at a regularly scheduled meeting to discuss the upcoming questionnaire with supervisors.

Is there a supervisor or manager who can review the questionnaire prior to use? His or her perspective on its relevance to the day-to-day work setting and job tasks related to the results you hope to assess will probably be very helpful.

Are there other events or situations in your business client's work setting that might interfere with getting responses to your questionnaire?

**Privacy of responses.** When asking for feedback via questionnaire, it is important to assure respondents that their responses will be kept confidential. Develop a plan for keeping responses private, so that employees can feel comfortable giving truthful responses:

Include a brief paragraph on the questionnaire introducing the questionnaire purposes, how the business hopes to use questionnaire results, and explaining how confidentiality will be maintained.

Consider providing an envelope for returning the completed questionnaire by mail.

Have a non-supervisory staff member collect and secure the completed questionnaires.

Explain your plan to report results without names or identifying information.

If you must keep track of who did and did not complete questionnaires, assign respondents unique identification numbers. Keep a list of the names and identification numbers, and put only the identification number on the questionnaires you distribute.

### **Decide if you will administer questionnaires to all employees of the workforce program**

If a large number of employees were involved in a workforce program, you must decide if you will try to obtain a completed questionnaire from each employee.

If you use an employee questionnaire for a large group of employees, consider:

Will you be able to accommodate (e.g., distributing, collecting and key-entering) that number of questionnaires, or do you need to think of a less burdensome approach?

Can you assess the results among a sub-group of employees and feel confident that they reflect the overall results? If so, determine how this sub-group will be selected in collaboration with your business client.

If you use a supervisor questionnaire for a medium-size or large group of employees, consider:

Can you provide the list of employees that each supervisor will rate with the questionnaire? This list should include at least the employee names and other information that allows the supervisor to clearly identify and think about the employees they will rate.

From among the employees to be rated, how many will you ask each supervisor to rate? That is, will each supervisor have to rate 10 employees? Is it too much effort? Will the supervisor be able to distinguish among the performance of individual employees in answering questions?

If you must limit the number of employees each supervisor will rate individually, try to select the employees they will rate using a random process, so that the selected employees are more likely to represent the larger group.

If supervisors must complete separate questionnaires for different employees, provide multiple copies of the blank questionnaire so they do not have to make copies.

You may be considering asking supervisors to rate a number of employees as a group. Be aware that, in addition to possibly creating difficulty for supervisors tasked with generalizing across their experiences with a number of individuals, this will also reduce your "sample size." You and your business customer must feel comfortable interpreting the results with the knowledge that there may be only a few completed questionnaires.

### **Increasing your response rate**

Even though your target response rate for workforce business value questionnaires is determined not by statistical considerations, but by the expectations of your business client, you still want to get the highest possible response rate so that you are confident you received feedback from the range of perspectives you wanted.

Use a regularly scheduled meeting to distribute the questionnaires and have employees complete and return them before the end of the meeting.

Make sure employees are authorized to complete the questionnaire as part of a scheduled shift. Make sure that this authorization is communicated to workers and their supervisors.

Provide food and ask employees to complete the questionnaire during break.

Provide a nominal incentive for completing questionnaires (e.g., \$3-cafeteria credit or cash).

Conduct a raffle for a larger prize that only questionnaire returnees have an opportunity to enter.

## **The Questionnaire Planning Worksheet**

There are a variety of possible questionnaire frameworks, accounting for different comparison options, whether the questionnaire will be administered to employees or supervisors, and of course, the purpose of the questionnaire and, therefore, its response categories/scales and substantive content! The On-line Resource Center provides a number of examples of how and why different types of questionnaire designs have been used by group members. Check the On-line Resource Center occasionally for examples of how other workforce-business partnerships across the country are using questionnaires in their assessments.

We do not provide rigid guidelines about which type of questionnaire to use for any given situation, because **the choice of a questionnaire type and comparison framework will vary from one situation to the next. In addition to the factors noted above**, you must also consider, for example: the type of workforce program, how many employees were included in the program, the timeframe of the program, and timeframe over which results are expected. Use the following Questionnaire Planning Worksheet with your business client to help you get started.

