# Ensuring Demand-Driven Youth Training Programs:

*How to Conduct an Effective Labor Market Assessment*

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## GUIDE TO LABOR MARKET ASSESSMENTS

The International Youth Foundation (IYF) supports a range of employability programs aimed at improving livelihood opportunities for disadvantaged young people around the world. These programs prepare youth for quality jobs by equipping them with life skills and technical know-how while connecting them to the mentors, internships, and job placement services they need to succeed in the job market. Our employability programs are focused on helping young people overcome the many barriers to employment by providing preparation for and placement into a first job experience.

The youth we serve live in a wide range of contexts in 73 countries and territories across the globe, from large urban centers in South America and the Middle East to small villages in sub-Saharan Africa and South Asia. Some live in relatively stable environments where there is a strong public and civil support system and where employment in the private sector is readily available to those who are able to obtain the necessary skills. Other youth reside in a context of greater conflict, fragile political systems, security concerns, or weak private sector economies.

As a result of these experiences, IYF has learned that successful employability programs depend heavily on the ability to identify and respond to unique local labor market conditions in each distinct targeted region and to tailor that programming to the specific assets and needs of local youth. To do so, youth-serving organizations and others need to consider both youth and employers as the primary clients of employability programs. This dual-client approach acknowledges that to be effective in serving young people organizations need to also understand and respond to the real human resource needs of the employers in their communities. When programs add value to these businesses, employers are more likely to hire and retain those participants and to become long-term partners in such efforts. Thus, in seeking to design employment interventions that result in real gains both for the youth served and the businesses that will hire them, IYF has adopted a standard program development process that incorporates assessments of local employment environments as a core activity. This guide reviews the rationale and purpose for understanding the employment dynamics of local economies and describes a proven methodology for carrying out a labor market assessment. This Guide was developed to be a tool for youth-serving organizations to design and implement employability programs in their own unique contexts.

We recognize that the industry- and employer-focused research described in this guide must be balanced against similar efforts to understand the particular circumstances and needs of the young people being served in each context. Though not addressed directly in this guide, the work of assessing youth assets and needs is equally critical. Readers interested in gaining a better understanding of IYF's approach to assessing youth needs and opportunities

may refer to *Building on Hope: Findings from a Rapid Community Appraisal in Jordan*. Baltimore, MD: IYF, February 2010.[1]

## WHY LABOR MARKET NEEDS ASSESSMENTS ARE IMPORTANT

A growing number of experts in the development community, including youth-serving organizations and other NGOs in the field, agree that successful youth employment-oriented strategies seek to provide participants with access to programs that are aligned with real labor market opportunities in the environments in which they operate. They have learned that these strategies need to be rooted in a commitment to support the aspirations, develop the assets, and address the needs of young people. Such efforts also need to simultaneously seek to understand and respond to the needs of businesses and other stakeholders who may provide employment opportunities. **Ample evidence tells us that employability programs that aim to help young people obtain employment function best when they:**

- Target high-growth sectors of industry that offer quality entry-level positions

- Provide training for the specific competencies and skill sets that are in demand in those sectors

- Are designed to be responsive to the human resource needs of local businesses

- Include significant and meaningful employer engagement in program design and implementation

Programs that are intentionally designed to address critical needs in local labor markets are more likely to develop highly relevant training content and methodologies and to result in sustainable job placements than programs that are disconnected from local needs. Furthermore, programs are better equipped to make long-term strategic decisions regarding the investment of scarce resources when they understand trends and competitive challenges that impact industry sectors.

Engaging local labor market stakeholders is crucial to the planning and start-up phases of employability programs and are of tremendous value to their ongoing operations. Employers can play an invaluable role in helping to continuously update information about current market needs; tailor curricula along the way; provide practical, hands-on training opportunities and internships; and support job placement efforts. But employers are motivated to continue to participate only when there is a perceived value gained from collaboration. A program's ability to address a key human resource issue that impacts a business's bottom line can be one of the most powerful reasons for industry leaders to engage with that program. Indicators of business value may include such benefits as reduced job vacancy rates, productivity improvements, and better employee satisfaction or retention. In many cases, value gained by employers can be related to corporate social responsibility policies, a desire to "give-back" to a community, political pressures, or a perceived marketing opportunity.

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[1] *http://www.iyfnet.org/sites/default/files/YWJ_RCA_Full_0.pdf*

## Labor Market Opportunities

Steps taken to understand labor market needs often reveal opportunities for programs to fill a need related to a skills gap or a policy or regulatory mandate.

Skills gaps exist when there is a mismatch between the workforce needs of local industry and the existing competencies held among the pool of available workers. These skills gaps may occur when (1) economic development efforts introduce new industries that require skills that do not exist in a region; (2) established industries adopt new technologies and systems that involve competencies that were not previously required; (3) skilled workers exit a sector, for example, though retirement or emigration; or (4) training and education systems are insufficient in terms of scale or quality or relevance.

Policy or regulatory mandates imposed by governmental bodies or private sector actors also can create an opportunity for employability programs. Mandates might be related to job quality standards, issues of access to employment for marginalized or otherwise discriminated-against groups of workers, or environmental compliance. For example, a new set of required licenses for specific occupations may force businesses to obtain assistance with certifying workers. In Paraguay, an *entra21* project working with disabled youth took advantage of legislation mandating government entities to hire at least 5 percent of people with disabilities.

## CONDUCTING A LABOR MARKET ASSESSMENT

Approaching a labor market assessment typically involves eight important steps. This Guide will walk you through each of these steps. Throughout the pages that follow, readers will be pointed to attachments and tools that further assist them in conducting these recommended activities. The eight steps are:

1. Assemble Advisors
2. Set Goals
3. Devise Key Research Questions
4. Identify Target Sectors
5. Conduct Field Research
6. Review and Vet Findings
7. Design the Program
8. Recheck (and Redesign)

These steps apply to labor market assessments in general, however, the types of tools used, level of analysis and decision regarding who will perform each set of tasks will depend on a number of factors related to context, resources, and organizational capacity. Some factors that will determine the specifics of each approach include the following:

- Your organization's level of experience in conducting quantitative and qualitative research
- Access to experts, such as advisors, sub-grantees, and consultants
- Availability of funding to support research
- Timeline for the study
- Goals, objectives, and requirements set forth by funders and governing bodies
- Type and scope of labor market information currently available for the region being studied
- Availability of previously conducted research on job skills and competencies
- Geographic scale of target area
- Number and size of employers in region in target industry sector
- Fragility of the environment in which the program operates

Keep these considerations in mind while reading through the following description of the overall labor market assessment process. The particularities of a situation may lead you to explore more rigorous and intensive research methodologies and tools or, conversely, to look for simplified approaches. Furthermore, as organizations plan for each step, they should consider whether it is best to conduct the work with their own internal team or to contract research activities to external consultants or firms. The issue of organizational capacity is discussed in further detail in on page 14 of this guide.

### Step 1: Assemble Advisors

To get started, assemble a group of advisors who will assist with the design and implementation of your research. Ideally, this advisory group would include individuals with quantitative and qualitative research skills, as well as key stakeholders representing the local labor market. These can be individuals from economic or labor research centers, the private sector, labor unions, and relevant public sector agencies, including vocational education institutions. In some cases, young people may also play a valuable role as advisors by helping to develop research questions that take their perspective on labor markets into account. Organizations can choose to engage the advisors formally through the development of a labor market advisory committee or interact with them on an individual basis throughout your research process.

Advisors can play a number of roles including:

- Setting and reviewing goals for the assessment
- Helping to identify sectors of interest
- Assisting with methodologies
- Identifying key informants
- Selecting external research firms to conduct all or part of

the fieldwork

- Interpreting and validating findings
- Devising strategies for keeping information up-to-date after the formal research phase has been completed

Potential advisors can be identified by tapping into existing relationships with individuals who sit on an organization's board of directors, participate on committees of the organization, or serve as volunteers. You can also use organizational and personal contacts to develop new relationships. For example, the board of directors can be asked to reach out to their contacts or to make introductions. Advisors may also be identified through chambers of commerce and industry, local colleges and universities, policy and research groups, government entities and committees, labor and trade organizations, and other business associations.

### Inclusion of Youth in Labor Market Assessments

Consider the potential benefits of including youth in the design, implementation, and interpretation of your labor market assessment. Young people can bring an important perspective to the work while gaining an opportunity to build skills. However, youth participation can be challenging and should be a part of your process only if it is meaningful both for the young people involved and for your research process. For more on this topic, refer to the SEEP Network's Youth and Workforce Development PLP Technical Note: *Guidelines and Experiences for Including Youth in Labor Market Assessments for Stronger Workforce Development Programs, 2009.* [2]

When asking people to participate as advisors, discuss concrete ways in which they could serve and how the information garnered might be useful to them in their own work. Let them know the discrete period of time they would need to participate, and ensure that, when the research is complete, that the findings would be shared with them. If potential advisors decline to serve in this role, always ask them to recommend someone else to contact who may be interested.

In settings where institutions are fragile and expertise is not readily available, it may be particularly challenging to build a robust advisory committee. In such cases, try to seek advice from fewer individuals on a more ad hoc and informal basis, ask internal staff to read published research and research guides to learn more about methodologies, reach out to other implementing agencies who have conducted assessments for similar industry sectors or in like geographic regions, or seek technical assistance from IYF staff.

[2] http://www.seepnetwork.org/Resources/YouthPLP_Assessments.pdf

## Step 2: Set Goals

It is very important that all members of the team share a common vision regarding the study's purpose and goals. Consider which of the following goals relate to your research (more than one may apply):

- To identify target sectors and subsectors in which there is current and future growth coupled with quality employment opportunity
- To identify specific occupational labor shortages in a particular region
- To identify skills gaps, the difference between young people's skills and the present or future needs of local employers
- To understand potential points of entry to employment for youth in specific industry sectors
- To map career pathways (opportunities for advancement from entry-level employment to higher paying positions)
- To provide information about particular skills and competencies of in-demand occupations as well as employer hiring practices, which will inform curricula and training processes
- To identify job quality issues (such as pay and benefits, work environment, job demands, scheduling/consistency of work, unionization, security, etc.)
- To understand gender dynamics within industry sectors. In particular, the identification of barriers to entry, retention, and advancement for women with regard to employer bias, social stigmatization, childcare needs, inhospitable work environments, transportation issues, conflicts with other domestic responsibilities, religious and cultural considerations, and the like
- To build closer ties to employers and engage employers in programs for the purpose of improving job placement rates and enhancing program quality
- Other

It is important to examine whether and how the goals for the assessment might conflict with one another and how they will impact your methodology. For example, if the primary goal is to develop statistically reliable data for research, planning, or evaluation purposes, your study may require a random selection of firms as well as the involvement of labor economists or other experts in quantitative data collection. If the primary goal is to design or improve programmatic elements and functions such as course curricula or job placement, then the research would ideally target a specific set of employers who are most likely to need services or to be amenable to receiving them. Use your advisors to help your organization think about the implications of the goals that have been chosen.

## Step 3: Devise Key Research Questions

Once the goals for the labor market assessment have been determined, the next step is to develop key research questions. The assessment likely will address some or all of the following areas of inquiry:

1. **Local demand for labor:** Present and forecasted demand for entry-level workers by sector and subsector, occupation or competency, and for anchor institutions.

2. **Characteristics of target businesses:** Information pertaining to internal labor markets of local firms in target industry sectors. Key questions may concern firm size, location, culture, growth trajectory, competitive advantage, and current workforce.

3. **Occupational Profiles:** Sets of skills and competencies required for particular occupations (including job-readiness skills); formal or technical education and experience required; preferred personality traits; test scores; licensing or credentialing; other.

4. **Job quality:** Are these jobs "good jobs" for the young people we serve? Considerations include pay and benefits, work environment, job demands, scheduling and consistency of work, unionization, security, accessibility to target youth populations, gender-related concerns, and causes of turnover.

5. **Existing capacity for training and education in the region:** Quantity, quality, and scope of existing programs, including ones that your organization operates. Entrance requirements, costs to trainees, and perceived value by local employers.

6. **Fit with target youth population:** Perceptions held by youth and by employers, geographic issues, other barriers to employment.

7. **Supply-side assessments:** Profiles of underserved communities, assessment of youth needs and opportunities, etc. (This may include a parallel process to collect information pertaining to the youth population to be served. *IYF's Youth:Work Jordan's Rapid Community Appraisal* [3] provides an example of such a study.)

8. **Employer-specific competitive challenges:** Recruitment, retention, upskilling, demands of new technologies and processes, efficiency, quality of service or product, etc.

9. **Competitive issues of importance to a sector or region:** Policy and regulatory issues, public and private sector investment, supply chain issues, logistics, pricing, institutional framework (labor market legislation, administrative structure, social stakeholders), etc.

In designing the best approach, first determine which of these areas of inquiry are relevant to what you hope to learn from the assessment. The next task is to identify the guiding questions to be addressed by the research. The goal here is not to format the questions for particular data collection tools, but rather, to develop a roadmap for the research in general. Start with a brainstorm of questions, and then cull the questions until there is a manageable number that can be answered through the research and are truly important to informing your work. **Although there are an extensive number of questions that the research could answer, it is important to be realistic about what can be accomplished.** In selecting the questions, consider your timeframe and budget, the objectives of the employability programs, and the availability of sources of information.

Attachment A: Key Research Question Development Tool provides a format for thinking about the key questions that the research will seek to address for each of these primary areas of inquiry. See table 1 for an excerpt from this tool.

[3] http://www.iyfnet.org/document/1059

## Table 1. Excerpt from Key Research Question Development Tool

| Area of Inquiry | Examples from IYF Programs | Is this an area of inquiry for your study? (yes/no) | What key questions do you have? |
|---|---|---|---|
| 1. **Local demand for labor:** present and forecasted demand for entry-level workers by sector and subsector, occupation or competency, and for anchor institutions. | *entra21* projects used labor market assessments to answer the following questions:<br>• Which industry sectors or occupational clusters should we target?<br>• Are there subsectors we should focus on?<br>• What are the hiring forecasts for specific employers?<br>• Where or for which occupations will new jobs be created? | | |

## Step 4: Identify Target Sectors

To develop employability programs that are truly responsive to local economic opportunities and to prepare young people well for such opportunities, it is important to fully understand the workings of particular industry sectors and subsectors. By honing in on a limited number of sectors, you can gain meaningful knowledge of employment issues and opportunities and develop a level of expertise that will give the organization ongoing credibility with employers. Given limited resources, it is unlikely that a thorough assessment of all industries and occupations in your region can be conducted. At the planning and start-up phase of the assessment, it is necessary to review a range of target industry sectors and subsectors and to select those upon which your program will initially focus. In the future, the organization may return to this step to expand the work to other sectors and occupations. This step primarily will involve desk research supported by a limited number of stakeholder interviews.

The work of selecting sectors may begin with a review of existing labor market studies and databases. These secondary sources can provide information on regional employment trends, indicate sectors where jobs are being created, and point to the types of occupational areas that are in greatest demand. In regions of Latin America where robust sets of labor market and occupational data are available, several entra21 projects found secondary sources to be particularly useful. For example, in Medellín, Colombia, Caja de Compensación Familiar de FENALCO Antioquia made use of an analysis of occupational trends that was produced by a local consortium of public and private actors. In Mexico, Centro de Investigación y Promoción Educativa y Cultural was able to extract helpful data from a State Development Plan of León, Mexico. These studies helped each of these organizations identify prospective occupational trends in teleprocessing and software development that could be expected to generate a need for training new workers. If access to this type of information is possible, additional tools for analysis of regional employment trends, such as location quotients and shift-share analyses can be very helpful (these terms are defined in the sidebar). The implementing organization may not have the resources or expertise to interpret the complicated economic data derived from secondary sources. Members of the advisory group may therefore be very helpful at this stage, providing advice on sources to consider, answering questions about the data, and reviewing your analysis.

While conducting desk research, a range of challenges may arise when using secondary sources. One reason for this is that quality sources of labor market information are not always readily obtainable. Appropriate data allowing you to pinpoint what types of skills are needed for specific occupational areas or sectors in particular locations may not exist. This problem may generate the

[4] http://www.economicmodeling.com/wp-content/uploads/2007/10/emsi_understandinglq.pdf

[5] http://nercrd.psu.edu/Industry_Targeting/ExtensionPapersandSlides/Ind-ClusterExt.GoetzBubble.pdf

[6] http://cecd.aers.psu.edu/pubs/Tool 4.pdf

## Tools to Analyze Regional Employment Trends

**Location quotients** are ratios that compare the strength of a sector in a particular city or region to that of a larger area or base. They can be used to assess how meaningful the concentration of a sector's employment is in relation to other locations. Bubble charts are used to provide a graphic presentation of location quotients for a number of sectors in the same region. Bubble charts can also be very helpful in identifying sectors that are both growing and employ significant numbers of workers. For more information, click _here_[4] and _here_[5].

**Shift share analyses** are valuable for understanding the significance of local employment growth in a particular sector in relation to employment growth for the sector across multiple regions. These are important tools for looking at a region's competitive advantage and can help implementing organizations be strategic in directing their investment of resources for employability. The Penn State College of Agricultural Sciences Agricultural Research and Cooperative Extension produced _Using Employment Data to Better Understand Your Local Economy. Tool 4. Shift-Share_[6] _Analysis Helps Identify Local Growth Engines._

## Using Secondary Sources: The Case of Jordan

In Jordan, IYF had access to a significant body of reliable secondary source data resulting from strong national and international investment in the nation's economic development planning. Market assessments produced by the Central Bank of Jordan provided _Youth:Work Jordan_ with data about the contribution of particular industry sectors to the GDP. Three reports further informed the labor market assessment and the subsequent decisions about investments in training. Jordan Vision 2020, an ambitious initiative endorsed by His Majesty King Abdullah II, lays out an economic blueprint for Jordan and identifies key "sunrise" industries. The Sector Analysis produced by the Jordan Prime Ministry identifies and assesses sectors that have the potential to significantly reduce poverty and contribute to the economy as measured by indicators such as GDP, exports, and higher wages. In addition, the National Agenda, prepared by a Steering Committee formed by a Royal Decree, identifies eleven target industry sectors. The information presented in these reports was garnered through group meetings, company surveys, desk research, and from previous studies. IYF used this information to guide the selection of target industry sectors for further research at the local level.

impetus for a more formal effort to produce new data. In the case of *Centro de Información y Recursos para el Desarrollo* (CIRD), an entra21 project partner in Paraguay, the absence of secondary source data prompted the organization to conduct its own direct labor market analysis. This research was conducted under CIRD's guidance and with the support of a consultant who designed and conducted a qualitative survey.

Even where reliable secondary sources can be found and interpreted, they are unlikely to provide complete answers to the key questions of your assessment. Some of the limitations to look out for include the following:

- Existing data may correspond to a geographically defined area that does not match or is larger than your project area.

- Data may not be broken down into the sectors or occupations that your program needs to know about.

- Studies are typically not done at the firm level and may not reveal significant variances in situations, practices, wage rates, and other differences among employers.

- Aggregate data may not show differences in wages by rural areas, towns or small cities, and large metropolises.

- Information may not show seasonality of employment or stability of work.

- Cash payments and opportunities generated by the informal economy may not be captured adequately.

- Employment data rarely distinguish between jobs available to new, entry-level workers and positions generally available only to incumbent workers.

- National skill standards and norms of performance do not always translate accurately to local need.

To supplement desk research and address some of its limitations, it is important to speak with stakeholders in the region about opportunities and challenges within industry sectors. This might include a limited number of interviews with representatives from trade associations, local governments, economic development entities, and others. These interviews will help to verify that the data being reviewed is reflective of current trends and conditions. These interviews are particularly important if you are operating in a location where access to reliable data is insufficient.

Once sufficient information about industry sectors in your local labor market has been collected, it is time to select those that seem to offer the greatest opportunity for your employability programming. When selecting sectors of focus, consider the following questions as you review the information that emerged from the desk research and stakeholder interviews:

1. What areas of the local economy are growing and are projected to grow?

2. What sectors have been targeted by government and

## Sector Selection Tools

The Labor Assessment Data Collection Table (Attachment B) is an example of a tool used by *Youth:Work Jordan* for organizing data collected from a labor market assessment, particularly the desk research. It is organized by sector and subsector and can be used to record how much a sector is growing in a program's geographic area. The tool can also document special considerations such as geographic match, relevance to training capacity, promotion of sector by government, etc. It also serves as a planning tool for brainstorming which employers to contact for interviews.

The Manual for Selecting Occupations (Attachment C (in Spanish)) was developed by *Fundación Chile,* an executing agency under IYF's *entra21* program. The manual lays out a methodology for conducting research to identify the competencies required for occupations of high demand that are relevant to youth seeking employment. For programs that are in an advanced stage of program development and are adopting competency-based training approaches,* the *Fundación Chile* approach can be used to supplement the Labor Market Assessment model presented in this guide.

*\*Competency-based training refers to training that is based on job-skills analyses for specific occupations and is organized around levels of competence (knowledge, skills, and attitudes) required for proficient work performance.*

international organizations for economic development and investment?

3. What data are available on employment in the sector? How is employment expected to grow or contract?

4. Does the sector offer economic opportunities (jobs or self-employment) that are a potential fit with the youth populations?

Once a set of target industry sectors (or occupational clusters) has been decided upon, consider inviting relevant experts and key stakeholders with specific expertise in the chosen sectors to join your group of advisors. Their deep level of knowledge about industry characteristics and trends can help the organization identify and gain access to key informants and to develop appropriate survey, interview, and focus group instruments for the next phase of research.

### Step 5: Field Research

The next phase of the assessment will involve field research to gain a deeper understanding of local labor dynamics within subsectors, identify needs and opportunities related to specific employers, and profile occupations to inform program design. This work will involve interviews, surveys, or focus groups with

individual employers, business and labor organizations, and public sector informants to learn what is really happening now at the local level. Besides producing valuable information, field research can serve an important secondary function: it can be a way to involve stakeholders in conversations that lead to greater support for and engagement in activities.

It is important to have a well-planned and systematized approach to conducting field research. The quality of the information being gathered will be related directly to the planning that goes into developing interview protocols and survey instruments, selecting interviewees and respondents, and analyzing the information.. The advisory group can provide input into the design of the tools and the methods used to collect information. For example, consider asking business leaders to test questionnaires before circulating them more broadly and identify other businesses to interview, and think about asking researchers to advise you on appropriate sample sizes and review the logic of the tools.

**Set Clear Objectives**

The first step to conducting a survey is to develop clear goals for what you want to learn. In Step 3 (above) key research questions were developed. The goal for this fieldwork is to gather knowledge that informs these questions.

**Choose Interviewing Methodology**

There are various ways to administer a survey to employers in your region, including in-person and telephone interviews, written or online questionnaires, and focus groups.

**Face-to-face interviews** have been found to be the most effective means of learning about employer needs. Well-conducted personal interviews allow for a deeper exchange of information than any other method. Interviewees tolerate a lengthier survey when the conversation is held in person. Furthermore, personal interviews are an important way to build personal relationships that can lead to additional contacts for your survey as well as more extensive involvement in future program activities. On the negative side, personal interviews are the most time intensive and costly to conduct and record. **Telephone interviews** can provide some of the same benefits without involving transportation costs. However, they are less effective for relationship building and may not be appropriate given the business culture of your target sector or location. In some areas, a lack of reliable infrastructure will make telephone interviews infeasible. If this option of conducting employer interviews by telephone is chosen it is helpful to set up a time for the call with the interviewee prior to the conversation.

**Internet surveys** can be conducted by using computer-direct software that allows a respondent to answer questions directly into a computer (Survey Monkey is one such service) or through e-mail. Computer-direct surveys are more sophisticated in that they allow you to use survey "logic" (based on an interviewee's response to a particular question, the software can automatically bring up follow-up questions or skip ahead to another part of the survey.) By allowing interviewees to enter their responses directly into an online survey, it is possible to eliminate risks of interviewer bias and reduce costs of data entry and editing. However, Internet surveys will not work well if you are operating in an area where access to and proficiency with technology is limited. It may also be a challenge to convince employers with whom you

do not have an existing relationship to take time to answer these surveys. To date, because of these limitations, IYF programs have not used Internet surveys widely.

A third methodology for soliciting employer feedback is through **focus groups**. It may be convenient to speak to employers as a group if there is an established forum for discussion among them, for example, if they come together regularly for small industry meetings through a trade association. The interaction among focus group participants and the facilitator creates a dynamic that can generate thoughts and ideas that might not surface during individual interviews. They are especially helpful in situations where you hope to learn about the degree of consensus among subjects. When utilizing a written or Internet-based survey as the primary data collection method, you may want to set up a few focus groups to supplement and verify the information being collected. However, it is important to note that focus groups are not always appropriate for this type of research. First, participants would have to be from a single industry subsector and have similar operations and language. Second, given the likelihood of competitive relationships among local employers, concerns about sharing sensitive information (such as wages paid, issues with turnover, and other business opportunities and challenges) may greatly constrain the depth and accuracy of information that you will receive. If using focus groups is one of your fieldwork methodologies, be sure to have a skilled and experienced facilitator to lead them.

**Designing Your Survey Instrument**
Before beginning the interview process, take time to develop a well thought out set of questions that will serve as the interview protocol. The employer interview instruments that are developed should ask your key informants a set of clear and direct questions about the company's current labor force, employment projections, sources of labor and labor preparation, hiring practices, and experience in employing youth.

A few points to keep in mind when developing your survey instruments:

- Verify that the survey content is in line with your research goals and corresponds to your key research questions.

- Make sure that the survey is compatible with the chosen methodology. For example, open-ended questions work better in an interview than on a written survey.

- Begin the survey with an introduction that explains who you are, what you hope to learn, and what will be done with the information collected. As part of the introduction, tell the interviewees your expectations regarding confidentiality. (Will information shared by the interviewee later be attributed directly back to that person, or will it be reported only as part of an aggregated set of findings?)

- Keep the survey length reasonable and appropriate for the medium. If conducting personal interviews, consider how long the subject is expected to sit with you. If using Web-based surveys, keep it short and simple.

- Consider the use and quantity of structured versus unstructured (open-ended) questions. Structured questions ask respondents to select among suggested answers though multiple choices, ranking scales for predetermined options, yes/no constructs, etc. They are quicker to answer and simpler to aggregate and analyze. This is an important advantage when a very large sample size is being planned. Unstructured questions do not provide suggested answers. They can allow your subjects to provide more detailed information and, in an interview setting, can allow the interviewer to prompt for more detailed responses in a conversational format. The responses to open-ended questions can be very valuable but can be time consuming and complicated to interpret. Look for a balance between these types of questions that will meet your needs and fit within your capacity.

- Use common survey design principles to ensure that your questions are designed and ordered in a way that will elicit the best responses and will facilitate coding and identification of responses for later analysis. There are many online sites that can be helpful, including the following:

The Web Center for Social Research Methods provides useful *information on survey design*.[7] (Additional information on sample size can be found here as well.)

The Duke University Initiative on Survey Methodology provides *guidance on survey question design and development*.[8]

Survey Monkey produced a *guide for developing online surveys*.[9]

A helpful survey design checklist is available *here*.[10]

- Use language and terminologies that are appropriate and common to the industry sector of the employer. Avoid jargon and acronyms from your own organizational context that may be unfamiliar to the interviewees.

- Use your advisors to review the language in surveys and questionnaires. Questions should not have multiple meanings and should be answerable by a typical interviewee.

- Incorporate questions related to the timing of employer needs. In most cases, businesses need to fill job openings immediately. Yet, a quality training initiative may take months to develop and deliver. An *entra21* project in Panama experienced the problems with timing when it designed training for a large call center that had promised to absorb all of the graduates. By the time the training was developed and trainees had graduated, the employer had already filled the positions from other sources.

- Test the survey by asking a small sample of individuals to respond. Ask them if there were questions that they did not understand or seemed irrelevant. Review their answers to see if your questions elicited the types of responses that you were looking for and whether you understand them. Afterwards, make necessary modifications before distributing your survey widely.

**Decide Whom to Survey**
Another important component of the research process is the selection of appropriate respondents for the survey. The local employers in the sector or subsectors that you have chosen for the labor market assessment are your primary target population. Depending on the occupations being targeted for analysis, respondents may include private firms as well as public or civic sector employers. The number of people to be interviewed will depend on the number of employers in the subsector, the size of these employers (very large firms may have operational divisions that each warrant a separate interview), as well as the scale of the geographic region.

In reaching out for respondents, consider the "right" person or persons to interview within a company or institution. **Look for people with direct knowledge of the hiring practices for your local context.** In a small, locally managed company, this may be executives (CEO, presidents, vice-presidents). However, if the firm is very large or if leadership is located outside of your target geographic region, it may be better to speak with regional directors or human resources personnel. With some employers, hiring decisions are decentralized and made by individual department heads. To get accurate and useful responses, it may be necessary to interview more than one individual from a given company. For example, you may need to talk to the HR director as well as departmental supervisors. If conducting personal interviews, ask respondent for names of other individuals with whom you might speak for information regarding unanswered questions.

[7] http://www.socialresearchmethods.net/kb/design.php

[8] http://dism.ssri.duke.edu/question_design.php

[9] http://s3.amazonaws.com/SurveyMonkeyFiles/SmartSurvey.pdf

[10] http://www.zoomerang.com/resources/DS_SurveyDesign_Chklist.pdf

**Record and Organize the Responses**
If the survey included a large number of respondents, the work of recording and analyzing responses can be time consuming. Several programs have used survey analysis software to manage this process. In Kenya and Rwanda, for example, IYF programs used a survey instrument to conduct a large number of in-person interviews as part of their labor market assessments. The survey primarily involved structured questions. Interview responses were then entered into an online survey tool on **KeySurvey.com**. Data entry was performed by dedicated data collection and entry staff based at two local NGOs, one located in Nairobi and the other in Kigali. The lead administrative team at headquarters ran weekly data reports of all of the information coming in and sent it back to the partners for review. In Uganda, IYF conducted a survey of a smaller number of private sector employers using a highly qualitative interview tool with open-ended questions. (See Attachment H, "Private Sector Guided Survey: YouthMap Uganda.") Interviewers took notes and sent them back to IYF headquarters in Baltimore, where a data entry and coding team had been set up to enter the responses into a database using **Atlas.ti** software. The team was asked to code responses in accordance with a coding dictionary set up by IYF for this purpose. (An example of the coding dictionary developed for the Uganda study is provided in Attachment I.) After coding was complete, IYF staff queried the data to produce reports by topic areas (for examples of the type of reports produced, see tables 2 and 3, below). This software was a helpful tool for organizing a complex set of responses so that staff could later read and analyze them in a more efficient way.

IYF programs found these two systems to be convenient and easy to use for designing the survey, entering data into a single repository, and generating aggregated reports. They also appreciated the quality of the online support from the companies. In both cases, it was critical to implement an intensive training program for individuals responsible for data entry and coding. The training included technical aspects of using the software as well as the purpose of the survey, the scope of the youth programs, and an in-depth understanding of the coding dictionary.

## Step 6: Review and Vet Findings
Now it is time to look at the research findings and consider information that informs your key research questions. First, conduct an internal analysis of what has been learned from your primary and secondary source research. If your organization has existing training and job placement programs, your own staff may be able to comment on whether the results seem to fit with what they experience in the sector. It may be helpful to organize the information in line with your key research questions.

If your advisory group includes researchers, ask them for technical feedback on whether your methodology for analysis was solid. Ask sector experts among the advisors whether the findings ring true to them. Next, present the results of the labor market study to a sample of relevant stakeholders for the purpose of validating the findings. This could include advisors and other members of

the private sector, and labor or economic analysts from public and private sectors. As information is vetted, areas for further questioning or clarification may lead you to decide that further data collection or analysis is needed. Last, incorporate any final recommendations or feedback into a final assessment report.

## Step 7: Design the Program

There are many ways to now use the labor market assessment. IYF programs, for example, have used information gathered through Labor Market Assessments to:

- Identify new opportunities for job placement
- Reformulate existing curricula to improve program quality
- Adapt nationally or internationally recognized norms of job performance to local contexts
- Build new programs and curricula
- Deepen employer engagement in program design, implementation and job placement

In most cases, this information will be used to design or update a training program. It is advisable to include some of your key informants, especially business representatives, in the program development process. When employers participate in this planning, they are more likely to believe that your program will meet their business needs and will be encouraged to hire graduates in the future.

## Step 8: Recheck (and Redesign)

Labor markets are not static and unexpected changes can come about at any time. Employers are typically unable to predict their future workforce needs with a high degree of accuracy, so the work of assessing markets to ensure that programs are in tune with local opportunities and needs must not be confined to the project start-up phase. The labor market context must

### Employer Engagement

Programs can be greatly enhanced by significant employer involvement in the following:

- Instruction (worksite tours, guest lectures, mock interviews, etc.)
- Periodic reviews and updates of curricula
- Work experience (internship) opportunities
- Job placement
- Ongoing review of program strategy
- Board or advisory committees for the organization or program
- Providing financial support and accessing resources
- Providing political leverage

## Table 2. Employer Perceptions of Youth

| Positive | Negative |
|---|---|
| • More productive and flexible than adults<br>• Less expensive to hire compared to adults<br>• Ambitious, motivated—work with a lot of hope<br>• Deliver quality work with enough guidance<br>• Strong business acumen<br>• Energetic, creative, and able to adjust quickly to new challenges<br>• Dynamic, fearless, and willing to take risks<br>• Loyal and focused (less family responsibilities)<br>• Good listeners, eager, and quick to learn<br>• Friendly, good attitude, and strong interpersonal skills<br>• Easy to mobilize, team spirit<br>• Willing to do anything to gain experience<br>• Vocal and passionate about youth issues<br>• Less prone to corruption<br>• Have potential to give back to community | • Need more practical knowledge, skills, and work experience<br>• Need more soft skills (problem solving, work ethic, critical/creative thinking)<br>• Need more financial management skills because of tendency to waste money<br>• Lack of patience and easily frustrated<br>• Demanding (higher salaries)<br>• Desire to make quick money (sometimes resulting in petty theft) and live extravagantly<br>• Not always committed or responsible<br>• Highly mobile, leading to high turnover<br>• Undisciplined, stubborn, and provocative<br>• Low self-respect and confidence<br>• Prone to alcohol and drug abuse |

## Table 3. Commonly Cited Occupations of Youth Interviewed

| Formal | Informal | Agricultural or seasonal | Illegal |
|---|---|---|---|
| • Ecotourism and hospitality (tour guides, interpreters, hotel staff)<br>• Entry-level positions with agriculture-focused companies<br>• Telecommunications (sales and marketing, engineers, technicians or support staff–HR or legal)<br>• Banking (tellers and entry-level managers)<br>• Mining<br>• NGO-sector jobs incl. field coordinators, office assistants, and community mobilizers | • Petty traders selling food, groceries, second-hand clothing, telephone cards<br>• Boda-boda (bicycle, electric bicycle, or scooter) drivers<br>• Casual laborers (incl. off-loaders or working on underground cables)<br>• Construction workers<br>• Domestic workers<br>• Security personnel<br>• Self-employed or working for small-scale businesses in areas of welding, motorcycle repair, bricklaying, metal fabrication, or small cinemas<br>• Political mobilizers or polling assistants<br>• Mediators/brokers<br>• Brewing alcohol (over 18 with license)<br>• Hairdressing or tailoring<br>• Political campaigning | • Horticulture (vegetables and fruits such as passion fruit and pineapple)<br>• Crop farmers (maize, coffee)<br>• Sugarcane cutters or growers<br>• Poultry (chickens and turkeys)<br>• Piggery<br>• Livestock farming and trading | • Prostitution<br>• Gambling<br>• Brewing/selling alcohol (if under 18 or without a license)<br>• Selling drugs<br>• Commercial livestock raiding<br>• Organized criminal activities |

be re-examined again and again over time. With good information, program staff can respond to changes in industry sectors by adjusting the types of training provided, fine-tuning the numbers and qualifications of students enrolled, and updating the content of course curricula. Although most programs will not have the capacity or resources to repeat intensive research-based Labor Market Assessments often, there are some useful approaches that can be used to keep a finger on the pulse of the local economy:

• Form advisory groups or councils to help the organization keep current on trends.

• Collect information about employer demand through internships and job placement activities. This requires that staff intentionally record, track, and share job requests and information that they receive from business contacts.

• Make use of program evaluations. Evaluations usually involve conversations with a sample of employers. Design those conversations to provide feedback that helps you stay up to date with changing needs.

• Continue to network with sector actors through participation in local regional planning and economic development groups or by becoming an associate member of a local business or trade organization.

• Stay abreast of industry trends by reading reports and publications related to local economies and to industry sectors.

## CAPACITY AND SKILLS REQUIRED

In their purest form, Labor Market Assessments are rigorous studies that require the skills of economists or expert labor market researchers. However, for many employability initiatives with limited resources, this level of rigor is neither possible nor necessary to guide effective programming. Nevertheless, these studies do require dedicated program staff or consultants that possess the capacity and competencies to manage the steps described in this guide. This includes the ability to:

• Develop guiding research questions and plan the overall process

• Convene experts

- Identify sources of primary and secondary source information

- Develop survey and interview instruments

- Conduct interviews and focus groups

- Record, code, and analyze responses (sometimes utilizing survey data analysis software)

- Review and interpret findings

- Validate conclusions with expert advisors

- Communicate findings to partners and funders

- Translate learnings into programmatic responses (participant recruitment and screening, occupational skills training, job readiness/soft skills training, job search assistance)

- Develop plans for iterative updates of information

Generally, this work is not the core business of youth development and training providers. It may be necessary to recruit external expertise to help design surveys, determine appropriate sample sizes, develop lists of people to be interviewed or surveyed, and tabulate and interpret results. This assistance may be provided by researchers or economists based at local economic development and labor institutes or universities. Furthermore, implementing organizations may decide to contract a third party research firm to design and conduct the fieldwork for the assessment.

The use of external research firms has both advantages and disadvantages that should be taken into account when deciding whether to do the research in-house or contract it out to a third party. On the plus side, these organizations can contribute experience, expertise, and a valuable degree of impartiality. They may be perceived as credible by the labor market actors from which they seek information. Also, they may be less likely to be wed to particular sectors or approaches than training organizations that are already imbedded in existing practice and relationships. On the other hand, their distance from existing relationships between the training organization and the community in which it operates can be a disadvantage. They may be less knowledgeable of the needs of the target youth population and not as well positioned to capitalize on relationships with business partners that have developed over time. Furthermore, the use of an external research organization could mean lost opportunities for your programs. First, there is a lost opportunity for capacity building at the program level when staff is not involved in the actual work of the assessment. Second, the process of conducting interviews with labor market actors is a very effective way of developing relationships between programs and demand-side stakeholders. These relationships have the potential to translate into very valuable employer engagement for program implementation. When an external organization conducts these interviews, the program does not reap this dual benefit to the same degree. If the decision is made to hire an external organization, you can build staff capacity for future labor market assessments by having them work in collaboration with the external researchers.

## Capitalizing on Existing Competencies

A number of *entra21* programs used nationally or internationally recognized norms of performance to define critical elements of their training programs. They then adapted these to specific workplace conditions so that they would be relevant to local companies and youth populations. *Entra21* has worked with a few implementing agencies that also serve as certification entities for occupations in their regions. Two examples are *Instituto de Hospitalidade* in Brazil, which has created skill standards for the hospitality sector, and *Centro Asesor para el Desarrollo de los Recursos Humanos* in Honduras, whose role is to coordinate and regulate labor, technical and professional qualification, and certification of the production sector in Honduras. The expertise of these organizations in defining human resource norms and certifying training has uniquely positioned them to design relevant training content.

Whether using permanent, temporary, or external personnel to carry out fieldwork and input and analyze data, it is important to train your team well for the roles that they will play. In addition to being proficient in the technical skill that each person will carry out (interviewing, coding information, generating reports, etc.), it is critical that these personnel have a clear understanding about the goals of your initiative, the characteristics of the youth population to be served, and the nature of your organization and its programs.

## WHEN AN ADAPTATION TO THE LABOR MARKET ASSESSMENT PROCESS IS REQUIRED

It may be necessary to employ a different approach to labor market assessment if

1. You are targeting a market with very few formal employment opportunities, or

2. Your program is working with significant budget and time constraints.

Here is how some programs have dealt with these issues.

**The target market has very few formal employment opportunities.** In locations where formal employment is a main source of income and employability programs are designed to connect youth to these jobs, labor market assessments are designed to identify opportunities and to align curricula with real industry demand. But in many locations, opportunities for employment in the formal economy are scarce. In a rural community, or where the informal economy dominates opportunity, your labor market research may not focus on interviews with existing employers in the region. Rather, it will assess opportunities for the generation

of new sources of income, particularly through entrepreneurial activities. In rural Tanzania, for example, Alliance for African Youth Employability implementers addressed this issue in two ways. Kiota Women Health and Development Organization used a Physical and Social Mapping Framework to determine the magnitude and extent of the problem of youth who lived in the difficult environments targeted by the program. The program consulted with ward-level authorities and community elders to identify the availability of social and economic opportunities and available local resources for project implementation. This activity allowed the organization to introduce the project to local government and community leaders and, as a result, to gain the support and ownership of the program by the whole community.

Also in Tanzania, Iringa Development of Youth, Disabled and Children Care, which focused on self-employment and business development rather than on job placement for youth, followed a similar approach, consulting with community leaders to assess the needs and opportunities available in the areas served by the program in order to assist youth in selecting business opportunities to pursue.

**The program is working with significant budget or time constraints.** Pressure to start up programs quickly often hinders our ability to conduct thorough labor market assessments. This problem frequently is compounded by resource constraints. In cases where it is not possible to conduct a thorough labor market assessment at the outset, it may be possible to build employer feedback into ongoing program review and improvement activities. For example, the organization can hold career forums, form employer advisory groups, meet with labor market stakeholders individually, or sponsor networking events. In Kenya, NairoBits, an NGO focusing on preparing youth for employment in Nairobi's ICT sector, set up an employer advisory group. The advisory group was tasked with reviewing curricula, helping to set up student internships, and participating in annual strategic planning for the NGO. Additionally, NairoBits began to hold quarterly interviews with employers to receive up-to-date feedback. Employers also participate with program implementation, acting as guest lecturers and providing awards to graduates.

## TEN USEFUL TIPS
Based on past experiences with labor market assessment, IYF offers this final set of suggestions for those embarking upon a labor market assessment:

1. **Access the expertise** of others to help develop the research protocol. This can be through the formation of ad hoc advisory group, use of a board of directors, or consultation with a local university or market research group.

2. Think long term: try to forecast **future** needs, identify **growth** sectors, and focus on occupational **categories** and **competencies** rather than on specific job openings.

### Adapting the Assessment Process to a Challenging Context

In the case of the Caribbean Youth Empowerment Program (CYEP), the ability to conduct a highly rigorous study was limited by a number of factors including tight funder-driven timelines, the lack of existing working relationships between the NGOs and the private and public sectors, limited availability of public labor market information, and capacity issues within their partner organizations. Furthermore, the local entities had not assessed labor markets in the past and did not immediately recognize the value or importance of an assessment.

To deal with this scenario, IYF contracted an independent research firm to conduct research for three CYEP projects. The scope of work was based on one developed for entra21 but was modified for this context. It asked the firm to profile a select number of occupations and to identify related standards of competence associated with target occupations. The methodology used involved the following set of activities: (1) a review of existing program documents (such as proposals, existing occupational profiles, and work plans); (2) Internet-based research (review of the Dictionary of Occupational Titles: International Classification of Occupations, etc.); (3) personal interviews and discussion with partner representatives; (4) one-on-one working and coaching sessions with partner representatives; and (5) meetings and discussions with a limited number of labor market informants.

The information gathered by the consultants helped the programs to reorient their training toward sectors and occupations that could provide better work opportunities for youth participants. As a result of this process, the training organizations gained an appreciation for the role of and need for labor market assessments. In fact, they are joining forces to advocate for better labor market assessment data in the region. IYF staff are encouraged that the executing partners appear poised to engage in deeper labor market assessments in the future.

3. Do not rely solely on secondary source data. **It is essential to speak to local labor market stakeholders, particularly employers.**

4. Be careful not to rely heavily on information provided by one large employer. Although it is tempting to develop a training program in response to the stated need of any one large employer, it is important to **look broadly at a whole labor market** when planning an initiative. Overdependence on any single employer for job placement

opportunities can be devastating if that business should suddenly be unable to absorb trainees as projected.

5. Dedicate time for **training** the individuals who will conduct the fieldwork and data entry and analysis to be sure that they are prepared with both technical skills and contextual knowledge. When using an outside organization, consider assigning permanent staff to work alongside their researchers so that you build in-house capacity for future assessments.

6. Use the assessment process to **build and fortify relationships** with employers and other labor market actors.

7. Be sure to **validate findings** by seeking feedback from experts in the local labor market.

8. Work over time to **educate funders** about the importance of conducting labor market assessments during the project development phase so that adequate resources and timelines can be constructed to support them.

9. If doing a formal labor market assessment prior to launching a program is not possible, it is still necessary to **find a way to gain information** that can keep your intervention relevant to local labor markets. If possible, conduct a labor market assessment at a later point in time. In the meantime, find less formal ways to conduct ongoing informal research.

10. Remember that assessing the labor market is not a one-time activity. Build feedback loops to stay abreast of ever-changing market challenges and opportunities. One good way is through monitoring youth internships and job placements to identify how well your training is meeting the current market needs.

## LIST OF ATTACHMENTS

**Attachment A**: Key Research Question Development Tool

**Attachment B**: Labor Assessment Data Collection Table

**Attachment C**: Manual for Selecting Occupations, *Fundación Chile* (Spanish)

**Attachment D**: Youth:Work Jordan Guidelines for Conducting a Labor Market Assessment—Process Tool

**Attachment E**: Youth:Work Jordan Employer Questionnaire

**Attachment F**: Youth ICT Project Employer Questionnaire

**Attachment G**: Sector Analysis Questionnaire: Aspen Institute WSI-Sector Skills Academy

**Attachment H**: Private Sector Guided Survey: YouthMap Uganda

**Attachment I**: Sample Coding Dictionary: YouthMap Uganda