# QUESTIONNAIRE PLANNING WORKSHEET

Person completing this form:

Date:

## (1) DEFINE THE BUSINESS VALUE RESULTS YOU WANT TO ASSESS

Complete the *Assessment Planning Worksheet*, to describe, in detail, the results you will assess. Summarize business value results you expect in this space. Consider whether the Excel Tool or questionnaires are the best method for this assessment.

## (2) DEFINE YOUR EMPLOYEE QUESTIONNAIRE

Describe the workforce employees, and comparison employees, if appropriate. Complete this description even if you will not use an employee questionnaire.

Employee questionnaire?  Yes  No

**Topics:** List specific improvements, changes, time/resource savings, or other results employees will assess. This will form the basis for developing the content of your questions.

**Workforce program employees:** Describe the employees who participated in the workforce program

How many?

Who are they?

**Comparison group employees:** Describe the employees who will serve as a comparison, if appropriate.

How many?

Who are they?

**Comparison:** What type of comparison will you use, for the employee questionnaire?

1  *Before-and-after* (same questions asked of employees before-and-after program)

Describe:

2  *Retrospective* (employees compare situation now, to before)

Describe:

3  *Comparison group* (same questions asked of different groups of employees)

Describe:

**Other:**

## (3) DEFINE YOUR SUPERVISOR QUESTIONNAIRE

Complete this description even if you will not use a supervisor questionnaire.

Supervisor questionnaire?  Yes  No

**Topics:** List specific employee performance changes, time/resource savings, or other results supervisors will assess. This will form the basis for developing the content of your questions.

**Who:** Describe the supervisors who will provide feedback about the results of the workforce program or services

How many?

Who are they?

# QUESTIONNAIRE PLANNING WORKSHEET

**How many employees will each supervisor assess? Or what is the maximum number a supervisor will assess?**

Can you provide a list of names?  Yes  No

**Comparison:** What type of comparison will you use, for the supervisor questionnaire?

1  *Before-and-after* (supervisors asked same questions about employees before-and-after program)

3  *Retrospective* (supervisors compare situation now, to before)

2  *Comparison group* (supervisors asked questions about employees in program group, and in comparison group, from Section #2)

4  *Implicit group* (supervisors compare individual employee in program group to “average” employee)

Describe:

**Other:**

## (4) STOP HERE—DRAFT YOUR QUESTIONNAIRE

In light of the content areas and respondent group you have identified above, draft a list of questions you would like to include on your questionnaire

- \* Consult the *Question Writing Checklist* and assess the questions you have written.
- \* Consider if you need all of the questions you have composed. Do you need more questions?
- \* Review the questionnaire order. Is the order of the questions easy for the respondent to follow?
- \* Simulate responding to your questionnaire. How long might it take a typical respondent to answer your questionnaire? Are there some questions that are particularly hard for your respondent to answer? Can they be made simpler? Can they be eliminated?
- \* Try to get feedback from other individuals. People who are very similar to your respondent group are, of course, the best “testers”, but others who are familiar with what you are trying to assess can also be a helpful set of “fresh eyes” in the editing process.
- \* You will probably want to draft and re-draft your questionnaire several times before you consider it ready.

## (5) DEFINE YOUR TIMELINE AND ASSIGN RESPONSIBILITIES

Discuss these logistics with your business client. Refer to the Handbook for specific discussion points and check the Online Resource Center for examples. Make note of important issues below.

Permission for questionnaires?                      From whom?    Approved : \_\_ / \_\_ / \_\_

Plan for privacy of responses?

Questionnaire(s) used before the workforce program:

Distributing questionnaires                      Who?    When : \_\_ / \_\_ / \_\_

Collecting questionnaires                      Who?    When : \_\_ / \_\_ / \_\_

Questionnaire(s) used after the workforce program:

Distributing questionnaires                      Who?    When : \_\_ / \_\_ / \_\_

Collecting questionnaires                      Who?    When : \_\_ / \_\_ / \_\_

Response incentive? (describe)

Other:

## (6) PLAN TO ANALYZE AND REVIEW THE QUESTIONNAIRE RESULTS

Make note of who is assigned to tasks, timelines or dates, and other important issues below.

Review completed questionnaires:

Key enter, tabulate and analyze the information:

Write or prepare the report:

Plan for discussing and reviewing the results:

Other: