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EMPLOYER ENGAGEMENT: A BUSINESS PLAN FOR FURTHER EDUCATION AND TRAINING COLLEGES

UNDER AGREEMENT WITH USAID/SOUTH AFRICA
FOR THE PARTNERSHIP FOR SKILLS DEVELOPMENT
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Jobs for the Future aligns education with today's high-demand careers. With its partners, JFF develops policy solutions and new pathways leading from college readiness to career advancement for struggling and low-income populations in America.

Cover Photo: A JFF and South Africa–US Partnership for Skills Development strategizing meeting with Nkangala and Gert Sibande FET Colleges. Photo by Robert Holm, JFF

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INTRODUCTION

Further Education and Training Colleges serve two vital roles in South Africa's society and economy. One is to provide access to economic opportunity and education for over 200,000 South African young adults who need skills to gain employment and a promising career. A second role is to address the skills needs of employers, both private and public, who drive the South African economy and create much-needed jobs.

Fulfilling both of these roles will require deep engagement between the FET college system and employers. In a recent National Skills Development Strategy briefing, the Minister of Higher Education and Training highlighted the need for partnering with industry and employers: "Priority will be given to strengthening the relationship between public colleges and universities and the SETAs, as well as with employers." This, he noted, will help to "achieve the fundamental transformation of inequities linked to class, race, gender, age, and disability in our society."

While the voices of South Africa's employers are more diverse, surveys indicate that South African employers broadly share the priority of improving the skills base of the workforce. One Deloitte & Touche study in 2007 found that 81 percent of South African companies struggled to find appropriate staff. And in the same year, the Bureau for Economic Research at the University of Stellenbosch found that 47 percent of manufacturers said that the skills shortage was their *most* serious difficulty. A further study by the Centre for Development and Enterprises identified the skills shortage as a challenge to doing business; half of the firms surveyed had to source skills from abroad.¹

In more recent surveys of South African employers, it is clear that the employees they have the most difficulty recruiting include occupations for which the FET colleges provide training. A 2011 Manpower survey of South African employers found the "Top 10 Hardest to Fill Jobs" below:²

Top 10 Hardest to Fill Jobs, South Africa Employers Survey, 2011

- 1 Drivers (Commercial)
- 2 Machinists/Machine Operators
- 3 Accounting & Finance Staff
- 4 Supervisors
- 5 Skilled Trades Workers
- 6 Sales Representatives
- 7 Teachers
- 8 Doctors and other Non-nursing Health Professionals
- 9 Secretaries, PAs, Admin. Assistants & Office Support

10 Chefs/Cooks

Most of these are positions for which FET colleges have training programs and for which its students could become well qualified. So the FET college system has the clear potential to address the most pressing workforce needs of employers while more rapidly improving the career opportunities of FET learners. Though employers and educators often encounter challenges in partnering with one another, they have a common interest in doing so.

PURPOSE AND ORIGIN OF THIS GUIDEBOOK

This guidebook is for FET college leaders who seek more productive partnerships with employers in order to improve career outcomes for students. It includes examples and strategies for everyone whose work affects employer engagement, including CEOs and deputy CEOs, partnership managers, student support managers, and lecturers. Since FET college leadership is so key to employer engagement (and transformation in the college), this guidebook targets college CEOs and their teams. It can also inform provincial and national officials who wish to support FET colleges' engagement with employers. It is a source of models, principles, and examples for anyone passionate about helping FET college students prepare for and succeed in the job market. It draws on employer feedback, college engagement experience, models, and research internationally—primarily from South Africa, the United States, and the UK—to help FET leaders build capacity.

The focus on South African and U.S. examples stems from its origins in the South Africa–US Partnership for Skills Development (PKSD). This partnership is a joint effort between the U.S. and South African governments, funded by the U.S. Agency for International Development in South Africa (USAID/South Africa). In that project, the American Council on Education engaged Jobs for the Future to provide technical assistance and training to the FET colleges to enhance their employer engagement strategies as well as their use of labor market information, career guidance, and data tracking tools.

REPORT FORMAT:

A BUSINESS PLAN FOR COLLEGE-EMPLOYER ENGAGEMENT

This guidebook is organized in much the same way that an employer would organize a business plan: from defining the value of the product, to management strategies, to market research, marketing, and financial sustainability. One reason for that format is to encourage college leaders to apply business concepts and approaches to their engagement strategies. A second reason is to focus on *action and implementation strategies*, as a business plan does, for creating value for students and employer customers. As in business, a plan for understanding and serving customers is one key to success.

Following a common business plan outline, this guidebook examines employer engagement from seven lenses:

- *Value Proposition:* Benefits and Challenges of Engagement
- *Management and Leadership:* Transforming FET Capacity
- *Market Research:* Understanding Employer Needs and Job Opportunities
- *Operations Part 1:* Focusing on Employers
- *Operations Part 2:* Focusing on Students and Dual Customers
- *Marketing:* Delivering the Business Case Effectively
- *Financing:* Generating Revenue from Employer Services

We begin this “business plan” element of the guidebook with the value propositions for employer engagement—why the challenges of engagement are worth the effort for employers, the college, its community, and its students. This is followed by management and leadership practices that set the foundation and capacity for colleges’ engagement activities. A market research chapter will assist colleges as they set direction for their employer strategies based on strong knowledge about demand and competition.

The “Operations” section is divided in two parts to reflect the two very demanding yet complimentary operations the FET must master to serve its “dual customer” base. The first focuses on operations targeted to employers, while the second focuses on those most engaged with students as they prepare to become employees. We then examine marketing strategies to begin improving employers’ perceptions of the FET college, its services, and its students. Finally, we discuss practical elements of financing and sustaining this demanding work, focusing on fees for training services to fuel the broader success of the college.

THE VALUE PROPOSITION: BENEFITS AND CHALLENGES OF ENGAGEMENT

WHY COLLEGES AND EMPLOYERS MUST ENGAGE

College-employer engagement and partnerships offer important benefits to employers, to college leaders and staff, to students, and to workers and the community as a whole. Yet these benefits require a great deal of work and major shifts in the way many colleges approach their mission and manage their operations. Before we address a central question of employer engagement—“What do employers in our community need?”—another question is equally important: “How does employer engagement benefit our college, our students, and our community?”

For colleges, partnerships with employers help them to:

- Increase placement rates among graduates;
- Become more attractive to job-oriented students;
- Add funding for initiatives not covered by dwindling government budgets;
- Access employers’ latest technology, equipment, and process innovations;
- Update and improve the relevance of existing curricula;
- Develop curricula for emerging occupations;
- Develop practical experience for lecturers; and
- Access adjunct faculty with real-time and hands-on experience.

For students, partnerships with employers help them to:

- Apply classroom learning to practical situations to improve learning and retention;
- Gain skills that are relevant skills to the current job market;
- Prove skills to prospective employers;
- Identify potential bursary support;
- Understand work in the field of choice, including work environment and company or industry culture; and
- Gain motivation and trust that employers will reward learning with employment.

For communities, partnerships with employers help them to:

- Attract employers to the region based on the available skilled labor;
- Improve the success of existing industries;
- Encourage entrepreneurs and start-up companies;
- Boost employment and wages; and

- Reduce poverty and the many attendant social costs.

SEEK FIRST TO UNDERSTAND: EMPLOYER NEEDS AND CONCERNS

To gain these important benefits, FET colleges must deeply understand and respond to employer needs, concerns, and challenges—just as they do for their students. Many helpful research studies have asked employers about their needs and challenges related to working with educational institutions. Yet most employer needs and concerns can be readily understood when college leaders imagine themselves in a business owner's shoes.

First, the stakes for failure are high. Most owners have invested significant risk and funds to start their business. When businesses fail, the owners can owe large amounts to their suppliers, investors, lenders, and employees. Many have staked their homes for an initial loan or investment guarantee. And they have staked their livelihoods and reputations on their businesses' success. As a result, they must be very strategic about how they invest their time and resources.

Second, satisfied customers are a business owner's lifeblood. So their employees need to be excellent at satisfying customers. And they must be able to do this every time they engage with a customer or create a product for sale. Their employees must be efficient, courteous, on time, and present on the job every day, for every customer, or for every product. And employees must have the skills and motivation to create services and products with the quality, speed, and price that are at least as good as competitors'.

WHY EMPLOYERS ARE WARY OF COLLEGE ENGAGEMENT

Given the stakes they face, it is understandable that employers in South Africa (and around the world) have expressed many concerns about starting partnerships with colleges and other education institutions. Common concerns include:

- Time it takes to participate in planning and meetings;
- Time it takes for colleges to respond to their requests;
- Low relevance of academic curricula for their business (including the National Curriculum/Vocational);
- Uncertainty about their responsibilities in a partnership;
- Uncertainty about where to begin contact with the college;
- Exposure to injury liabilities in working with students;
- Current employees seeing their interests in conflict with those of learners;
- Aversion for academic culture, language and bureaucracy;
- Potential divulging of sensitive information to competitors; and

- Other potential costs of participation.

An employer who engages with an FET college to provide work experience or who hires FET college students and graduates faces significant risks and potential costs.

Therefore, the FET college must communicate and assure that the benefits clearly outweigh the likely costs and potential risks.

EMPLOYER BENEFITS

Fortunately, there are many potential benefits for employers who engage with an FET college, *if* the FET college has the capacity to deliver those benefits. These include opportunities to:

- Recruit and identify the most skilled and motivated students at the college;
- Preview and coach qualified applicants during hands-on work experience at the business;
- Reduce training costs by helping the college to teach more relevant skills;
- Increase morale and job satisfaction among current employees by providing opportunities for advancement;
- Increase productivity and competitiveness by developing more skilled employees; and
- Improve marketing and market share with more diverse employees and visibility of your company.

These are just some of the important benefits that colleges and other stakeholders when employers and colleges partner.

OTHER CHALLENGES TO ENGAGEMENT

To provide these tangible benefits, FET college leaders should prepare for common challenges in implementing employer engagement. These challenges can arise from the goals and circumstances of each stakeholder, as well as from the environment they find themselves in together. The literature reviewed for this paper suggests three categories of challenge when educators and employers attempt to engage with one another. In addition to the concerns of employers cited above, another set of challenges are internal to the college itself, and many others arise from the enabling (or disabling) environments that affect them.

Internal College Challenges:

- Costs of equipment for technical and hands-on training;
- Numbers of participants needed to make courses financially feasible;
- Lack of facilities for customized classes;
- Faculty concern about academic relevance of “vocational” training;

- Lecturers with relevant industry experience and pay structures to attract specialized lecturers; and
- Inadequate staff capacity or systems for efficient follow-up with employers.

Environmental Challenges:

- National or local funding changes that interrupt the continuity of services employers rely on;
- Program policies and requirements that interfere with providing desired business solutions;
- Poaching of students by other employers, which discourages investment in training workers; and
- Economic slowdowns and high unemployment that can reduce the demand for skilled workers.

Given the significant benefits and challenges of FET college-employer engagement, this guidebook highlights effective strategies and practices used by a variety of college leaders. The following chapters address the question: What strategies and actions can FET college leaders pursue for the benefit of their students, their communities, and the employers themselves?



MANAGEMENT AND LEADERSHIP: TRANSFORMING COLLEGE CAPACITY

BEGIN WITH TRANSFORMATIVE LEADERSHIP

FET college-employer engagement often requires important changes in the practices and culture of the college—and often in the businesses with which they work. This requires transformative leadership and management. Successful employer engagement leaders use their transformative vision, communication, and management strategies to overcome institutional challenges and inspire confidence among FET college staff and potential employer partners.

Many FET college CEOs, managers, and staff understand the benefits of engaging with employers to improve the job market outcomes of their students. And they recognize the need for the colleges to contribute to the success of regional businesses and the South African economy. The national government too has begun to place a priority on employer-based learning and partnerships.

Yet most college systems and incentives were set up for priorities *other than* employer demand. For example, student enrollment numbers (rather than job placement or the value of training to the local economy) have primarily driven FET college budgets. That creates a strong incentive for FET leaders to offer courses that are popular with students, whether or not they lead to employment or meet employer needs. FET college budgets have also constrained investment in the facilities, equipment, lecturer, and student support capacity needed to provide training for high-demand skills. Such constraints spur transformational leaders toward new incentives and resources to help their staff create effective services to employers.

Broader cultural and historical challenges also add to the transformational nature of building employer partnerships. While mistrust between the public and private sectors is common internationally, South Africa's legacy of apartheid has exacerbated it, particularly for efforts to prepare young people of color for vocational skills. It has also led to mistrust of employer-government collaboration generally. And the relative neglect of FET colleges in the past has led to their relatively low status (or recognition) among employers.

To address these institutional and cultural barriers, the FET-employer engagement leader—whether a CEO, partnership coordinator, or student support officer—needs to be a leader of transformation, and in both institutional practices and the mindset of those staff and employers they hope to influence.

WHAT COLLEGE LEADERS AND MANAGERS CAN DO

BECOME A THOUGHT LEADER ABOUT YOUR REGION'S ECONOMY.

One responsibility of a transformative college leader is to look beyond the campus grounds to see what's next in the environment affecting the college's students and their futures. They keep themselves informed about economic, labor market, and industry trends that will affect employers and the college's soon-to-be graduates. They block off regular time to read articles and reports about the economy and industries of importance in the region. They also monitor labor market data about declining or growing occupations, and about ways that global or technological changes are affecting the world of work. *(See the Market Research section for more details).*

BUILD INDIVIDUAL RELATIONSHIPS WITH BUSINESS AND COMMUNITY LEADERS.

Part of being such a thought leader is to build relationships with well-informed business and community leaders who track economic trends in their work. The leaders of chambers of business, key industry groups, and professional associations should be on the CEO or partnership manager's list of relationships to cultivate. Other community members (e.g., commercial lenders; business-to-business sales managers) can add even more detailed knowledge about certain sectors. And local elected officials, economic developers, and community development foundation leaders are in a similar position to monitor regional trends.

Such relationships help the FET leader better understand local skills demands and community challenges that the college could help address. They also help alert the FET college to opportunities for collaboration and provide a channel for it to share its unique knowledge of the community and influence other leaders in ways that help college and its students.

These first two "learning leadership" strategies help CEOs and managers develop a vision for employer engagement and proactive plans to address the threats and opportunities of the future. This learning helps leaders motivate and empower their staff by sharing knowledge informally, and it can be augmented by asking staff to track trends as part of an intelligence-gathering team. By modeling awareness of the labor market, leaders help staff understand the environment more effectively and engage them in responding and preparing students for the future.

CONDUCT AN EMPLOYER ENGAGEMENT SWOT ANALYSIS FOR THE COLLEGE.

A useful way to begin preparing your college for employer engagement is to conduct a rapid analysis of your college's "Strengths, Weaknesses, Opportunities' and Threats"—a

SWOT analysis—related to employer partnerships and the labor market. The analysis engages your management team in thinking strategically about how well the college is positioned for creating relationships with employers and where it needs capacity building to prepare for engagement.

A typical SWOT process begins with information collection about the college's strengths and weaknesses, followed by a review of opportunities and threats that might arise. These should examine many of the subjects covered in this guidebook, including the labor market, management, operations, staffing, marketing, and finance, but also consider any aspect of importance to employer partnerships. It is also useful to assess each aspect of the FET college in comparison to potential competitors, including private training providers, in terms of price, quality, or specialization.

Example Practice: FET SWOT Analyses

Several FET colleges participating in the SA/USAID Partnership for Skills Development engaged in an employer engagement SWOT analysis process with JFF in 2010. The colleges began with a dialogue among key leadership and staff involved in employer engagement. As Step One, each college as a whole compiled answers for each SWOT category. In Step Two, they prioritized their strengths weaknesses, opportunities, and threats in terms of the impact on employer partnerships. They then identified the reasons that each strengths was important to employers and identified action steps to correct weaknesses and address opportunities and threats. In Step Three, they added ways that the college would measure the effectiveness of the action steps. An example of one FET College's SWOT analysis is included in the appendices.

CREATE AN FET-WIDE EMPLOYER ENGAGEMENT STRATEGY.

The SWOT analysis can help your management team develop a rapid, shared understanding of the college's employer engagement opportunities and weaknesses and generate immediate capacity-building steps. It can also serve as the first step to a more comprehensive long-term partnership-building strategy.

Even a strong business services unit is no match for the capacity and expertise of the entire college faculty and staff who can bring technical, marketing, fundraising, and other supports to employer engagement. A comprehensive employer engagement strategy, led by the CEO or deputy CEO, will help those departments create a shared vision for working together and communicate the importance of employer engagement for the whole college. This strategy should include representatives from academic and technical noncredit departments, student support services, marketing, and IT, among others, to enlist each of them more deeply in a college-wide cultural change and align their resources to more effectively engage employers.

The table below summarizes an example of a college-wide employer engagement capacity-building strategy. It illustrates the kinds of activities that diverse parts of the FET college may undertake to enlist the entire college in employer engagement—and ultimately in job placement success for students.

ENGAGING THE ENTIRE COLLEGE: FET-WIDE EMPLOYER ENGAGEMENT CAPACITY BUILDING STRATEGY	
DEPARTMENT/TEAM	ROLES / STRATEGIES
Executive team	1) Build relationships with Chamber and targeted sector leaders. 2) Promote FET-wide employer engagement strategy to middle managers
Institutional Research	1) Identify 3 growth industries and 6 FET-level occupations in demand. Identify employer skills needs and challenges for those. 2) Launch employer outreach survey.
Lecturers/Academic	1) Deliver English language enrichment program for Business, Hospitality program students, 2) Initiate 'lecturer learnerships' for rapidly changing industries.
Business Unit/Short Courses	1) Implement employer-focused customer relationship management system, 2) Convene 3 employers to conduct review of a special IT curriculum. 3) Reestablish XYZ SETA certification.
Finance / Accounting	1) Build full costing and profit model for short course bidding, 2) Identify local high volume suppliers for employer engagement
Communications	1) Develop internal campaign to highlight college mission of employer engagement. 2) Prepare and highlight one article on a local employer or FET-employer partnership in FET monthly newsletter.
Events	1) Recruit key employer leader to speak in upcoming graduation (or other) event. 2) Plan employer awards event for coming year.
Marketing	1) Develop employer-services brochures for our 3 target industry sectors. 2) Assist IT with employer-focused website content.
Information Technology	1) Develop website portal specific to employer services and education. 2) Create social media (Facebook) student and alumni tracking tool.
Community Outreach	1) Develop community partners for childcare, transportation. 2) Establish MOUs.
Development/ Fundraising	1) Gain certification with XYZ SETA. 2) Develop new facilities, equipment, and employment support program proposals.

Student Support	1) Develop computer-based career guidance tools using existing web tools. 2) Implement career guidance programs for prospective students prior to registration. 3) Implement SSACI work based learning.
Facilities	1) Expand flexible facilities use schedule to allow more hands-on workshop use. 2) Improve signage directing employer visitors to CEO and Partnerships officer offices.

COMMUNICATE COMMITMENT TO EMPLOYER SATISFACTION

To create such an FET-wide commitment to improving student job placements, it is important that most college staff see and treat employers as one of their important customers. The leadership team must communicate this priority clearly and consistently.

This change in perspective is frequently challenging for staff who have focused solely on classroom preparation and student services. However, senior leaders can demonstrate the strategic cultural shift in multiple ways, starting with the SWOT analysis and comprehensive employer engagement strategy processing above, and continuing through a communication strategy.

One strategy is to provide symbolic and visible reminders of the importance of employer partnerships by inviting employers to attend or talk at graduation ceremonies or by hosting awards ceremonies or web-based or print articles about employers who have:

- Hosted work based learning experiences for students or lecturers;
- Provided mentors to students;
- Worked on curriculum development with lecturers;
- Donated time, equipment, or other resources;
- Participated in governance structures and advisory boards;
- Contracted training for current employee advancement; or
- Hired multiple graduates.

Lecturers and staff who work with employers should also be featured and rewarded for their efforts to develop relationships and share initiatives. This enhances motivation for those staff, as well as their peers, to regard employer partnerships as an important priority and to collaborate to meet employer needs.

CREATE STRUCTURES AND RESOURCES THAT HELP STAFF RESPOND TO PARTNER NEEDS.

Successful employer engagement leaders supply their staff with the resources and flexibility required to keep pace with the employer environment of competition, rapid technological change, and tight timelines and budgets. To sustain responsiveness, staff

members need structures, processes, and resources that can be dedicated to meeting the needs of employers under pressure. This includes processes and resources for:

- Developing relationships and understanding employer needs;
- Placing students in jobs and work-based learning;
- Addressing work attendance and retention problems and work conflicts;
- Hosting or facilitating industry sector meetings;
- Developing customized training curriculum;
- Marketing college services to employers; and
- Researching and addressing the region's current and long-term labor market.

While a business services or customized training unit can serve as the core employer contact, other units (e.g., finance, marketing, curriculum development, academic departments) must also have the ability and incentive to use resources when called upon for employer activities. Involving a broader range of departments in employer engagement planning communicates the priority and enables them to identify contributions they can make and the resources they would need to contribute. This requires planning for adequate budget flexibility to fund the work and to schedule staffing around high and low activity times in the academic calendar.

PARTNER WITH OTHER INSTITUTIONS TO SERVE WORKERS AND EMPLOYERS.

Few FET colleges can provide everything employers need to meet their workforce challenges. However, the college's business services unit can broker or make referrals to valuable services for new workers. Referrals to child care, worker transportation, and a variety of types of counseling can help new or advancing employees be reliable and effective on the job. The college can also partner with organizations that provide business services (e.g., SME financing, entrepreneurial consulting, lean business processes, technology commercialization) and other services that contribute to solving business problems. Offering such services can simplify an employer's efforts to hire and retain workers.

CREATE A SHARED GOVERNANCE STRUCTURE THAT ENSURES BOTH A COMMON VOICE AND ACCOUNTABILITY.

In active partnerships between colleges and employers, many significant decisions can lead to either cohesion or tension. The outcome can depend in part on how satisfied each partner is with the decision-making process itself. Specialized governing boards that give representation to employers, the college, and other stakeholders have been useful for ensuring a process of shared leadership and management.³ These boards have more autonomy and they focus on joint initiatives more than would the governance body of either the college or an employer association in the partnership. Such a board

(or “workforce partnership”) functions better if it takes the time to establish a shared mission and vision for the partnership and designs outcome goals that create value and accountability for employers as well as other the partners. Carefully recruit business leaders who have respect and influence in their industry and an ability to understand the planning processes of colleges.

USE METRICS TO DRIVE EMPLOYER SERVICES—AND STUDENT EMPLOYMENT.

One way of demonstrating the college’s commitment to employer engagement and satisfaction is to include related measures in organizational and individual goals. Include direct measures of employer contributions to the FET college (e.g., outreach contacts; participation in advisory committees; work-based learning placements) in the performance evaluation of business services units and appropriate partnership staff. The ultimate measure of employer (and student) satisfaction with the college’s mission is student job placement and retention. Success at placement is the ultimate goal of employer engagement and of student participation in their FET education. Thus, it should be a central measure on which the college should collect data and base program decisions. If job placement data were available on individual student records, colleges could gauge how well certain programs and courses help graduates to gain employment.

Despite its central importance, job placement data are among the most difficult data for FET colleges to access. A national system of reporting on unemployment insurance would provide a wealth of this information for employment in the formal economy, using data that are already collected from UI records. National and provincial policymakers (as well as employers and college CEOs) have the opportunity to make tremendous impact on FET responsiveness to employers by advocating for the use of this data.

Since student employment tracking is such a critical measure of overall success—but has so many difficulties—we dedicate substantial detail to this concept in the operations section. We also discuss direct employer satisfaction surveys in conjunction with the labor market intelligence (Market Research) section. *(Also see the Cabrillo College example in the following section on Market Research.)*

MARKET RESEARCH: UNDERSTAND EMPLOYER NEEDS AND JOB OPPORTUNITIES

In a business plan, entrepreneurs must provide market research to demonstrate that they understand the demand for their new product or service, and that enough customers will buy it to support the business financially. While this research is time consuming, it can reduce risk significantly and help the business leader make decisions that are crucial for the enterprise and its employees. Similarly, as noted earlier in this guidebook, FET colleges need to deeply understand the needs of the region's employers, just as they do students, in order to provide value to both customers.

BASE STRATEGIES ON ACCURATE INFORMATION.

From the labor demand side, colleges need to understand the overall economy and its impact on the specific industries that are important to their regions. But it is not enough to know the general direction (growing versus shrinking) of particular industries. In addition, college leaders need to know the *occupations* that are growing or declining, and the skills and education requirements employers require to hire new employees. For instance, while many communities have seen an overall decline in manufacturing in recent years, specific types of manufacturing are still growing and have a strong need for skilled workers in certain occupations. Rather than end a manufacturing training program, a college would need to sharpen its focus to reflect the growing occupations.

So how can South African colleges gain such accurate information?

USE MULTIPLE LABOR MARKET INTELLIGENCE SOURCES.

Colleges typically gather such "labor market intelligence" from three main sources: general data collected by others; direct relationships with employer groups; and special data collected by the college. It is vital to use multiple sources of information because no one source can give a complete picture of the labor market, and because it is difficult to verify the accuracy of many of the sources available.

BEGIN WITH EXISTING RESEARCH.

For efficiency, colleges should review existing research on the labor market and industries of interest. So the first source of intelligence is secondary data collected by outside sources. These sources include Statistics South Africa, provincial economic development offices, industry association researchers, and the most recent SETA's Scarce Skills reports. This is often the way to begin getting informed about the economy or industries of interest, ask the most pertinent questions of employers, and get a real-world reality check on the data through other intelligence sources.

Generally, data produced by Statistics South Africa will not include enough local detail to be useful, with the major exception of data published from the 2011 Census. While that data will not be available until late 2012 or early 2013, it will likely include a wealth of relevant information.

There are five other useful sources to pursue:

- Provincial and municipal economic development agencies;
- Various Sector Education and Training Authorities (SETA);
- Local chambers of business;
- Local universities; and
- Internet job consolidation sites.

Provincial economic development agencies gather local statistics, and they often commission specific studies to help guide their activities. Much of the information they collect for their own purposes will also be useful to the FET college. Establishing a relationship with those agencies has a potential major benefit to the college if the economic development agency begins to see it as a potential partner in its business attraction and expansion activities.

Each SETA will have its own research department (*see the Service SETA http://www.serviceseta.org.za/Research/research_index.html for an example*). SETAs that cover occupations for which the FET college is providing training should be approached to determine if any of past or ongoing research is relevant. Again, the approach on the research question could blossom into a larger partnership, with the SETA seeing the college as a key player in its skills development strategy.

Local chambers of business can be a valuable informal source of information on the local economy. They are likely to have a sense of what sectors are expanding and which ones are not. They are solid partners for the employer outreach surveys described in another part of this guide.

The economics, business, and statistical departments of local universities may be producing relevant research. Cultivating relationships with a local university can also bring other benefits, including occasional guest lecturers and articulation agreements that provide a path for some FET graduates into university education.

Finally, three Internet job consolidators currently operate in South Africa: Job Rapido (<http://za.jobrapido.com/>); Indeed (www.indeed.co.za); and Simply Hired (<http://za.simplyhired.com/>). These sites can be a source of information on the local labor market. They pull job ads from various Internet sites in South Africa (e.g., newspaper help wanted sections; national job boards; company websites) and make

them available through a single search. Research here is likely to be done by the college's placement staff as a secondary benefit to finding jobs for students.

These sources might provide relevant data on such questions as:

- What industries are growing and declining (nationally/in the FET region)?
- What occupations are growing and declining?
- What companies are hiring the largest number of these occupations?
- How many workers are expected to retire from the in-demand occupations? (What is average age?)
- What degrees or certifications are required for the in-demand occupations?
- How many workers are gaining training for the degrees or certifications?

DIALOGUE WITH EMPLOYERS.

A good source of intelligence is personal contact and *direct conversations with employer representatives*. Informally, college leaders need to cultivate relationships with business people who closely monitor business trends. Such relationships can become a source of very detailed and actionable information about labor market needs. And the relationships can provide insight that is much more current than secondary data, which is usually based on data from several years in the past. Personal contacts also provide insight into plans that will affect future demand.

Chamber of business managers, commercial lenders, large business-to-business sales representatives, local utility planners, and economic development officials are all useful sources of information because they must be well informed about the region's larger industry trends. College leaders should selectively develop relationships with business people from industries that have the most potential to hire many FET graduates in their region. They can develop informal contacts with these business people by joining chamber groups and professional associations, as well as by inviting leaders to graduations and other college events. They can more formally organize these relationships by inviting select employers to join governance structures and industry groups that advise specific departments at the college.

Relevant data that these sources might provide include all of the questions noted above, plus:

- How does the company advertise for these occupations?
- What are the sources of workers for these occupations?
- What skills are lacking in applicants for these occupations?
- What training is needed for current employees?
- What new employment is likely to be created in the near future?

- How well does our curriculum match your skill needs?

CONDUCT DIRECT EMPLOYER RESEARCH.

The third source of labor market intelligence is specialized formal *research that colleges conduct for themselves*. This research is valuable for two reasons: most secondary data are reported on a national basis, but the data differ significantly by region; and the personal contact research tends to represent only a small fraction of the employers in a region. Therefore, many colleges conduct a hybrid of specialized demand research when exploring the feasibility of a new program. Such research usually includes the data described above, as well as surveys, interviews, and focus groups with employers. Sometimes the college commissions outside consultants for this work; sometimes researchers internal to the college do it.

Example Practice:

Establish an Employer Outreach Survey

JFF recommends a continuous and systematic approach to collecting data about employer demand through “Employer Outreach Surveys.” These are relatively brief and inexpensive email and telephone surveys of large groups of employers of interest to the FET colleges. The surveys are developed in partnership with local chambers of commerce and economic development and university stakeholders. The initial purpose is to identify high-demand occupations, potential job openings for FET college graduates, and work-based learning opportunities. But the survey may also be used to identify any number of opportunities for partnership with employers or needs for service improvement—such as incumbent worker training needs or perceived skill deficiencies in local FET graduates.

As an example, Nkangala FET College in Mpumalanga Province partnered with the Middelburg Chamber of Business and JFF to establish the first survey pilot in 2011. Building on an ongoing relationship between the college and the chamber, Nkangala FET and JFF approached a chamber manager with a concept paper describing the survey and arranged a meeting with the chamber CEO. The chamber quickly recognized the potential benefits of gathering employer skills needs so that the chamber and FET (and other partners) could more accurately meet those needs.

The partners established an MOU to define each organization’s roles, the needs for confidentiality of employers, and a work plan for design and implementation. The model MOU is included in the appendices of this guide, but the key roles include:

Chamber Roles:

- Advise JFF and the college on design of the survey questions.

- Confidentially share the chamber database to build upon the contact lists generated by Nkangala FET and JFF (only the chamber and JFF have access).
- Publicize the survey and encourage participation among the business community by email, newsletter (print and electronic), and chamber website.
- Email or fax the survey or survey announcement to employers.
- Announce and publicize the results of the survey among employers.
- Make a workstation available at chamber for survey activities.

FET College Roles:

- Advise JFF on design of the survey questions to ensure FET responsiveness.
- Provide telephones and computers at the student support center for implementing the survey.
- Establish and manage a team of student workers to implement the survey.
- Help to analyze survey results.
- Establish an “Employer Responsiveness Team” to use the survey results to improve services to employers and career success of students.

As a technical assistance provider, Jobs for the Future led design of the survey instruments and processes, established a relationship with the University of Limpopo for potential survey analysis, advised Nkangala FET and the chamber during implementation of the survey, analyzed results of the survey, and recommended reporting formats.

USE OUTCOMES DATA TO CONTINUOUSLY IMPROVE, EXPAND, OR REDUCE PROGRAMS.

Data about the employment outcomes of FET college graduates is an extremely valuable source of information about matching programs to the labor market. This requires gathering data about where students are employed after graduation, and linking that information to the programs students completed. The college can use this information to assess which programs are most effective at preparing learners for jobs and which industries are the biggest “customers” of those college programs. Linking this to each student’s required and elective course records, the college can also gain indications about how to shape program content. And this can help the college target additional surveys of employers who have hired graduates and help improve the content of the courses.

Further detail about student tracking strategies is included in “Operations Part 2.”

Example Practice:
Cabrillo Community College

Cabrillo Community College in California uses student job placement data and other labor market information to guide its updating of existing programs and investment in new programs. The college also uses this information to guide the reduction of programs that are not supported by demand. To help the college make difficult program decisions in an era of high budget deficits, it surveyed student employment outcomes for its graduating classes over five years. The college followed up with each class one year after graduation using email, phone calls, and traditional mail. It had a 50 percent response rate using these methods and is now using social media, beginning with LinkedIn but likely moving to Facebook.

Using these data, the college conducted comparisons among its 21 programs, and used the placement outcomes data in its program reduction and elimination decisions. Staff consider this data use as a matter of responsible stewardship for college funds, and they use it to convey the importance of job outcomes throughout the college. It also motivates program staff to analyze other data, such as overall job demand, employer skills requirements, and the supply of programs at competing colleges.

RESEARCH THE COLLEGE'S COMPETITORS.

College leaders should begin their research of competitors by listing institutions that provide similar courses and services, principally private training organizations. For each company, generate some basic information, including the provider name and contact, description of the school, courses that compete with the FET, the course duration, price, and the competing course within the FET college.

To supplement the basic awareness that college officials have about competitors, they should collect lists of accredited training providers from the SETAs that cover the college's curriculum areas. They could also review data on the Skills Portal (<http://www.skillsportal.co.za/>). *Because pricing is such an important element of this competitive market research, this is discussed in more detail under Financing.*

OPERATIONS

Effective operations are the heart of maintaining employer partnerships. Once your FET college team has developed management strategies that support engagement and has conducted research on employer demand, it is in a better position to build its operational capacity. While effective operations vary based on each college's environment and resources, all face several common issues when designing their employer engagement operations. Important elements of nearly all employer engagement operations include:

- Coordinating services to employers;
- Placing and retaining students in jobs;
- Developing more relevant curriculum;
- Building lecturer capacity;
- Improving career guidance to students;
- Organizing work-based learning; and
- Delivering customized training.

TWO LINKED CUSTOMERS = TWO LINKED OPERATIONS

Each element affects the two primary sets of FET college customers: students and employers. However, some services (e.g., career guidance) center more on student services, while others (e.g., customized training) primarily serve employers. For our student customers, *successful careers* are the end product they seek to “buy” with their FET college attendance. For employer customers, the typical end product is *successful employees*.

Given this dual customer nature of the FET college business, we divide our two chapters on Operations into practices that are primarily employer focused, and those that are student focused or serving as an intermediary between both groups. The college's success with each type of customer has a direct impact on the other.

OPERATIONS PART 1: EMPLOYER FOCUSED

BUILD A DEDICATED BUSINESS SERVICES UNIT.

One valuable foundation for employer partnerships is a dedicated business services unit. This is a small team of staff dedicated to establishing and managing the partnerships between the college and employers. Ideally, business unit staff develop specialized knowledge about local employers and key regional industries, ensure that services match employer expectations, develop the college's capacity and credibility, and gain commitments from employer partners.

While such a dedicated unit has costs, it provides many valuable advantages to the college, including:

- A clear point of contact, or “one-stop shop,” for employers who reach out to the college but do not know where to begin;
- Increased accountability for employer customer satisfaction and long-term relationships with employers ;
- Specialized partnership expertise (e.g., marketing, needs assessments, negotiation) to help other departments to partner;
- A neutral coordinator of services from multiple departments and a broker of multiple community resources;
- A clear resource for job vacancy and labor market demand information for students, alumni, and college staff; and
- Centralized monitoring and documenting of employer engagement, which is often decentralized to staff with individual employer relationships

Example Practice: Northern Cape FET

When South Africa's FET system replaced apprenticeships with learnerships, Northern Cape Urban FET College established a dedicated team—the “Business Unit”—to coordinate cooperation with SETAs, employers, facilitators, and learners. This unit registers learning programs and facilitators with SETAs and then implements the programs on the college's two main campuses, plus other sites in Northern Cape Province. The unit also organizes short courses requested by local government, the municipality, and other employers, as well as training the FET's own staff.

The college also operates a learnership/skills unit that deals with 12 SETAs and offers 14 Accredited Skills Training Programs. The college has established joint initiatives with a diverse set of employers, including: UFS, Simsa, the Premier's Office, the

Departments of Social Services, Health, Labour, Economic Affairs and Tourism, as well as Eskom, De Beers Consolidated Mines, Police Forum, Iscor, Sishen, Kimberley Municipality, De Aar, Uppington and Kathu Campuses, Mobile Educational Trust, Thutong Ya Bana, San & KWE Development, and Vukani-Ubuntu—Nelson Mandela Children’s Fund.

EXAMINE ALTERNATIVE STRUCTURES FOR THE BUSINESS SERVICES UNIT.

Different structures for a business services or employer engagement unit may be most effective, depending upon the college’s goals, environment, and resources. South Africa’s Human Sciences Research Council examined the variety of structures that grew out of a “Linkages and Programmes Unit” initiative piloted in 2002.⁴ The LPUs were established in seven FET colleges to create a formal mechanism to engage with external partners. Three of those colleges exemplified the range of structures possible. The College of Cape Town represented a large urban FET that could build upon a history of employer engagement and multiple partners. South Cape FET College was a small-town college that had only small and unsuccessful previous attempts at more responsive curriculum, but it had several partners available. And Mthashana FET College was a deeply rural college that had very few partners available or structures to develop them prior to the LPU pilot.

Major differences in approaches by the colleges centered on four factors (*see table*):

- The extent to which deputy CEOs, campus managers, program managers, and academic leaders are committed to employer partnerships and working together effectively;
- The extent to which the CEO delegates LPU tasks;
- The presence of potential partners from local industry, CBOs, and government; and
- The income sources available to fund new programs and initiatives.

Following is a table summarizing the differences:

Varied Environments and Structures for Business Services Units

	COLLEGE OF CAPE TOWN	SOUTH CAPE COLLEGE	MTHASHANA COLLEGE
CORE COLLEGE IDENTITY	Big city urban	Small town, peri-urban	Deep rural
LEVELS OF LOCAL UNEMPLOYMENT	Medium	Medium	High

ORGANIZATIONAL ECOLOGY	LPU 'devolved' and integrated within an existing effective organizational infrastructure	LPU 'detached' and separate from existing organizational structures	LPU 'centrist' and reports directly to CEO - organizational ecology is too weak to play host to it.
ROLE OF CEO	The CEO does not lead the LPU on a daily basis; devolved. Staff and management structures run the LPU	Mixed; As a separate unit; LPU reports directly to Deputy CEO (New Business), but staff and management structures of the college do play a role	The CEO plays a very central role in starting up and leading the LPU
PRESENCE OF EXTERNAL STAKEHOLDERS	Several urban-based partners available	Several Small town based partners available	Few partners, developing rural partners amongst CBOs and local government
ORIGIN OF NEW INCOME	From business	From Business	From the public sector

Source: *Building FET College Responsiveness: The Role of LPUs*. Human Sciences Research Council. May 2006.

Many U.S. community colleges support a similar unit dedicated to employer engagement. U.S. colleges are highly decentralized, so these units operate under a variety of structures and names, such as a Workforce Development Group, Continuing Education Department, or Career and Technical Education.

POSITION THE UNIT AS THE “RESEARCH AND DEVELOPMENT” LEADER

To communicate the FET-wide priority on employer engagement, and to help the business services unit gain the respect and collaboration needed college-wide, it can be useful to position this unit as the college’s “R&D” department. In that role, the business services unit identifies, tests, and develops programs that meet longer-term employer and community needs, while also building the reputation and revenue of the college. It can survey employers on the skills of program graduates hired, assist lecturers to participate in “lecturer learnerships,” monitor when industry standards advance, and

attract work-based learning opportunities that improve student learning. Elevating the unit's role in contributing to other departments can help to establish a paradigm shift among all staff to see the long-term importance of developing programs with employers.

For example, before establishing the LPU initiative above, the College of Cape Town undertook an internal audit of institutional capacity (parallel to the SWOT analysis recommended earlier). This led the college to establish an R&D Department aimed at creating partnerships with industry. This department's strategy was to identify skills development facilitators within local companies, and these facilitators work with the college to research the companies' needs and develop FET college solutions. College staff report that the college was in a stronger position to create a business services (LPU) unit in 2003, which later also spun off a Business Center for small and micro enterprises.

ESTABLISH THE COLLEGE AS EXPERT IN SELECTED FIELDS.

Recognized expertise in one or two industry sectors or occupational groupings can raise the visibility of the college and generate employer trust. Success in one or two specialty areas can improve its ability to deliver in new areas to be developed with employers. Thus excellence in one or two occupations or industries initially is more important than attempting to provide to develop expertise to satisfy employers in too many industries. This is particularly true for FET colleges with limited resources.

Customized contract training, delivered well, is often the starting point for developing an industry expertise and reputation. According to research by U.S. employers, such customized training partnerships are most likely to succeed if certain factors are in place. First, the college must enlist faculty members with the necessary specialized teaching and industry experience. Hiring faculty with direct industry experience is the quickest way to build the knowledge base and credibility with employers to begin. In addition, colleges must teach relevant curricula, be willing to modify or develop programs that fit employer needs, and provide flexible training—on and off campus, as well as outside usual working hours.⁵

CREATE AN INDUSTRY “CENTER OF EXCELLENCE”

Centers of Excellence, as they are often termed in the United States, exemplify a more advanced stage of establishing college expertise in a sector. At this stage, a college takes on the mission of gathering, improving, translating, and disseminating leading-edge training (and other) practices for an industry of importance to the region or province. This requires the college to hire or partner with individuals with deep industry relationships and expertise who can help develop and manage services of the most value to businesses in that industry. In the United States, such centers might be operated by a college (two-year or four-year) or public workforce agency.

Example Practice:

Bellevue College's Center of Excellence for Information and Computing Technology

In the United States, a highly coordinated system of college Centers of Excellence can be found in Washington, where ten of the state's community and technical colleges each have a specialized center of excellence for a different industry. One of these centers, the Center of Excellence for Information and Computing Technology, is hosted at Bellevue College near Seattle.⁶ It partners with the U.S. National Workforce Center for Emerging Technologies to provide IT related services, research, programs, and events that serve community and technical college faculty and students, as well as industry and the secondary education system around the state.

The center has authority to reach beyond the college's official service district to provide other colleges with model IT education programs, best practices, up-to-date research, and lecturer professional development in emerging technologies. It also provides information on industry trends that impact employment, education, and business growth across Washington State. By brokering services for industry representatives, community-based organizations, economic development organizations, and other education institutions, the center develops the college's reputation and improves the entire region's workforce for IT.

In South Africa, hospitality training schools, specialized automotive training, and other programs that partner closely with employers have the potential to serve as such centers of excellence. That potential can be developed (and marketed) with strategic investments in expertise that employers see as reliable and uniquely valuable to their industry. For colleges with deep expertise in certain trades, becoming a "Trade Test Center" for certain occupations can be one concrete step to becoming a regional center of excellence for certain occupations.

ENCOURAGE AND LEVERAGE EMPLOYER LEADERSHIP: INDUSTRY PARTNERSHIPS.

Leveraging collaborative employer leadership is the strongest way to ensure that the college is developing programs and services that match market demand. And when employers are in the lead of an industry partnership, they are most likely to contribute substantially and to sustain their participation over time. An industry partnership led by employers implies that a *group* of employers is trying to meet the needs of its sector, rather than an individual company. It also implies the industry's understanding of the potential value that FET colleges or other educators can provide in meeting their industry's workforce needs.

FET colleges should seek out and contribute to industry initiatives that employers have organized to address challenges they face as a group. Industry associations, economic

developers, and chambers of business are good sources for finding out about these. Cluster initiatives that seek to strengthen an industry in a region almost always identify workforce supply challenges in the course of setting strategies. Often, FET colleges can play an important part in their solutions.

When such initiatives do not exist, FET colleges can sometimes help to encourage more narrow initiatives by convening a group of employers to discuss their common workforce challenges and needs. These “sector strategies” bring employers together with educators to create solutions for their workforce challenges, typically focusing on building the skills of mid- to entry-level workers to meet employer needs.

Example Practice: South Africa’s National Tooling Initiative

One employer-led model for FET curriculum and instruction partnerships is the National Tooling Initiative), founded by the Toolmaking Association of South Africa. The objective is to rehabilitate the South African tool, die, and mould-making industry and, as one part of that objective, stimulate South Africa’s manufacturing and technical skills development. In addition to its small business, technology, competitiveness, and export development efforts, the NTI has created partnerships with six FET colleges across the country.

Before building partnerships with the FET colleges, NTI identified regions of the country with high concentrations of fitting and turning or related manufacturing employment, then organized employer groups in each region to champion a local effort. These regional groups then identified FET colleges they were confident could adapt to the high skills standards needed in the industry—those who had the necessary flexibility, management strength, and technical capacity. Next, NTI worked with the colleges to improve the curricula, instruction, and other capacities needed for success. In this case, NTI and the employers developed the primary technical curriculum, based on international standards set by the U.S. National Institute for Metalworking Standards.⁷

In addition to providing customized curriculum, NTI helped the FET colleges build their lecturer and staff capacity in several ways. First, the technical coursework required highly trained fitting and turning lecturers, who are typically paid much more than FET college salary guidelines allow. So, NTI hired and paid these high-demand lecturers a market-competitive wage. Then, they provided lecturers with pedagogical training to improve their training skills. They also worked with Hennepin Community and Technical College from the United States to customize assessments and trained student support staff to implement them. In addition, these industry-FET partnerships established a single point of contact for supporting program participants and troubleshooting problems that might interfere with their retention.

BUILD LECTURER SKILLS AND EXPERTISE WITH EMPLOYERS

A critical element of the NTI initiative is industry's participation in developing lecturer capacity. Industry identified the technical skills lecturers would need and provided training and assessment to ensure lecturers were qualified to teach those skills. It also delivered pedagogical training for workers who had the technical skills but lacked teaching experience.

This level of lecturer development can present practical challenges. If the college cannot directly afford lecturer training, some employers would find this expense worthwhile if the training were very relevant to their operations. And even if they do not donate funds for training, many are willing to host lecturers (more so than young learners) for practical and theoretical experience at their worksite. Since lecturer's family constraints sometimes make them reluctant to attend extra hours of training, it is important for the college to recognize the value of their professional development during work hours.

In the NTI case, lecturers with the appropriate skills in fitting and turning were so in demand that the FET colleges feared that employers would hire them away at higher salaries. The solution in this case was for the employer association to create a position at a higher salary level, and cover this from industry revenues.

ENGAGE EMPLOYERS IN CURRICULUM AND BUSINESS ADVISORY COMMITTEES.

Whether or not it is part of an "industry partnership," employers' direct participation in curriculum design and instruction makes it more likely that the FET college is providing up-to-date training to meet employer needs and maintaining the confidence of area businesses. Colleges can facilitate this participation in many forms, whether for short courses or longer National Curriculum/Vocational or NATED curriculum.

Although colleges should not ignore opportunities to provide training for employers with large hiring needs, the college and community benefit most from short skills courses that will serve many employers over time. Thus, once the college has identified a common demand for training among employers, it may be useful to develop an ad hoc curriculum design group of employers to help design programs that incorporate multiple employer perspectives and serve many employers needs. Longer term, Business Advisory Committees help get improvement feedback over time. With a longer term advisory team in place, curriculum, and instruction for that matter, can shift to meet broad and evolving needs, rather than the specific needs of one firm at one point in time.

The FET college should capitalize on its special competency in training and curriculum design as a service to employers. The DACUM (Developing A Curriculum) process is a popular approach to occupational analysis among both colleges and employers in the United States. A college can offer valuable facilitation to employers using the DACUM or

similar processes to identify instructional needs, develop curriculum and materials, plan training, revise job descriptions and recruiting materials, and develop standards that are recognized globally by the International Organization for Standardization.⁸

BEGIN WITH SHORT COURSE DEVELOPMENT.

Since short courses offer the most flexibility in terms of curriculum design, fewer obstacles prevent deep collaboration between the college its employer partners in this area. The college can begin planning short courses through an analysis of regional demand for skills and training using the information described under Market Research. This research should help partnerships staff identify industries and occupations for which employers are likely to engage the FET college in short courses and other programs.

ENGAGE EMPLOYERS IN THE NCV CURRICULUM

Many employers have little awareness of the National Curriculum/Vocational or have misgivings about its effectiveness for preparing potential employees. Educating employers about the NCV curriculum and its benefits is an important role for employer engagement staff (*see Marketing section*). At the same time, there are also ways to reflect the needs of employers and apply their feedback to more effective implementation of the NCV curriculum in the classroom.

First, employer engagement can help the college include more practical or up-to-date applications in the teaching of the NCV theory curriculum (while at the same time familiarizing employers with NCV strengths). By engaging employers in the NCV, they can provide details about the application of theory to their most common operations or problems. They can help lecturers produce case studies or homework assignments that enrich student learning and provide a local context that improves learning retention. They can also donate or recommend equipment to reflect the current state of the industry, and allow for hands-on experience in the classroom.

Second, employers can be engaged by helping the college offer “capstone” courses designed with local employers to add specialized, job-relevant training to the end of a student’s NCV training. Accounting lecturers, for instance, might provide specialized accounting methods for the extractive industries in a region where mining or forestry operations have significant employment, or construction accounting methods if employers from that industry are numerous in the community. If there is not capacity to offer such capstone curriculum *at the end* of a course, FET lecturers might offer such an employer-enhanced module as “extra credit” for students who are ahead of peers *during* their core NCV studies. Such capstone courses can be highlighted in students’ CVs and interviews and help bridge NCV curriculum graduates to specific industries of importance.

DEVELOP CAREER ADVANCEMENT PATHWAYS WITH INDUSTRY.

In the United States, an increasingly important way to work strategically with industry sectors and clusters is to identify and build the experiential and educational steps workers must take to advance in their careers. Building the steps along these “career pathways” requires collaboration and articulation agreements among secondary, FET, and other higher education institutions and programs, as well as employer input on effective steps to qualify for higher-wage positions. In addition to helping workers advance, such pathways help employers access increasingly skilled workers and improve their retention of valued workers who seek increasing responsibility, learning, and pay.⁹

The stigma against vocational training as a low status or dead-end path compared to academic preparation exists in many countries, including South Africa. This interferes with student motivation and recruiting and employers’ perceptions of FET college students. Until students in technical education can progress into college and long-term career possibilities, both parents and students will see careers not requiring a college degree as lower in status. This means the academic preparation in vocational programs needs to be as rigorous as that in academic programs. South Africa, South Korea, Tunisia, and other countries have encouraged agreements between secondary schools and higher education institutions to accomplish this, but more work needs to be done.¹⁰

Example Practice:

Cumberland County College

Cumberland’s five-year strategic plan includes developing and maintaining five career pathways that lead to family-sustaining jobs. One of these pathways links training and career advancement steps across three industries through a career progression in business management and administration for the hospitality, tourism and retail sectors. Turning college programs into effective career pathways for these industries has led to stronger relationships with employers and deeper knowledge of their requirements for promotion in the career. This has resulted in the realignment and adaptation of all of the college’s business management degrees, as well as additional internship partnerships with employers. The pathway approach has garnered enthusiastic participation with these industries, which often struggle to retain employees.

DEVELOP SKILLS CERTIFICATES RECOGNIZED BY EMPLOYERS.

One element of a career pathway recommendation would include the awarding of industry-based certificates through training delivered by the FET college. Short modular, part-time, and weekend courses designed to acquire the next-higher-level skills within an occupation can help workers advance while maintaining their employment and incomes. This requires collaboration with industry certifying bodies (e.g., automotive repair, tooling) to qualify the FET as a training provider.

To make these short-term programs consistent with the advancement afforded by higher education, shorter-term certificates would also ideally be recognized in an academic credit path. This would involve dividing a set of skills into discrete manageable units that take less time to acquire and demonstrate. Together, the short units may lead to a more formal certificate or degree. This is a valuable exercise if the short-term skills certificates are recognized and used in employer decisions about hiring or promotions.¹¹

USE MEMORANDUM OF UNDERSTANDING SELECTIVELY.

FET college partnership staff express pressure to create written MOUs with employers when developing partnerships. In part, this pressure stems from requirements to document the existence of the partnership. Unfortunately, requiring an employer to sign a written MOU before a strong relationship develops can undermine the process of building trust. That process includes familiarity and dialogue, as well as demonstrated follow through on initial commitments. As one employer put it, “We have to date before we get married.”

Once employers are ready to commit to longer-term projects, then it is useful to have a written mutual agreement on the roles, responsibilities, needs, and limitations of the partners. At that point, a written agreement clarifies the underlying assumptions of verbal agreements and serves as a reference document for more complex (and even simple) partnership work plans. This does not necessarily require a formal MOU; a letter or even an email can be a reference document for initial collaboration. However, MOUs may be needed for partners to commit significant resources.



OPERATIONS PART 2: STUDENT AND DUAL FOCUSED

FET college students often make their first important career decisions as they enter the college. Yet they typically have little information about the world of work. At the same time, their decisions directly affect how successful the college will be at helping them get and retain a job, and how well they match students with the employers with whom they will seek to begin their careers. In addition to career guidance, the quality of support that FET colleges give learners has a large impact on whether they can find the best employers and how well they can contribute if hired.

Student-focused operations are essential to satisfy the FET college's "dual" customers of both learners and employers. "Operations: Part 2" focuses on practices that directly serve students, and those that directly connect students and employers. All of these ultimately affect both sets of the college's customers.

BE PASSIONATE ABOUT CAREER GUIDANCE.

In a 2011 JFF focus group with South African employers, their top predictor of employee success was "passion for the work." These employers wanted employees who have a personal interest in the quality of their work and the quality of the product. That was true whether the product was a well-running automobile, an attractive hairstyle, a well-crafted cabinet, or an excellent customer service experience. The employers believe this passion helps address their biggest concerns about new employees: attendance, motivation, and quality of work. The employers concluded that FET students need more detailed and persuasive career guidance to help them choose careers that make the most of their abilities, aptitudes, and interests.

While the complementary guide to career development developed by YouthBuild International¹² will provide important elements of career guidance, this guidebook highlights ways to leverage technology and employer engagement in career guidance and job placement.

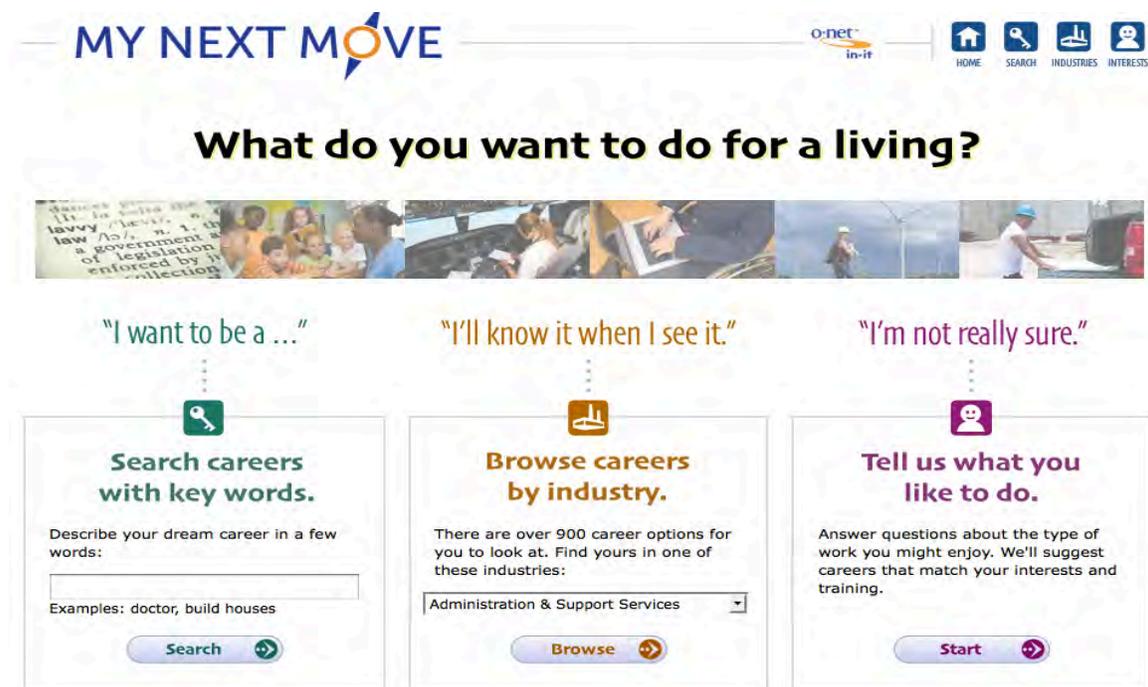
USE TECHNOLOGY TO EXTEND THE REACH OF GUIDANCE.

FET colleges need to reach large numbers of students efficiently, which they can do with technology-based career guidance tools. The South African Ministry of Education is in the process of developing comprehensive national career guidance tools, but FET colleges can quickly boost their career guidance capacity by introducing important elements of the future national system.

FET colleges could begin by adapting the U.S.-based O*Net career guidance tools. O*Net career tools, which are based on surveys of workers in over 1,000 occupations, help students make realistic career and coursework decisions by providing detailed

information on the tasks, work environment, required skills, education and experience, relative wages, and many other aspects of given careers. Use of the tools would improve students' knowledge of occupational choices and their selection of appropriate programs of study. That would likely lead to improved retention and success in their programs, as well as improved matching for employment. Where Internet connections are stable, the tools can be downloaded via the web. Elsewhere they could be loaded on locally networked Student Center computer stations.

One example of such a tool that is user friendly is the U.S. Department of Labor's "My Next Move." This online tool provides jobseekers with information on more than 900 occupations, as well as local job openings and training opportunities (see screen shot below).



Introducing more automation to the system using O*Net tools would reduce the current workload of student support staff. It would also improve the quality of guidance and information available to each student by allowing them to work independently using the technology. During orientation, student support staff would give prospective FET students a short workshop on career selection using the colleges' assessment tools and the O*Net interest inventories and career information tools. Then students would work independently on the student center computers to:

- Take the current FET math and English skills assessments;
- Complete the O*Net interest inventory and values inventory;
- Match their skills, interests, and values with prospective occupations;

- Conduct an exploration of suggested occupations, answering recommended questions and generating their own questions;
- Work with the student support staff to discuss and set career goals; and
- Identify NVC courses and work experiences needed to reach their goals.

Once the FET has such technology-based guidance tools, it is in a better position to make counseling available to secondary schools students who would be a good fit for FET study. Many employers believe that middle school students need this early career guidance in order to maintain motivation through high school and keep doors open to careers they might fit well in later youth. When FET staff can introduce automated guidance tools to students and allow them to explore high quality information on their own, they can spread and deepen more of the career information available to young people.

ENHANCE TRADITIONAL CAREER GUIDANCE BY INVOLVING EMPLOYERS.

Although new technology offers exciting opportunities for improving career guidance, direct exposure and staff interaction with employers remains crucial.

Whether due to age, poverty, remote location, or lack of relevant networks, most FET students lack exposure to employers. This hampers their ability to learn about work behaviors or the variety of occupations that might fit their abilities and interests. It also denies them the formal and informal networks to access most job opportunities. The FET college can make an important difference by addressing this gap.

Valuable ways to give prospective students exposure and involve employers in career guidance include:

- Industry features with local examples on the college website;
- Career fairs for prospective learners to meet employer representatives;
- Employer speakers at college recruiting or registration events;
- Tours of employer facilities;
- Alumni events introducing successful FET graduates to prospective students; and
- Feature stories about employers, their industries, and workers in college media.

The employer outreach survey and labor market intelligence described (see “Market Research”) also provide valuable guidance for FET college students and their parents. The college can summarize the results of such research for young people to guide them about local employers and occupations.

INVEST IN JOB PLACEMENT LEADERSHIP—YOUR INTERFACE WITH EMPLOYERS.

Effective job placement services are a foundation of good relationships with employers and of meeting the career goals of learners. Thus, the college's job placement officer plays a critical role for the institution. She is often the most visible face of the college among employers and determines whether they see the college as a valuable resource. She also provides a lasting impression on graduates who spend their final weeks in college seeking her assistance.

The FET college should invest in the most qualified person for this role and train him or her in the variety of skills needed. To serve both employer and student customers, job placement officers must be capable of numerous complex tasks:

- Understanding the skills of students and graduates;
- Building students' resume writing, job search, and interview skills;
- Keeping a useable database of resumes;
- Marketing to employers;
- Assessing employer needs;
- Responding to employer requests;
- Organizing large amounts of information on employers and students;
- Coaching students through their first jobs;
- Resolving conflicts between employers and workers; and
- Brokering services to solve a variety of problems (e.g., transportation, health, child care).

Essentially, the college needs a highly organized "people person" with strong communication skills and experience and credibility in the business community. Experience with sales and marketing to business is an important quality, as is the ability to coach learners on developing their job skills.

DEVELOP ONLINE RESUME AND JOB SEARCH ASSISTANCE.

As part of the orientation they provide to career guidance services, FET staff could teach prospective students how to establish an individual career account that includes an online resume tailored to their career goals. The student would use O*Net tools to help create a resume and determine gaps and learning needs by comparing his or her current knowledge, skills, and experience to those required by a target career. The student would update the career account and resume each semester, adding skills learned in coursework and updating goals and contact information. Alumni would similarly update their resumes and data with each new job or change of status.

This online resume and individual career account would encourage students to pursue career-relevant learning and help them to build attractive resumes over the course of their studies. Equally important, the database would motivate students to keep their contact information current and enable the FET college to better track their outcomes after graduation (see “Tracking” below).

GATHER AND FACILITATE ACCESS TO JOB OPPORTUNITIES.

Students and alumni would have the strongest motive to update their resumes if they knew that employers might contact them through the FET’s resume database or that a job placement officer would use resumes to match jobseekers with job opportunities that the college collects. Similarly, employers’ interest in partnering would grow if it included access to a large database of well-qualified students and alumni.

To leverage these employer and student motives, the college should work simultaneously on populating a searchable resume database, gathering information on job opportunities, and building systems to match qualified students with opportunities. Ideally, the college would create a tool for employers to either post job vacancies on an FET website (enabling students to search for vacancies) or request that FET student support staff help identify good candidates. Alternatively, the job placement officer—and all other FET staff—could access the database to organize opportunities identified from a variety of methods.

Some of the traditional methods for identifying and gathering job vacancies include:

- Networking with local chambers and other business organizations;
- Culling newspaper and community advertisements;
- Building relationships with trade and union representatives;
- Consulting with provincial and local economic developers; and
- Contacting local businesses (via phone or by going door to door).

These approaches can be enhanced by technology-based methods that are gaining currency, particularly for industries in the formal economy. Job-vacancy consolidators in South Africa (e.g., Simply Hired, Indeed) have grown quickly in the number of postings they gather online weekly. In a recent week, 45,000 jobs were posted on these two consolidation sites, and others contain thousands more. Placement officers can learn to get the most from these searchable databases and teach learners how to do the same. They can also have automatic leads generated based on the background of FET jobseekers and link those to the FET’s databases.

THOUGHTFULLY MATCH LEARNERS WITH EMPLOYERS.

Technology tools can improve the efficiency and reach of the FET college’s job placement efforts. They can also make the *first* effort to match students with job

openings more objective and less time consuming. Yet their effectiveness relies on the human skills and judgment to ensure a particular individual and particular employer will be well suited for each other.

After identifying a pool of students with the training and experience requested for a job posting, placement staff should pay close attention to circumstances that might affect success. Assess a student's work habits, transportation, child care needs and resources, health, and other issues against the employer's needs, location, and work culture.

Example Practice:

Year Up

Year Up, a well known and successful U.S. youth employment and training program in the IT sector, conducts a thorough assessment of prospective apprenticeship employers and gives an employer and learner comparisons on relevant elements of workplace culture, such as dress, punctuality, creativity, detailed guidance, and the managers' style of leadership. Year Up also engages the employer in the matching and selection process by arranging interviews and visits to the work site before placement. This improves potential candidates' preparation before the first day of work and enables the employer and the learner an opportunity to ask questions and assess the fit.

SUPPORT STUDENTS FOR RETENTION THROUGH PARTNERSHIPS.

When FET college students enter the world of work, they face many challenges beyond their skills preparation. These can include lack of transportation, adequate clothing, child care needs, or health care for themselves and their families. Recognizing that some students need additional supports, many U.S. colleges form alliances with local community-based organizations or faith-based groups to ensure successful entry and retention on the job. This has been less common in South Africa, but there are opportunities to use this approach, particularly with faith-based partners.

Example Practice:

Miami Dade College's Hospitality Institute

The Hospitality Institute at Miami Dade Community College in the United States connects low-income students with job opportunities in the region's strong hospitality and tourism industry. It does this through a three-day customer service and job readiness training, as well as by providing specialized services for program graduates. The institute is located in a church in the area's highest unemployment district, which is home to many of the institute's students. It provides additional support to graduates to encourage their career advancement: through weekly personal contact, it encourages them to visit the office, enroll in services, and continue degree programs.

TRACK EMPLOYMENT OUTCOMES.

Analyzing the employment outcomes of FET college students is a valuable way to help the college understand the needs of employers—and ultimately to meet the job aspirations of students. For example, if students who took certain courses are hired at a much higher rate than others, this may indicate strong employer demand for the skills taught in those courses. And if certain industries and companies hire graduates, this should influence marketing strategies.

However, it is often difficult to maintain the contact information needed to track outcomes for FET college graduates. Ideally, graduate tracking could be done in collaboration with provincial and national administrators who collect Unemployment Insurance information for workers in the formal sector. This could automatically generate information about whether graduates have found work, the industries they work in, and, potentially, wages and other data. Such a model has been implemented with colleges in some U.S. states. Because this strategy requires long-term partnership building to accomplish in South Africa, this guidebook focuses on strategies FET colleges can implement themselves.

MAINTAIN STUDENT AND GRADUATE CONTACT USING SOCIAL MEDIA.

The most innovative strategies to track students capitalize on students' strong interests in staying connected with one another and in accessing job opportunities. Strategies can also capitalize on the widespread use of advances in social networking and communication technology .

To begin, college can use existing social media tools (e.g., Facebook, cell phone texting) to create a student- and alumni-generated network that encourages continuous contact with the college and among alumni. Such tools have strong platforms for sharing information continuously as well as widespread (and free) use among youth. The FET college would create a social networking web page that has multiple incentives for students to update their contact information. Incentives to remain active in the network include:

- Notifications about recent job opportunities;
- Access to alumni and mentors in their career fields of interest;
- News and pictures about accomplishments or activities of their peers;
- Opportunities for recognition; and
- Postings about social events of interest.

The social network page can be maintained and updated by a team of students in marketing and IT or related fields, monitored and supervised by a staff member, and advised by the college's alumni network. It would encourage students to update their contact information and employment status frequently and to reach out to peers who are

not on the network, perhaps with recognition for being an “FET Community Organizer” or more attractive distinction.

Given the wide use of text messaging, the network would employ text alerts to motivate students and alumni to update their contact information regularly. Texting could also be used to conduct random sampling surveys. Such surveys would typically focus on three questions: Are you employed? Who is your employer? What is your job title? Less frequent text-blasts would inquire about more sensitive information, such as weekly pay.

PROVIDE LEARNERS WITH VALUE FOR CONTACT—JOB OPPORTUNITIES.

One key to a tracking approach is providing information of value to students. For students who elect to enroll, regular text alerts about job opportunities offer the most compelling reason for students to remain in the text alert network. College job placement officers would further motivate contact updates by alerting individual students or alumni about special job postings that match their skills. If the college implements a student and alumni resume database, it should use automated technology to generate messages, such as, “We’ve updated your resume. Could you verify your current information so employers or our job placement staff might reach you?”

Such a strategy would generate updated contact information for a significant share of graduates. The online network, as well as the employer outreach survey operations (see “*Market Research*” above), could also be used for contacting this larger pool of graduates for tracking. The contact information generated in these ways is key to tracking student outcomes, particularly for the unemployed and those in informal jobs.

INTEGRATE MULTIPLE FORMS OF WORK-BASED LEARNING.

Formal learnerships have been the focus of work-based learning in South Africa in recent years, while apprenticeships were more prevalent in the past and may be making a comeback. Both forms of work-based learning have an invaluable impact on learners and employers’ relationships with the colleges. Additional work-based learning can be achieved at many levels of intensity, each of which adds tremendous value to learners. Here is a list of a few of the many types of work-based learning, along with practices that tend to make them more effective:

- *Field Trips* to employer sites provide opportunities to discuss the skills requirements, challenges, rewards, and the career paths observed. They also expose students to high-level skills and technology current in the industry.
- *Job Shadowing*, supported by in-class preparation and follow up, helps students make connections between the work exposure and their academic and career goals.

- *Service Learning and Special Projects* include volunteer community service activities that focus on students' acquisition of values, skills, and knowledge related to their career goals.
- *College-Based Enterprises* engage students in producing goods and services as part of training and provide a venue for learning and practicing career technical skills, career success skills, customer service skills, and entrepreneurship.
- *Clinical Experience* includes a licensed professional who directly supervises activities. Colleges with child care facilities should consider opportunities for this work-based learning activity, under the supervision of the facility.
- *Like Learnerships, "Cooperative Education"* in the United States focuses on job-specific assignments at employer sites, designed to provide highly individualized experiences for students, based on the skills/competencies that they need to acquire. Such an arrangement typically require an MOU between the college and the employer, a training plan listing competencies to be acquired, and detailed performance standards.
- *Internships* are usually short-term placements on the worksite, focused on the application of skills. They can be paid or unpaid but typically require an MOU. Worksite supervisors provide college staff with performance evaluations at the end of the internship.¹³

THOROUGHLY SUPPORT WORK-BASED LEARNING PARTNERS.

College practitioners in South Africa, the UK, and the United States have pointed to several principles for engaging employers in work-based learning.¹⁴ These are particularly important for learnerships and other relatively deep engagements.

First, college staff should identify, understand, and address employer concerns about work-based learning. Unless they are experienced, employers are likely to be concerned about committing to it because of uncertainty about a variety of factors. These include their role in the learning process, the time involved in planning and reviewing learning, safety liabilities, and the backgrounds and demands of learners. Listening to and resolving these concerns must occur before "selling" work-based learning to the employer.

Second, treat the employer as a valued partner and provide thorough support. FET lecturers and designated staff must help build relationships with employers and provide the training and tools they need for work-based learning to succeed. Supervisor training, clear procedures, and on-the-job curriculum documents from the FET help supervisors understand and fulfill their teaching roles. The FET staff should avoid FET jargon and use business language in these documents and in meetings. The FET should also make a person available for resolving conflicts that arise with the learner and provide recognition for employers who do a good job supervising learners on the job.

After the FET college has helped the employer and learners experience success, it can develop new work-based learning opportunities with that employer. At this point, it can credibly market the benefits to employers from participating with a work-based learning program. In any circumstance, the college should maintain good relations with businesses by allowing them to tailor their level of involvement.

The case that colleges can make for work-based learning among employers includes:

- The opportunity to identify potential future employees;
- Being a socially responsible corporate citizen;
- Increased influence in the training programs for the future workforce;
- Potential professional development for current staff to enhance mentoring, supervision, and training skills; and
- The heightened job satisfaction and morale their employees gain from assisting a young learner.

Example Practice:

The Swiss South Africa Cooperation Initiative

The Swiss South Africa Cooperation Initiative has worked with the Department of Higher Education and Training to develop practical procedures and curriculum documentation to establish and guide work-based learning in its FET College Support Program. The program has helped college staff recruit employers, develop standard agreements about their roles in training and supervision, and design skills-specific competency guidebooks to help learners and employers get the most value from work-based learning. The program focused on the Level 2 Engineering & Related Design program within the NCV when it began with four colleges in 2008. Since then, it has spread to 25 colleges and the curriculum focus has widened to include the electrical infrastructure, fabrication, tourism and hospitality programs at all FET college levels.

MARKETING: DELIVERING THE BUSINESS CASE EFFECTIVELY

LEVERAGE DUAL CUSTOMERS.

Successful marketing to employers strengthens a college's marketing to students, and vice versa. That is because students highly value the link to employment: When prospective students see employers endorsing FET studies and hiring FET graduates, they perceive FET study to be relevant and valuable. Similarly, the higher the quality of students the FET can attract and market as a pool of potential employees, the more relevant and valuable the FET college is to employers.

Although student and employer marketing are mutually beneficial, few FET colleges have developed a strong plan for marketing to employers, and few invest significantly in strategy implementation for employers. This chapter addresses the need for stronger marketing to employers and effective practices for conveying the college's value to them.

DEVELOP AN EMPLOYER MARKETING STRATEGY.

The need for an employer-centered marketing strategy is likely to emerge from the SWOT analysis and comprehensive engagement strategy discussed earlier (see "*Management*"). Those tools set the broader capacity-building agenda for employer engagement. In a sense, an employer marketing strategy is simply a more detailed part of that comprehensive plan but focused on the college's messaging and outreach to employers and primarily guiding the marketing and employer partnership teams.

Key elements of an FET marketing strategy to employers can vary. However, common elements include:

- Environmental analysis;
- Marketing objectives and target industries and occupations;
- Central marketing messages;
- Positioning of the college compared to competitors;
- Placement and distribution of marketing;
- Pricing;
- Management and marketing budget;
- Evaluation and continuous improvement; and
- Work plan for the coming year

The marketing strategy does not need to be lengthy or complex, although the work plan should provide specific action steps, individuals responsible for each step, timelines, and expected outcomes. The intent is to identify clear objectives and coordinate the most

effective messages and action steps. The sections below (and the “Finance” chapter) suggest many elements of such a plan.

USE LABOR MARKET RESEARCH TO GUIDE YOUR MARKETING STRATEGY.

Based your employer-oriented marketing materials on direct knowledge of the needs of the employers/customers you seek. Regular conversations with employers should reveal their needs, problems, current training providers, and the kinds of services they most value. Ideally, you can use labor market information to identify labor market demands and implement market survey research to understand the needs of many local employers. That research should help you identify and speak to the benefits and solutions your local employers most care about.

Market research should also reveal the strengths and weaknesses of your competing training providers. This is useful because it can help you model your brochures to respond to your competitors’ strengths and capitalize on their weaknesses. Marketing should use this information to position the FET favorably compared to its competitors. For instance, the pricing of your competitors will ultimately help you determine whether and how to highlight pricing in your own materials.

MAKE “THE BUSINESS CASE” YOUR MESSAGE.

Since FET students face many obstacles in reaching employment, it can be tempting for job placement officers to cite concern for their students’ well-being as a reason for employers to hire or train graduates in work-based learning. Though this is laudable, and employers do wish to help, most are not in a position to do so. However, they are in a position to train or hire highly valuable, skilled, and motivated employees. Such employees can make the business more successful and profitable. This is the “business case” for working with the graduates of FET colleges.

When auto dealers market their cars, they do not focus on the difficult circumstances of the cars or the dealership. Instead, they focus on the needs, desires, and hopes of their customers. They might emphasize the cars’ stylish looks, fuel efficiency, comfortable seating, or safety. In short, FET colleges should craft a marketing message to meet the needs of the customers they target, and they should adapt that message for customers with different needs and priorities.

The market research discussed earlier will help you refine the elements of a business case that your college chooses to emphasize. However, nearly all employers’ problems and priorities tend to center around a few common business benefits, which have been identified in a number of studies.¹⁵

Overall priorities:

- Increased profitability (or meeting budgets for government agencies)
- Expanded markets and improved products

Priorities related to workforce training

- Morale and turnover
- Productivity
- Customer service

Priorities that lead employers to partner with colleges

- Cost (the major factor, according to surveys)
- Faculty and capacity in area of need
- Flexibility in delivering training (ability to modify content to meet needs and delivery time)
- Prior experience
- Academic credit for courses
- Access to additional funding, and other services.

Most likely, the college's marketing message should address some combination of these priorities. Your marketing message will succeed to the extent that it addresses an employer's strongest motives.

LEAD OUTREACH WITH CUSTOMIZED TRAINING.

If the college has few or weak relationships with employers, its initial marketing is more likely to succeed if it centers on short skills courses customized for a small number of employers. The FET should aim this marketing and other promotional activities at attracting contract training from local businesses. This will enable the college and the employer to work closely together on meeting specific and current needs, most likely in noncredit offerings. This working relationship aimed at addressing specific employer needs helps to build the trust that can later be developed into partnerships for long-term, for-credit courses.

As we note in the final chapter on pricing strategies, most FET colleges can offer competitive prices for their courses. If you have profitable pricing strategy for short courses, you may also want to invest most heavily in marketing those courses.

CRAFT MARKETING MATERIALS TARGETED TO EMPLOYERS.

Effective materials for recruiting students typically highlight benefits of interest to students and their parents, such as available courses, bursaries, lodging, and

recreational facilities, as well as the quality of student life and the chances of finding employment upon graduation. This marketing is also indirectly important for employer engagement, since attracting high-quality students is also important to employers.

However, local businesses are interested in very different qualities of the FET college. They want to know that graduates have relevant and up-to-date skills, a strong work ethic and motivation, excellent attendance records, and very good problem solving, customer service, and people skills. They also want to know that the FET college itself is cost effective, has up-to-date curricula and workshop equipment, is quick and easy to work with, and is responsive to employer needs.

To best convey those messages to employers, the college needs targeted, concise, believable, and accessible marketing materials. These usually include:

- Testimonials from employers who have hired your graduates or trained their employees at your FET college;
- Pictures of satisfied employers, with students and workers trained in your FET programs;
- Benefits of value to employers (e.g., relevant training, SETA certifications, FET cost advantages); and
- Who to contact.

CREATE BOTH GENERIC AND INDUSTRY-SPECIFIC MATERIALS.

Your FET should consider developing two types of marketing materials to attract employers.

A *generic brochure* highlights the broad positive aspects of your FET that are important to employers. This brochure might be used for general marketing of the FET—for instance, by inserting it with your local chamber of business newsletter. Such a generic brochure would include the essentials described above and might also include:

- A list of NCV courses;
- Current short courses and the ability to customize new ones;
- A variety of employer testimonials; and
- Other significant features of your college from an employer's point of view.

A *targeted brochure* or flyer highlights the benefits of specific FET programs or courses to specific industry segments. For instance, if your FET college offers very strong short courses in the automotive industry, it can be effective to create a flyer that speaks directly to the needs of those employers. In that case, your materials should include:

- Listing of programs specific to that industry;

- The use of industry standards or specialized equipment;
- Testimonials and pictures from other employers in that industry; and
- Information about pricing, schedules, workshop facilities, and lecturers.

Identifying target industries and occupations will help the college select training programs and other services to highlight in marketing to those employers.

USE A VARIETY OF METHODS TO DISTRIBUTE CONTENT.

Once your messaging and materials content are developed, there are a variety of ways to distribute them. The methods you select will depend most on the audience targeted and their habits. Key messages can be delivered via a growing number of print or online methods, including:

- Chamber of business and other employer newsletters;
- Special web pages or blogs on the FET website;
- Features on employer association and other partner websites;
- Social media (e.g., Facebook, LinkedIn, Twitter);
- Brochures, annual reports, and prospectuses;
- Text messages to selected employer groups;
- Email list serves;
- Direct mailing;
- Press releases about noteworthy events;
- Radio and TV commercials produced by students or employees;
- College newsletters;
- Logos, banners, photos, corporate gifts, freebies;
- Billboards and “bus-boards”; and
- Sports and entertainment banners.

Live events are a powerful method for spreading the college’s marketing messages, whether they are designed specifically for outreach and marketing to employers or simply offer college staff a moment to speak with employers. These are important for providing the person-to-person interactions that are critical for relationship building.

- Chamber and other business association events;
- Special college events designed for employers;
- Job and career fairs;
- Community programs and projects;
- Liaison with government departments;
- Marketing and promotion activities and media events;

- College open days;
- Science week, including science and engineering employers; and
- Provincial campaigns with the Defense Force.

However, many employers are not familiar with the NCV curriculum or have negative perceptions of it. Thus, many colleges offer outreach events educating employers about the value and variety of their NCV offerings. These “chamber breakfasts” have typically been conducted in conjunction with monthly chamber of business morning meetings and include a brief explanation of the NCV curriculum and its differences with the previous NATED courses, followed by a chance for employers to ask questions of FET staff. These have demystify the NCV, alert the colleges to legitimate concerns of employers, and offer an opportunity to improve quality.

Example Practice:

“Striking While the Iron is Hot” at Ehlanzeni FET

When Ehlanzeni FET College in Mpumalanga Province learned it would host international visitors involved in employer-college partnerships, its deputy CEO saw this as an opportunity to attract employers and launch the employer advisory council he had been contemplating as part of the PSKD project. In three weeks, the deputy CEO recruited a five-star hotel to host the event, organized speakers (the CEO, from the College Board, and employers), developed an “Introduction to the NCV” delivered by business and engineering faculty, and recruited several employers for a dinner at which the U.S. delegation would speak on employer engagement in the United States and South Africa. In the course of the evening, three employers committed to joining the new Employer Advisory Council and others promised to put the request before their executive teams.

TAP INTERNET MARKETING POWER.

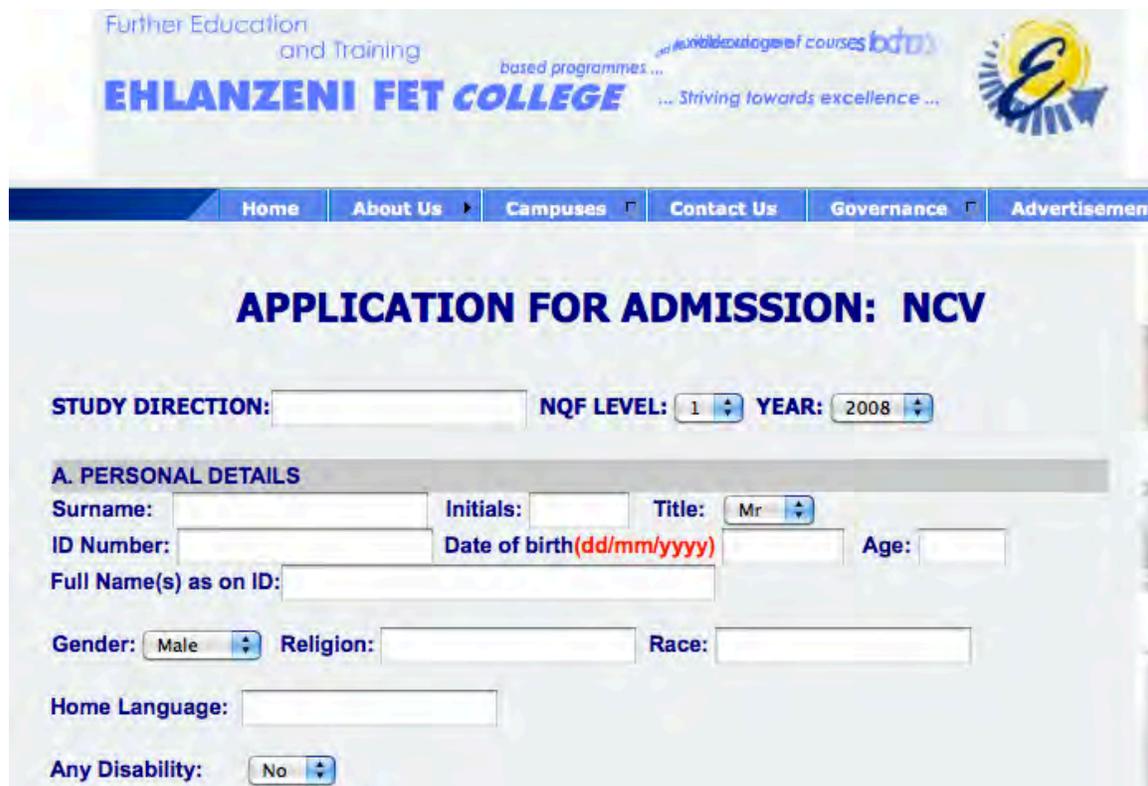
Most FET colleges are in the early stages of developing their websites, many of which are still basically online brochures that do not take advantage of the “transactional” capacity of the web. Some colleges highlight their business partnerships, but most do not. Some colleges describe the short courses and customized training they have available, but most only describe their core academic (NCV) programs.

The key to powerful website is the combination of relevance (Does it help answer my question?) and convenience (Can I do something now?). For employer engagement, the websites can improve on both criteria and help to contribute to the positive image of the FET college. Small improvements can make a big difference. There are two primary areas of focus where changes will have the most impact: student-focused course listings and employer-focused customized training.

Student-Focused Elements

All FET college sites describe their programs of study. Few describe the types of occupations the course of study will qualify them for. A simple addition to most of the sites would be an “I want to be a . . .” section that lists various occupations and then allows the user to click on any one to learn about the course of study that would lead to that occupation. Each course of study should also list all the occupations graduates could qualify for.

Second, each course of study page, as well as other places on the site, should permit the student to enroll online (or at least download enrollment forms). The key is to allow the user to take action once they have found an area of interest. See an example from Ehlanzeni FET College (<http://www.ehlanzenifet.co.za/enrolform.php>).



The screenshot shows the website for Ehlanzeni FET College. The header includes the college's name, "Further Education and Training", and a logo. A navigation menu contains links for Home, About Us, Campuses, Contact Us, Governance, and Advertisement. The main content area is titled "APPLICATION FOR ADMISSION: NCV". Below the title, there are fields for "STUDY DIRECTION:", "NQF LEVEL:" (set to 1), and "YEAR:" (set to 2008). A section titled "A. PERSONAL DETAILS" contains several input fields: Surname, Initials, Title (set to Mr), ID Number, Date of birth (format dd/mm/yyyy), Age, Full Name(s) as on ID, Gender (set to Male), Religion, Race, Home Language, and Any Disability (set to No).

Employer-Focused Elements

Unfortunately, businesses rarely see themselves treated as a customer in FET college websites. Several relatively simple steps can change that. First, put an “Employer” tab on the home page. Clicking on that tab or link should take the employer to their page with at least three types of information:

- *Current partnerships between the college and local businesses, along with the ability ask for more information.* Their information request would be e-mailed directly to the college staff person who handles partnerships.

- *Available short courses and, if possible, a description of the college's willingness to create customized training for a business.* The description of the short courses should link to a full catalog and somewhere on that catalog the business should be able to register for a course. The description of customized training should include the ability to seek direct contact with a person who can take the next step (generating an e-mail to the College staff person who handle customized training).
- *An "I want to find . . ." section that lists occupations for which the college has graduates.* Depending on the level of sophistication, clicking on an occupation could lead to a list of available graduates or simply a contact form that would send an e-mail to the job placement staff.

In all of these sections, it would be useful to lead with a few sentences of testimonials from businesses that have used the college's services.

STAFF AND ORGANIZE YOUR EMPLOYER MARKETING.

Marketing staff who have experience and credibility with industry can make a world of difference in the effectiveness of employer marketing. Successful partnerships depend on the employer's personal interaction with staff after brochures and social media have attracted attention. People who have worked in targeted sectors come equipped to know the pain points of employers in those sectors, their needs, and the modes of marketing that will be most effective in their industry.

Arming that person with customer relationship management software will make them even more effective by organizing the vast number of contacts they will acquire (along with notes, addresses, and phone numbers) and the services offered to local employers. Effective marketing strategies draw a large number of inquiries, many of which come in simultaneously and require intensive follow up. Without systems to organize these inquiries and follow up, many are likely to be dropped, leading to damaged relationships with employers—the opposite of a marketing strategy's objectives.

Technology can assist with marketing in another way—through the online resume database. Marketing, job placement, learnership, and other employer engagement staff would promote the database to employers as a way to find strong candidates for internships and job opportunities. This resource would serve as an outreach tool to ask employers to provide job postings on a regular basis. College marketing needs to be intimately linked and coordinated with college management, research, operations, and financing.

FINANCING: GENERATING REVENUE FROM EMPLOYER SERVICES

The effort to improve employer engagement at the college offers wide-ranging benefits, the most important of which is improved job placement and career success for students. Increasing the value of the college's services to employers also improves its potential to attract financial resources and invest in further development more broadly.

FET colleges need to raise additional funds to support basic operations and improve and expand services. While seeking donations from private sources or recapitalization funds from government are often the primary fundraising vehicles, selling services to employers is a potentially larger source of unrestricted revenue. This chapter focuses on generating revenue from customized training and other services to employers.

GENERATING REVENUE FROM EMPLOYER SERVICES.

One key to generating revenue from customized training and other services is understanding how much the services cost to deliver (including indirect costs) and then adding an appropriate profit margin. The other key is understanding what competitors charge for comparable services.

This chapter and associated spreadsheet¹⁶ will help FET colleges understand their cost structures, build costs and pricing for services, and understand how much each project contributes to its internal capital funds and unrestricted revenue. As part of standard accounting and audit functions, colleges already collect and in some cases analyze much of the information needed to price its services. The CFO's office will be helpful in building the necessary reports and validating the results of the pricing spreadsheets.

CONCEPTS OF COSTS

We generally think of cost as how much it takes to get something done. For example, when determining the cost of a meal cooked at home, one might add up the cost of the ingredients and perhaps the chef's time. These are the "direct" costs of the meal. However, this would miss a large fraction of the real cost of putting the meal on the table—the use of spices and other ingredients bought previously, the use of the kitchen tools (stove, pots and pans), and the use of the room itself (including electricity, gas and water). In accounting terms, those other costs are often labeled as "indirect" or "overhead" costs. A restaurant that did not consider those costs would soon go out of business.

With indirect costs, consider how best to divide up the cost of a large item so that its use is properly reflected in the cost of a particular activity. Colleges should consider at least four categories of indirect costs: general and administrative; facilities usage; and equipment usage.

General and Administrative Costs

At a college, the primary function is learning, so direct costs are those for the instructors. However, many other people make the college work: janitors, security guards, financial office staff, student support services, technicians running the computer labs and heating/plumbing and electrical systems, the CEO. Most of these costs are considered “general and administrative.” Should cost accountants put the costs of janitors, security guards, and the technicians who are running the college facilities into this general and administrative pool or into the “facilities usage” category? How should they determine this particular portion of the indirect rate? There are many ways this can work; the key is to do it consistently.

For the colleges, it will probably make sense to put staff costs for janitors and similar workers into the facilities usage category because some services you sell may be done at a workplace rather than using college facilities. Splitting the cost pools that way makes the decision on the unit easier.

For the general and administrative pool, the decision on the unit becomes fairly simple. This indirect cost rate would be expressed on a per rand basis—for every rand of instructional costs, add a percentage that reflects the general and administrative costs supporting that instruction. The rate would be calculated by dividing the total amount of general and administrative costs by the total amount of instructional costs. For example, if the total salaries of all the instructors per year was 30 million rand and the total cost of administration was 6 million rand, the general and administrative cost rate would be 20 percent (6 divided by 30).

The general and administrative pool would include:

- Salaries (including fringe benefits and required taxes) for the CEO and officers of the college; clerical staff; student support services; finance staff; and academic support staff;
- Facilities usage for the offices that these people occupy (including costs for maintenance and cleaning);
- Equipment usage for these individuals;
- General equipment (e.g., the college’s vehicle fleet); and
- Supplies need by administration

The items in the instructional pool are the salaries (including fringe benefits and required taxes) of the lecturers, department heads and instructional support staff (lab technicians, clerical support), and general supplies (but not instructional materials). Department heads and the clerical staff supporting them would be part of the overhead for individual courses.

Note that the general and administrative pool cannot be calculated until you know the facilities charge and the equipment charge that will be assigned to this pool.

Facilities Usage

This category covers the full cost of running the college's physical plant. Since we are looking at the instructional side of the college, exclude the cost of operating the hostels from the calculations for the moment. (In most cases, consider the operations of the hostels as a separate business.)

Some facilities costs are obvious: salaries for janitors, plumbers, electricians, boiler operators, and security guards (or the cost of the contracts for a vendor that is providing those services to the college), utility costs (electricity, gas, water), and supplies (toilet paper, cleaning supplies, etc). Some costs may not be as obvious: costs for external contractors to maintain the buildings or fix a problem, cost of any debt service on existing buildings, and most important, the cost of replacing a building as it ages. This last item is generally ignored, because it does not represent an immediate cash outlay. However, it is critical for solving a persistent problem for colleges: lack of capital.

Most of the costs will be easily quantified by the finance office, but the share of replacement costs for the buildings will require additional work. For colleges that have recently built or substantially renovated facilities, it may be easier. It is probably sensible to look at the replacement cost of the particular type of building and to determine that cost by square meter. Each college probably has three main types of facility: offices, classrooms, and workshops. Develop a replacement cost for each type.

For example, if the college had recently built an office facility with 1,000 square meters of usable office space for 2 million rand, the replacement cost would be 2,000 rand per square meter. If the college has 3,000 square meters of office space, its replacement cost would be 6 million rand (3,000 times 2,000).

Recovering the replacement cost should be done over the useful life of the building (not over a single year). For most buildings, the useful life is 30 years. Using the example from above, the college should put away 200,000 rand per year (one thirtieth of 6 million rand) to cover the replacement cost of the building. While the college may not be able to do so for its basic operations, it should do so when they selling services.

As with the general and administrative costs, we have to decide the "unit" on which the facilities charge will be made. The unit most often used would be cost per square meter per unit of time (for example, six rand per square meter per hour). The hourly rate will make sense for the pricing of short courses. A yearly rate would make sense for the pricing of office space assigned to administrative staff.

The calculation of the facilities usage charge would be done for each type of facility:

- First, determine the size of each class of property in square meters. Total the amount of square meters for all property classes.
- Then determine the percentage of the total property represented by each of the three classes of property (for example, total size of the office space divided by the total size of all property). These percentages will be used to allocate the other general facilities costs to the different classes.
- Next, gather all the variable costs (salaries, supplies, contracts, utilities) associated with the facilities. Allocate the total cost to the three classes of property based on the percentages that you have calculated in the prior step. (For example, if the total variable cost is 5 million rand and the classrooms represent 75 percent of the total property, 3.75 million rand of this cost would be allocated to the classroom segment.)
- Next, determine the replacement cost for each class of property. Divide that cost by 30 to get an annual rate. Then divide the annual rate by the number of hours that type of facility is in use during the year. (For example, classrooms might be used 1,400 hours during the year 7 hours of usage per day times about 200 days of instruction.) The annual amount would probably be used in calculating the general and administrative costs; the hourly is likely to be used for classrooms and workshops.
- Add the facilities cost together for each class of property.
 - For the general and administrative segment, add those annual costs to the other general and administrative costs.
 - For classrooms and workshops, calculate a facilities cost per square meter per hour. Then calculate an hourly rate for a standard classroom, a computer lab, and for the various types of workshops. You would use the estimate annual usage for each of the types to get to the annual rate.

These calculations create a facilities charge that can be included with general and administrative costs and can be applied when calculating the costs of short courses.

Equipment Charges

The next class of charges to be allocated is equipment (computers, copiers, and workshop equipment). The bulk of the cost here is the calculation of the replacement costs. There may also be supplies, some repair and maintenance, and the costs of Internet service for computers. As with the property, it makes sense to divide the equipment into classes.

In the case of computers, it might simply be calculating the cost of all the computers in the college, including the servers. Those costs would include replacement costs and operating costs (maintenance and Internet). For computers, it would make sense to

calculate the replacement cost based on a three-year useful life. For example, if the average desktop computer costs 4,500 rand (hardware and software), 1,500 rand would need to be set aside for replacement each year. The servers may have a five-year life, but the calculation of replacement costs would be the same.

In the case of the workshops, it makes sense to calculate the cost of all the equipment in the workshop, which itself is likely to be “rented” as a unit. For example, an engineering workshop might have three drill presses, two boring machines, two grinders, two routers, four lathes, and two numerically controlled machine tools. The workshop lecturer or the machine’s manufacturer should be able to estimate the normal useful life of each machine type. For a workshop, it would be useful to calculate the annual replacement cost value for each type of machine. Then add all of those amounts together and divide it by the number of hours the workshop would be used during the year. (The number of hours of use is likely to be different than the usage of classroom space.) That would give an hourly rate for the usage of the equipment in a particular workshop; the rate could be combined with the hourly cost of the workshop space to determine the total “workshop” charge for calculating the cost of a short course that requires the use of a workshop.

For computer labs, the process would be the same, but all of the equipment is likely to have the same replacement cost and useful life.

For items like the Internet and computer maintenance (and the technician labor assigned to the tasks), it would be useful to add those total amounts together and then divide that by the number of computers in use. The annual cost per computer would be used for calculating costs for computers used in the general and administrative functions. An hourly rate would be used when calculating the costs associated with their use in classrooms or computer labs.

As noted, you will also need to calculate the costs of the vehicle fleet (operations, maintenance, and replacement costs). Those costs will be added to the general and administrative section.

Costing Summary

In calculating the costs of any activity, it is important to start with the direct costs, but if you stop there, you will miss a large fraction of the cost of actually delivering the service. We have looked at three different types of indirect costs that are important to calculate when determining the true cost of delivering a service. First are the general and administrative costs—the institutional infrastructure that makes offering the service possible. Next are the facilities themselves in which the services will be delivered. Finally there is the equipment needed to display or demonstrate the learning.

SET THE PRICE USING THE COST MODEL—EXAMPLE COURSES

A common way to set a price is to build up to it by considering all the cost elements and then adding a profit margin. That is where we will start, using a short course on computer skills as the example.

Direct Costs

The course will be one week in duration and have forty-five students. Each of the college's computer labs can handle fifteen students comfortably. There will need to be three instructors and one technician (to ensure the computers are fully functional during the course). Each of the students will require a set of materials and a certificate of completion at the end of the course. There is also an online test at the end of the cost that must be purchased. The direct costs would be as follows:

ITEM	QUANTITY	UNIT	UNIT COST	TOTAL COST
Instructor 1	40	Hour	200	8,000
Instructor 2	40	Hour	200	8,000
Instructor 3	40	Hour	200	8,000
Technician	40	Hour	200	8,000
Materials	45	student	150	6,750
Testing	45	student	300	13,500
Total Direct Labor				32,000
Total Other Direct				20,250
Total Direct				52,250

Other direct costs will relate to “renting” the facility and the use of the equipment. The calculations for those charges are addressed later.

Another example would be an eight-week machine tool basics refresher course that a learner might take in advance of taking a trade test.

15 STUDENTS FOR AN 8 WEEK BASIC MACHINE TOOL REFRESHER				
ITEM	QUANTITY	UNIT	UNIT COST	TOTAL COST
Instructor 1	200	hour	275	55,000
Instructor 2	200	hour	275	55,000
Shop Materials	15	student	1500	22,500
Written Materials	15	student	300	4,500
Total Direct Labor				110,000
Total Other Direct				27,000
Total Direct				137,000

There will also be an indirect labor cost for courses involving the department head in the affected department and any clerical support. It may be easier to calculate the “instructional indirect labor” rate once rather than calculating an indirect rate for each department. The indirect instructional labor rate would be calculated by adding up the labor costs for salaries and fringes for department heads and their direct clerical support.

Department Head Indirect Labor Rate

ITEM	COST
Salaries, wages, and fringe benefits (includes department heads and clerical support)	350,000 R
Supplies	13,000 R
Professional Services	15,000 R
Travel	25,000 R
Total Department Head Costs	403,000 R
Total Instructional Labor Costs	9,500,000 R
Indirect Labor Percentage (applied against direct labor)	4.24%

Other elements of indirect cost that fall under the heading of general and administrative costs need to be considered. However, to calculate those costs, we will need to calculate facilities costs and equipment costs first.

Facilities Cost

The first part of this analysis requires understanding what percentage of the total building area each class of property (offices, classrooms, computer labs, and workshops) represents. Generally, this can be retrieved from building or site plans. If exact measurements are unavailable, use approximate measurements. For classrooms, computer labs and workshops, we will also need to estimate how many hours per year they are used.

PROPERTY TYPE	AREA (SQ METERS)	PERCENTAGE	HOURS USED
Office	750	12.50%	
Classroom	3,500	58.33%	1,400
Computer Labs	250	4.17%	1,200
Workshops	1,500	25.00%	900
Totals	6,000		

The second part of the analysis is to estimate the replacement cost of each class of property. (This analysis could use the depreciation assigned to each class of property as an alternative.)

PROPERTY TYPE	COST PER SQUARE METER	AREA (SQ METERS)	USEFUL LIFE (YEARS)	ANNUAL REPLACEMENT COST	ANNUAL REPLACEMENT COST PER SQUARE METER
Office	2,000	750	30	50,000	66.67
Classroom	2,250	3,500	25	315,000	90.00
Labs	3,000	250	20	37,500	150.00
Workshops	1,500	1,500	30	75,000	50.00

The next part is to build up the costs associated with running the facilities.

ITEM	ANNUAL COST	COST PER SQUARE METER
Security	1,000,000	166.67
Utilities	600,000	100.00
Janitorial Work	225,000	37.50
Maintenance Work	450,000	75.00
Supplies (Cleaning, rest room)	125,000	20.83
Total	2,400,000	400.00

Finally, all the calculations come together in the form of an overall facilities charge:

PROPERTY TYPE	AMORTIZATION PER SQUARE METER	OPERATIONS PER SQUARE METER	TOTAL COST PER SQUARE METER	TOTAL COST PER SQUARE METER PER HOUR
Office	66.67	400.00	466.67	
Classroom	90.00	400.00	490.00	0.35
Labs	150.00	400.00	550.00	0.46
Workshops	50.00	400.00	450.00	0.50

Generally, the office charge will be allocated either to general and administrative (which uses most of the office space) or instruction (office space for lecturers). For the general and administrative expense, the calculation might look like this:

FACILITY CHARGE FOR ADMINISTRATION	
Estimated Percentage of Office used for G & A purposes	75.00%
Square Meters	562.5
Annual Charge to G & A	262,500.00

The amount of the G&A facility charge is added to other costs in calculate the overall G&A rate.

The facility charge for lecturer office space might be handled as an addition to the indirect charge already calculated for the department head labor.

INDIRECT CHARGE FOR INSTRUCTIONAL OFFICES	
Estimated Percentage of Office	25.00%
Square Meters	187.5
Total Charge for Instructional Offices	87,500.00
As an Indirect Percentage against Instructional Direct Labor	0.92%

That indirect charge would be added to the indirect charge for overhead labor (department heads) when the final cost analysis is done.

Direct and Indirect Equipment Charges

Creating charges for equipment generally involve an amortization schedule for each type of equipment and allocating the cost of that against various activities. Amortization is designed to recover the cost of a capital investment over the useful life of the equipment.

We include three examples of these schedules for three different types of situation. The first is for the use of a 15-station computer lab. The second is for a metal working

engineering workshop. The third is for the equipment that supports the administration of the college.

EXAMPLE—15 STATION COMPUTER LAB				
	ANNUAL AMORTIZATION	NUMBER	ORIGINAL COST PER UNIT	USEFUL LIFE
Hardware				
Desktops	42,666.67	16	8,000	3
Server	800.00	1	4,000	5
Router	800.00	1	4,000	5
LAN	1,500.00	1	15,000	10
Software				
Desktops	12,800.00	16	2,400	3
Server	1,000.00	1	5,000	5
Furniture	9,142.86	16	4,000	7
Annual Amortization Charge	68,709.52			
Per Hour Charge	57.26			

Note that the per hour calculation is based on estimated usage over the course of the year. The hourly charge is used to calculate equipment charges built into the costs of short courses.

EXAMPLE—ENGINEERING WORKSHOP				
	ANNUAL AMORTIZATION	NUMBER	ORIGINAL COST PER UNIT	USEFUL LIFE
Equipment				
Lathe	54,000.00	4	135,000	10
Break Press	1,950.00	2	9,750	10
Saw	3,750.00	2	18,750	10
Drill Press	11,250.00	4	28,125	10
Numerically Controlled	23,250.00	1	232,500	10
Sheer	3,750.00	2	18,750	10
Grinder	11,250.00	4	28,125	10
Annual Amortization Charge	109,200.00			
Per Hour Charge	121.33			

General and Administrative Costs

The basic pool of general and administrative costs would be built in much the same way:

GENERAL AND ADMINISTRATIVE COSTS	ANNUAL COSTS
Salaries and wages	1,250,000
Supplies	43,000
Library Books and Other Common Materials	200,000
Professional Services	345,000
Licenses and memberships	24,000
Travel	125,000
Allocated Facilities Charge for Administration (including office space for department heads)	262,500
Facilities Charge for Common Areas (parking lots, grounds, cafeterias, libraries, etc)	300,000
Allocated Equipment Charge for Administration (including of equipment for department heads)	131,019
Total General and Administrative	2,680,519
Total Instructional Labor Costs	9,500,000
G & A Percentage (applied against direct labor)	28.22%

BRINGING THE PIECES TOGETHER

All of this preliminary work makes it relatively simple to assign a realistic price to a new course and make a profit for the college. The following are two examples: the one-week Excel training and the eight-week basic machine tool refresher course.

EXAMPLE—45 STUDENTS FOR A ONE WEEK TRAINING ON MS EXCEL		
Number of Students	45	
	AMOUNT	RATE
Direct Costs		
Labor	32,000.00	
Facilities	5,500.00	
Equipment	6,870.95	
Other Direct	20,250.00	
Instructional Indirect	2,697.75	5.16%
Total Direct & Indirect Instructional	67,318.70	
General and Administrative	18,994.64	28.22%
Sub Total Direct and Indirect	86,313.34	
Profit	8,631.33	10.00%
Total Cost of Service	94,944.67	
Per Unit Price of Service	2,109.88	

EXAMPLE—15 STUDENTS FOR AN 8 WEEK BASIC MACHINE TOOL REFRESHER		
Number of Students	15	
	AMOUNT	RATE
Direct Costs		
Labor	110,000.00	
Facilities	35,000.00	
Equipment	24,266.67	
Other Direct	27,000.00	
Instructional Indirect	7,073.53	5.16%
Total Direct & Indirect Instructional	203,340.19	
General and Administrative	57,374.45	28.22%
Sub Total Direct and Indirect	260,714.64	
Profit	26,071.46	10.00%
Total Cost of Service	286,786.11	
Per Unit Price of Service	19,119.07	

Set actual pricing 5 to 10 percent higher than the per unit price generated by the model to allow for a lower number of students actually enrolling and paying for the course.

THE FINAL STEP: WHAT ARE YOUR COMPETITORS CHARGING?

Understanding the college's cost structure and ensuring that its prices will cover full costs and generate sustaining revenues is the first step.

The second is to understand college pricing in the context of what other providers charge for the same or similar training. Each college will know about some of the other providers in their markets. The starting point for competition research is creating a list of those that provide similar services. For each of these, generate basic information and information on each of their course offerings. The result will be a table like this:

PROVIDER NAME AND CONTACT INFO	COURSE NAME	SHORT DESCRIPTION	DURATION	PRICE	COMPETING FET COURSE

Consistently name the FET courses to allow for sorting on that field.

To supplement the basic awareness that college officials might have about competitors, it would be useful to get lists of accredited training providers from the SETAs that cover the curriculum areas for your college. It might also be useful to review data on the Skills Portal (<http://www.skillsportal.co.za/>) to identify other potential competitors.

A rule of thumb should be that the FET price should be 20 to 25 percent less than the price being charged by private providers. As noted, many surveys indicate that employers cite cost as a primary motivation for using public colleges. If the costing model generates a price that is higher, it would be useful to review college costs to see where cuts might be made. If it is lower, the college might consider increasing the price and increasing the profit margin.



**APPENDIX
SAMPLE MEMORANDUM OF UNDERSTANDING—FET AND
CHAMBER OF BUSINESS**



MEMORANDUM OF UNDERSTANDING

This agreement is made effective as of July 1, 2011 and remains in effect through February 28, 2012.

Made and entered into by and between three parties:

MIDDELBURG CHAMBER OF COMMERCE & INDUSTRY (“The Chamber”)

292 Church Street, Middelburg, 1050, South Africa

Herein represented by CEO Anna-Marth Ott

FET COLLEGE (“The College”)

(Address)

Herein represented by (CEO or Deputy CEO)

And

JOBS FOR THE FUTURE (“JFF”)

2000 Pennsylvania Avenue, NW, Washington, DC, USA

Herein represented by Robert Holm

And the PARTNERSHIP FOR SKILLS DEVELOPMENT (“PSKD”)

1. Purpose of the Memorandum

This MOU is to establish a partnership between the three parties above for designing and instituting an Employer Outreach Survey that will assist Mpumalanga employers to convey their needs to the Sample FET College so that it can more effectively meet those needs.

This Employer Outreach Survey will serve as a model and pilot for employer market research among other Mpumalanga Province FET Colleges, as well as South Africa as a whole.

2. Responsibilities of the Parties To This Agreement

The Chamber:

- Advise JFF and the College on design of the survey questions
- Confidentially share the current Chamber database to include in, and build upon the contact lists generated by JFF and Sample FET
- Publicize the survey and encourage participation among the business community in the following forms: email mailshot; newsletter (print and electronic); on website and on posters.
- Email or fax the survey or survey announcement to employers for whom we have email addresses or fax numbers
- Post an explanation of the survey and its benefits to employers on the Chamber website, so that employers can verify the survey's authenticity
- Announce and publicize the results of the survey among employers (on same methods as mentioned above) and use the Sample FET business buzz in November as a medium to report results
- Make one workstation available at Chamber for survey implementation activities

Jobs for the Future:

- Design the survey instruments and processes in conjunction with the parties to this MOU
- Draft the initial survey questions for review
- Establish 3-province partnership and work plan with the University of Limpopo
- Advise Sample FET and Chamber during implementation of the survey

- Analyze results of the survey and recommend reporting formats in partnership with University of Limpopo

Sample FET College

- Advise JFF on design of the survey questions to ensure FET responsiveness
- Provide workstations (telephones & computers) at the student support centre for implementation of survey, including completion of surveys as well as data input of the results
- Establish and manage a team of student workers to implement the survey
- Analyze survey results
- Establish an “Employer Responsiveness Team” to use the survey results to improve services to employers and career success of students

3. Assignment of Personnel

The following personnel will be responsible for the ensuring that each party meets its responsibilities under this MOU:

The Chamber: Anna–Marth Ott / Valerie Pienaar

JFF: Robert Holm / Jim Vollman

Sample FET: CEO / Deputy CEO

4. Work-plan: Tasks and Timelines

1. Develop business contact list for implementation of survey

Deadline: August 12, 2011

Person(s) Responsible: Valerie Pienaar, James Vollman

2. Establish final survey goals, questions, processes, protocols as agreed between parties

Deadline: August 17, 2011

Person(s) Responsible: Robert Holm

3. Assign and equip (4) workstations for survey implementation

Deadline: August 26, 2011

Person(s) Responsible: CEO

4. Select and train Survey Team manager

Deadline: August 31, 2011

Person(s) Responsible: Deputy CEO, James Vollman

5. Select and train student workers

Deadline: August 31, 2011

Person(s) Responsible: Deputy CEO

6. Post website information about the survey

Deadline: August 19, 2011

Person(s) Responsible: Deputy CEO for FET, Valerie Pienaar for Chamber

7. Publicize the start of survey and encourage employer participation

Deadline: October 2, 2011

Person(s) Responsible: Valerie Pienaar

8. Complete first round of surveys

Deadline: October 10, 2011 through October 14, 2011

Person(s) Responsible: Deputy CEO (or Sample Survey Supervisor)

9. Complete analysis of survey results

Deadline: November 18, 2011

Person(s) Responsible: Deputy CEO (or Sample Survey Supervisor),
Professor Lesaoana, University of Limpopo

10. FET “Employer Responsiveness Team” Planning Meeting

Deadline: November 21, 2011

Person(s) Responsible: Deputy CEO

11. Chamber event reporting survey results

Deadline: November 25, 2011

Person(s) Responsible: Anna-Marth Ott / Valerie Pienaar

5. Payments

No exchange of funding is required under this MOU. The responsibilities of each party will be met by current organizational budgets unless amendments are agreed to by donating parties.

The Middelburg Chamber of Commerce and Industry participation is linked to the Sample FET College partnership fees.

6. Confidentiality

The confidential information to be disclosed or submitted (either orally, in writing or in other tangible or intangible forms) by discloser under this agreement can be described as and includes: Invention description(s), technical and business information relating to discloser's proprietary ideas and inventions, products and services, software, databases, schematics, research and development, production, costs, profit and margin information, finances and financial projections, customers, clients and marketing. All information supplied by the discloser in good faith must be treated as confidential regardless of whether such information is designated as confidential at the time of its disclosure.

SIGNED on this _____ day of July 2011, by:

Anna-Marth Ott

on behalf of Middelburg Chamber of Commerce

Robert Holm

On behalf of Jobs for the Future

FET CEO / Deputy CEO

On behalf of Sample FET College

APPENDIX

SAMPLE FET COLLEGE SWOT ANALYSIS

Ask first: “What other items might be critical to business?”

STRENGTHS: RANK ORDER AND REASON IMPORTANT

RANK	STRENGTH	WHY IS IT IMPORTANT TO EMPLOYERS	HOW WILL WE MEASURE ITS EFFECTIVENESS
1	ISO Certification	Confirms that the institution meets international quality training standards and that a QMS is implemented effectively.	<ol style="list-style-type: none"> 1) Employers will partner as a source of meeting their workforce needs 2) 80% placement of students who have completed their studies
2	SETA Accredited courses: ETDP—Early Childhood, Minders W&R SETA—Wholesale & Retail PSETA—Public Admin level 3 CETA—Community House Building SERVICES SETA—Project Management	<ol style="list-style-type: none"> 1) Companies can claim a tax rebate for accredited staff training 2) Employers can support employees to acquire credits and qualification 3) Meet incumbent worker training needs 4) Cost effective over private providers 	<ol style="list-style-type: none"> 1) An increase in demand for these Courses 2) Employers will seek additional training 3) Secure contracts to custom build courses for employers
3	Part-Time, Mentoring and Distance Learning Opportunities	<ol style="list-style-type: none"> 1) Ensure a skilled frontline workforce 2) Ensure life-long Learning for career advancement or career transition 3) Flexibility to offer courses at any learning site/ not confined to FET 	<ol style="list-style-type: none"> 1) A more diverse group of student enrolment 2) Support for introduction of e-learning 3) Demand for non-accredited courses 4) RPL system developed
4	Accredited workshops	<ol style="list-style-type: none"> 1) Employers can accurately evaluate training outcomes 2) Custom build programs for employers 3) Current and future workplace needs can be addressed 	<ol style="list-style-type: none"> 1) Increase in the number of College partners willing to donate equipment and up-to date technology essential to train their workforce 2) Increase # satisfied employers based on feedback through customer surveys
5	Sound Financial Status	<ol style="list-style-type: none"> 1) Indicates competent governance and Management structures 2) Recognize the College as an economic development resource 3) Visionary in surviving even in downturn 	<ol style="list-style-type: none"> 1) Increase in the number of successful proposals for additional funding 2) Increase # of Grant Allocations 3) Increase in the number of successful entrepreneurial enterprises
6	Centre's of Excellence	<ol style="list-style-type: none"> 1) High pass rate 2) Excellence in specific disciplines, with well qualified practical and theoretical staff 3) Indicates collaboration 	<ol style="list-style-type: none"> 1) Org. structure eliminates duplication, unites departments, facilities, resources 2) Amongst top 3 best performing Colleges

Other strength statements may matter to other audiences but may not matter to employers.

Rank order the items in terms of what item is most important to fix or what is most possible to fix.

WEAKNESS: RANK ORDER TO FIX AND ACTION STEPS TO CORRECT

RANK	WEAKNESS	ACTION STEPS TO CORRECT	HOW WOULD WE MEASURE SUCCESS
1	Lack of proper market research	<ol style="list-style-type: none"> 1) Determine the degree of rivalry 2) Conduct area analysis surveys 3) Determine training needs of employers in community 4) Analyze economic challenges and opportunities 	<ol style="list-style-type: none"> 1) Labour market needs confirmed 2) Anticipatory strategies in place 3) Statistical analysis of workforce development
2	Lack of comprehensive academic support services	<ol style="list-style-type: none"> 1) Budget for tutorial afternoon classes 2) Introduce remedial maths and maths literacy interventions 3) Advocate an environmental approach to health and wellness 	<ol style="list-style-type: none"> 1) Schedule of academic interventions available 2) Integration of academic topics apparent 3) Student % retention improve
3	Not sufficient placement opportunities in the world of work for both lecturers and students	<ol style="list-style-type: none"> 1) Collect reliable information on possible strategic partners 2) Materialize intervention for effective placement of students 3) Internship expanded to Engineering students 4) Identify opportunities to engage employers 	<ol style="list-style-type: none"> 1) Placement officer appointed 2) Increase in number of staff and students placed
4	A Recognition of Prior Learning (RPL) System not in place	<ol style="list-style-type: none"> 1) Develop guidelines for implementation 2) Identify member of staff to drive process 	<ol style="list-style-type: none"> 1) A RPL policy underscored by the ETDP SETA, approved 2) Identified member of staff trained
5	E-learning System not operational	<ol style="list-style-type: none"> 1) Complete Phase 3+4 of Connectivity 2) Research e-learning systems available in the market 3) Compile implementation plan 	On-line academic programs available via internet
6	Not sufficient provisioning made for physically challenged students	<ol style="list-style-type: none"> 1) Do needs analysis in the community 2) Identify two focus areas for 1st year of implementation 3) Acquire resources needed 	<ol style="list-style-type: none"> 1) At least 4 facilitators (1 at each campus) with special need training appointed 2) Increase in the number of enrolments of students with disabilities

List out the Opportunities from your SWOT Analysis

Ask first, “Are there other items that would present a great opportunity for the college in terms of meeting the needs of employer customers?”

Rank order the items in terms of what item is most important to pursue.

OPPORTUNITIES: RANK ORDER IN TERMS OF WHAT WILL BE PURSUED FIRST AND ACTION STEPS TO PURSUE

RANK	OPPORTUNITIES	ACTION STEPS TO PURSUE	HOW WOULD WE MEASURE SUCCESS
1	Networking to secure Partnerships	<ol style="list-style-type: none"> 1) Join local Chamber of Commerce 2) Identify employers that have employed former students 3) Invite large employers to open day to explain NCV 4) Run workshop on forming of partnerships 	<ol style="list-style-type: none"> 1) Increase in the number of formalised strategic partnership agreements 2) Increase in the number of donations of costly equipment and/or up-to-date technology 3) Increase in profit from contract training
2	Secure SETA support	<ol style="list-style-type: none"> 1) Prioritise labour market needs 2) Identify relevant programs for which SETA approval is required 3) Submit all required documentation for accreditation of these programs 	<ol style="list-style-type: none"> 1) Increase in the number of SETA accredited programs offered 2) More funds secured from legislative support for the address of skills shortages
3	Development of new demand driven courses and curriculum	<ol style="list-style-type: none"> 1) Conduct survey to determine skills required 2) Make appointments for direct interviews with company leaders 3) Partner with relevant partners to be responsive 	<ol style="list-style-type: none"> 1) Internal review processes in place to evaluate the range and value of current programs 2) Representation on advisory committees to tap into information on training trends
4	Positive growth of staff skills	<ol style="list-style-type: none"> 1) Evaluation of the current skills of the workforce done and analysed 2) Professional development programs approved 	Professional development programs link staff to industry
5	Sharing good practice, nationally & internationally	Strategy in place for identifying companies/ colleges against which to benchmark performance	Schedule of visits to benchmarking companies/colleges in place
6	Specialized RPL centre's	<ol style="list-style-type: none"> 1) Identify the skills set required for access to identified jobs 2) Identify screening requirements 	<ol style="list-style-type: none"> 1) RPL policy approved 2) Pilot project in place

List out the Threats from your SWOT Analysis.

Ask first, “Are there other items that would present a great threat to the college’s competitive position with business?”

Rank order the items in terms of what item is most important to correct.

THREATS: RANK ORDER IN TERMS OF WHAT WILL BE PURSUED FIRST AND ACTION STEPS TO CORRECT

RANK	THREATS	ACTION STEPS TO CORRECT	HOW WOULD WE MEASURE SUCCESS
1	Existing loyalty to Report 191 programmes	<ol style="list-style-type: none"> 1) Inform the community of the NCV & skills programs on offer 2) Make Industry aware of personalized programs to address their specific needs 3) Advocate career building opportunities 	<ol style="list-style-type: none"> 1) Curriculum development unit in place 2) Diverse profile of students evident
2	Rate of industry growth	<ol style="list-style-type: none"> 1) Leverage institutional support form industries in the Community 2) Recognize environmental assets and liabilities 3) Strategies around assumed constraints 	New enterprises and partnerships developed
3	Information complexity	<ol style="list-style-type: none"> 1) Research technical and analytical change 2) Constitute continuous dialog between the College and employers 	<ol style="list-style-type: none"> 1) Standardized data available across College 2) Disseminated documents instill strongly held college values and beliefs
4	Technology change	<ol style="list-style-type: none"> 1) Keep up to date with relevant technological changes 2) Partner with technologically driven companies to be pro-active for changes 	Funds raised for high-demand programs
5	One size fits all approach	<ol style="list-style-type: none"> 1) Promote life-long learning strategy 2) Streamline policies and procedures to enhance responsiveness 	Seamless system of education and training apparent
6	Limitations of the organizational structure	Share resources and compliments strengths	Collaboration between internal divisions and external organizations apparent

Concept Paper

Real Time Labor Market Information

Supply and Demand Analysis Derived from Internet Postings

Problem Statement

Accurate and timely supply/demand information is critical to various labor market actors. Yet traditional methods of analyzing labor supply and demand too often depend on expensive surveys, anecdotal stories or common knowledge. Surveys are only as strong as their sample size. Significant increases in the sample, in order to capture either individual occupational detail or to be able to provide geographic granularity, are both costly and result in significant time lags in publishing final results. Accurate supply data depends in part on administrative reports from education providers (public and private) to determine what is in the pipeline and accurately gauging the supply of existing workers in the labor force already.

Given the challenges and limitations of traditional data analysis, new methods are necessary to meet the critical needs of important labor market actors. Job seekers need to know where the jobs are and what skills are required, and they need this information on a timely basis. They would also like to have a sense of how competitive that market is so that they can make judgments about salary negotiations. Employers have parallel needs – where are the candidates and how competitive is the market. They also need to be able to signal to individual job seekers about their specific skill/knowledge requirements but also signal the market more generally so that skill shortages are quickly filled by a pipeline of trainees.

Government needs this type of information as well. For policy makers who need to allocate resources, understanding where the current skill shortages are is critical. Education officials need to understand what new and emerging skills are being demanded in the marketplace and what skills are declining in value. Labor officials need to understand which recently unemployed person will find getting a new job relatively easy (because of high demand in their field) or will need to go for immediate retraining because s/he has a skill set where current job prospects are slim. Economic development officials need to be able to describe available labor supply to prospective employers. Guidance counselors need to be able to direct students toward high demand fields and also to provide them with realistic assessments of their own skill gaps.

Real Time Labor Market Analysis Tools – A Cost Effective Answer

New analysis tools are being pioneered in the United States that take another approach to supply and demand analysis. There are several sites providing this type of analysis in the US. (See <http://public.greencarecentral.org/>; <http://www.burning-glass.com/products/labor.html>; <http://www.conference-board.org/data/helpwantedonline.cfm>; <http://www.indeed.com/jobtrends>; and <http://www.simplyhired.com/a/trends/national>) These tools use job ads scraped from the Internet and sophisticated analysis software to take a new look at labor demand and the specific skills, knowledge, abilities, experience and education required by employers. Because of the density of the data collected (100,000 to 150,000 new ads per day in the US and perhaps 5,000-15,000 in South Africa), analysis at the individual occupation and local labor market area level is possible. The ability to aggregate data from thousands of employers allows for types of analysis that would be nearly impossible to replicate using surveys. And the greatly reduced time lag from data collection to publication makes this data source “real time.”

Data Collection Options

There are two distinct types of data that will need to be collected – job ads and CVs. Collecting the job ads is likely to be the simpler of the two tasks since by their very nature “ads” are meant to be public. Collections of CVs will be more complex, probably take much longer to accomplish, and be dependent on other elements of the Human Capital Development System

Job Ad Collection

The common method for collecting job ads is through spidering or indexing. Spiders are search robots that crawl through websites and pull back content. There are at least three firms that are spidering job content in South Africa now (Indeed -- www.indeed.co.za/, SimplyHired -- <http://za.simplyhired.com/>, or Job Rapido -- www.jobrapido.co.za/). Setting up such a spidering operation would be a critical element of creating a South Africa national labor exchange (SA-NLX) because large firms will not want to spend the time to repost their ads to multiple sites.

Two primary options for collection of the job data are available. First, access to the spidered content from one of the existing commercial providers could be purchased. Second, a spidering operation could be created or outsourced. The potential advantage to the purchase from commercial providers is access to the file of jobs they have previously collected. Such a history file will mean that some types of longer-term analysis will be able to be done sooner. If the purchase option is used, it is critical that the public agency “owns” the underlying job data once it is transferred to its possession with as few use restrictions as possible.

The purchase option has some initial advantages (history file, quicker start up) that should push South Africa in this direction at the start. However, control of the spidering process should eventually shift to the public sector because without such

a shift data quality control will not be really possible. The current aggregators are not in the business of producing analysis they are in the business of finding as many jobs as possible so that job seekers come to their sites. Duplicates are not their concern. Creating a consistent time series is not their concern. Whether meta-data is included or filtered out is not their concern. But each of these items need to be the concern of DHET or Statistics South Africa because they want data of sufficient quality to allow for public policy decisions to be made based on the data.

This job collection effort will also become a foundation of the “job” side of the South Africa National Labor Exchange (SA-NLX). There should be three “public” sources of job listings that would be added to the “spidered” jobs: 1) job listings from the Department of Labor’s career centers, 2) job listings from the job outreach and placement efforts of the FET colleges and other public higher education institutions, and 3) an employer portal in the SAQA career services system. Bartering access to this job flow might allow DHET to lower the price of purchasing access to the job flow from one of the job consolidators and purchasing the job history file.

CV Data Collection

The collection of CV data will not be as easy because most CV collection systems are not designed to be public and easily accessible. The building of the CV database will require a series of actions within the public sector and the formation of partnerships with some private sector firms.

The public sector has some distinct advantages in terms of CV data collection because it often touches individuals at points of career transition and because public bodies manage much of the formal qualifications structure in the country. What is required is a user-friendly suite of career tools that makes CV creation or upload simple, connects to an always-updating source of job adverts and allows the user to make the CV available to search by employers with various levels of anonymity for the user. (The three levels of privacy controls are typically: highest = contract information available only via a system-generated e-mail allowing the individual to decide to reply or not and with other personally identifying information stripped from the CV; medium = standard CV with contact only through a system-generated e-mail; and lowest = CV and contact information revealed to any registered employer via a search). The SAQA career advisory suite of tools (enhanced with the proposed career management account) should become that site for South Africa.

The key to building a large and constantly updating CV database will be to make sure that CV creation in the SAQA site is part of every public career-related transaction including: application for unemployment benefits, exit from the military, application for employment with a government agency, exit from secondary school, entry into or exit from FET colleges, technical and regular universities, as part of the application process for a bursary or student loan, as a member service by university alumni associations, and as part of the application process for any NQF examination or trade test. The look and feel of the CV creation tool in each of these collection

opportunities may be different but the CV should be deposited into a common database to allow for both search and analysis.

Inserting the CV creation tool into all of those circumstances will quickly generate the largest CV database in South Africa. Because recent university graduates and those sitting for qualifications exams will be included, employers will quickly recognize the public sector CV database as a mandatory part of their recruitment efforts. As high quality employers begin to search the database to find candidates, other skilled workers and professionals will want to add their CVs to the database voluntarily to take advantage of the opportunities. The database will become self-perpetuating and include CVs from all occupations and all areas of the country.

The CV database will become a working and valuable part of the SA-NLX. It will also create the database to be used for analysis of labor supply. Government should also ensure that no one is excluded from the CV database. Subsidizing Internet connected career centers in the FET college campuses and Labor career centers will ensure that there are no information “have-nots.”

Government might also be able to partner with private sector entities at a couple of levels. First private colleges and universities could be offered versions of the SAQA career suite at little or no cost with the provision that CVs entered into the system become part of the larger national collection. It is possible that private CV databases (e.g, Career Junction www.careerjunction.co.za/) could be persuaded to share the CVs they collect either to become part of the larger searchable CV database or stripped of contact details added to the analysis database only. The sharing could be done in such a way that it did not negatively impact their current business models.

The SAQA career suite is already planned to be social media friendly. To enhance the CV database, it will be important that the suite become an application within those social media sites and that tools are provided to the sites that allow their members to easily “publish” their CVs to the national CV database. Elements of the CV site should also be designed to be accessible through smart phones.

Analysis Design Options

The analysis of the data from the jobs and CV databases is critical in order to extract useful information, to understand both the value of that information and its limitations, and to create the series of standard reports and tools that make the information accessible to job seekers, employers, educators, counselors, and policy makers. In considering these analysis options it will be useful to address the “who” and “how” questions.

Who

Eventually, the analysis should be housed within a public agency in partnership with a South African University partner. Initially, involving a university from the US that

has been involved in conducting real time LMI analysis will also be useful in terms of jump starting the process. There are three possible public agencies that could take the lead in the analysis efforts: Statistics South Africa, Human Resource Development Council/Department of Higher Education and Training, and/or the South African Qualifications Authority. Each has its own strengths and weaknesses.

Statistics South Africa has within it the statistical staff that would be need to conduct the on-going analysis and access to the micro-data from various surveys that should be used to validate and benchmark elements of the real time data. The downside of designating Statistics SA has the lead would be the relative lack of focus the agency is likely to place on this new data source. Real time will not be considered a “core” program and will get lower priority for use of resources.

The Human Resources Development Council (HRDC) and the Department of Higher Education and Training (DHET) where it is housed would be another potential lead agency. They perform a number of statistical analyses already as part of their core mission to determine skill demand and shortages in the SA economy. The management information systems with the agency already house a significant amount of data about the labor supply and the supply pipeline. And a potential source of funding exists through the National Skills Fund. It would need to arrange for access to the micro-data held by Statistics SA to do the some of the benchmarking and related analysis.

The South Africa Qualifications Authority is another potential candidate for lead public agency. Its primary advantage is its role is setting qualifications for various occupations and its lead in producing the national career advisory service. It will be a primary consumer of the information produced and would help to maintain a customer orientation.

Skilled analysts will be required to determine from the real time information flow what data represents real movements in the labor market and what represents mere noise in the data or limitations in the data itself. The question of who leads and supports the effort is critical because it will determine the ultimate credibility of the information products generated by the system. Beyond the analysis work, whoever leads the effort must also manage the on-going quality control of the job/CV gathering process and the coding/parsing process. Experience from the US indicates that such quality control efforts will need to involve several full-time analysts and is not a one-time effort.

How

There are three aspects to the mechanics of analysis. First, because of the massive size of the databases and the amount of computing power needed to parse the job ads and CVs and to generate the reports, there will need to be significant investment in computer hardware and high bandwidth hosting services.

The second aspect is the analysis software. To make sense of the massive flow of data, the system will need analysis software that will do all the following:

- Extract various data elements from the job ads or CVs – job title, location, employer, skill requirements, experience requirements, education and certification requirements, date initially posted, source website, etc.
- Assign accurate occupational codes (to job ads and to prior experience elements in the CVs)
- Assign accurate industry codes (to job ads and to prior experience elements in the CVs)
- Assign accurate location codes to job ads
- Relate skill statements to standard taxonomies of skills
- Understand statements in context so that the difference between a java programmer and serving java at a coffee shop are clear.

The US Northeast Research Consortium uses software provided by Burning Glass Technologies (www.burning-glass.com) to do each of these functions. In addition to the Burning Glass software, the Consortium's academic partner, Georgetown University, uses SAS and SPSS statistical packages to conduct some of the analysis.

The final aspect is the programming necessary to store the resulting data in relational databases and generate web-based reports from the stored data. Some samples of the reports that can be generated from the stored data are displayed at the end of this paper. The Northeast Consortium, which covers an area with a population similar to South Africa, utilizes the services of a full time database administrator and a full time web programmer.

Points of Integration with Overall South Africa Human Capital Development System

The job collection and CV collection efforts needed to feed the real time analysis are also the underpinning of the South Africa National Labor Exchange (SA-NLX). As noted above, the public contributions to the job flows will come from several sources. It is likely the public sector will be the primary source of CVs in both the SA-NLX and the real time analysis database. This symbiotic relationship will be critical to the success of both the real time analysis system and the SA-NLX.

The real time analysis reports will have several customers within the South Africa Human Capital Development System. It will become a critical source of information for the HRDC and the Skills Branch in terms of analysis of current and emerging skills requirements. Labor market information developed by the real time system will become a critical element for the SAQA career advisory service. The skill analysis will be valuable for the various curriculum developers within higher education. (See some of the sample reports below for examples of the types of reports that might be used to support curriculum development.) The real time demand analysis will be a critical part of an effort to guide students into high

demand occupations. It will also assist the Department of Labor’s unemployment insurance operation to triage new claimants to determine those who can easily find new jobs and those who will need to be retrained.

Cost Estimates

Costs are presented in US dollars and will need to be converted into Rand and in the case of labor costs converted to SA pay scales.

Cost Item	Set up Cost	Annual Cost
Data Gathering (annual cost)		\$285,000
History File (will depend on length of time and vendor)	? (\$50,000-\$100,00)	
Hardware and related software	\$65,000	\$10,000
Hosting and Internet		\$45,000
Analysis Software		
Burning Glass (or similar)	\$145,000	\$355,000
SAS or SPSS (depends on discounts)		? (\$10,000-\$100,00)
Staff		
Public Agency (7 senior analysts, 4 support)		\$800,000
University Partner (US)	\$350,000	
University Partner (SA)		\$450,000
Database Administrator		\$150,000
Web and report programmer		\$125,000
Totals	\$560,000	\$2,220,000
Plus unknowns (History File and Statistical Analysis Software – cost ranges given)		

Note: SAS and SPSS provide substantial discounts if the software is purchased by an institution of higher education.

Real Time Analysis Limitations

Real time labor analysis greatly enhances, but does not replace traditional data analysis. It also has important limitations. First, not all jobs are posted on the Internet. The lack of full coverage has been important for some US applications of the tool and is likely to be more serious in South Africa. While perhaps 60-65% of all job openings are posted on the Internet in the US, the coverage of occupations is not uniform. Construction, restaurant, and retail jobs tend to be significantly underrepresented. However, most jobs that require significant amounts of education or training are listed.

Second, the process of ‘spidering’ to identify jobs on the net is still more art than science. Job spiders “break” frequently resulting in additional coverage issues and new sites are popping up constantly.

Third, the same job is often listed on multiple sites. Solid analysis requires that duplicates be removed so that only the underlying demand is revealed. De-duplication software is not perfect; testing for duplicates in one US tool showed between 10-15% duplicates after the de-duplication software was finished.

Fourth, the job ads themselves are designed for recruitment and not analysis. That will mean locations listed in the jobs will speak to recruitment areas (from which candidates might be willing to commute) rather than specific job locations. That will limit the geographic granularity that is possible in real time analysis.

Fifth, software used to sort job ads into occupational groupings is not perfect. This automated occupational coding works best on occupations that are posted frequently (better for medical personnel and managers than for agricultural workers) and is better for jobs drawn from sites that have structured the data and include more job detail. Coding works better at higher levels of aggregation (e.g. all production jobs rather than an operator of an plastic injection molding machine). Even with the limitations, coding software can be trained to improve its accuracy.

Finally, software used to extract skill words and phrases tends to produce 15-25% false positives (finding the word or phrase when it is not in the text of the ad). That problem is generated because job sites will often imbed common “skill” words into their sites and to the ad results in order to improve their placement on search engines like Google. This “meta-data” is often not visible to the Internet user but is to the spiders and robots used by Google and job aggregators like Indeed. Stripping this meta-data from the ads is a challenge. Although experience in the US suggests that the rate of false positives can be brought into an acceptable range. It should be noted that false negatives (not finding the skill when it is in the job ad) is not a significant problem.

Despite these issues, real time analysis can produce information not available from any other source. Investments in improving that sophistication of spidering, coding and parsing tools will pay dividends.

Potential Revenue Sources

The primary source of funds for real time information should be the National Skills Fund and the individual SETA funds that will benefit from the new source of information. The real time data (to help guide the initial triage of individuals who apply for UIF benefits) and the enhanced flow of job openings (to allow the unemployed to get back to work sooner) should provide justification for on-going investment by the Labor Ministry and the Unemployment Insurance Fund. DHET

may also justify a direct investment because of the improvements in curriculum development and guidance counseling that will result from real time information.

Value Proposition

The real time information will produce a more solid foundation for making decisions on the billions of Rand invested by the South African government on education and by employers and others on skills trainings.

The real time system itself will improve the ability of HRDC, SAQA, and various SETAs to understand the current demand for skills in the labor market. In some cases, the real time system will substitute for some existing research. In other cases it will supplement existing research. The ability of the real time system to spot emerging skills and to understand how skills are in demand across multiple occupations will provide a solid research basis for curriculum development at the FET colleges and universities. It will also indicate specific targeted areas for the development of short courses. And the more analytical reports (e.g., skill cluster analyses) will provide tools for counselors to better understand how skills translate from one occupation to the next.

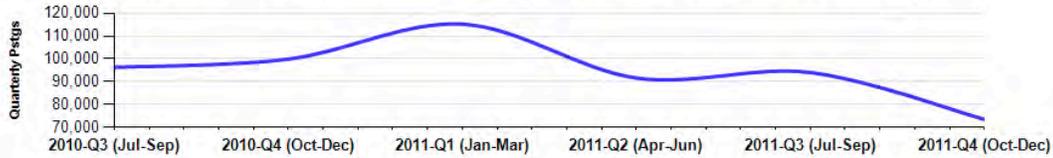
The information derived from the real time system will be a critical data source for the SAQA career advisory services because it will be the only system in SA that can provide information on demand and changing skill requirements at the detailed occupational level. The real time information will also make the SAQA career site more “sticky” (visited more often and with a loyal customer base). Information e-mails and SMS feeds about changes in the labor market will keep South Africans coming back to the site. The real time data could also be used to create a life-long learning culture as various higher education institutions create short courses to fill new skill demands and then use the SAQA CV database to reach out to potential customers.

Because of the real time system’s ability to better find and localize skill shortages and surpluses, it will be critical as part of the rapid reemployment effort to move those who file for initial unemployment benefits to be quickly moved into new jobs (using the stream of job adverts that feed the real time system) or into training for high demand occupations.

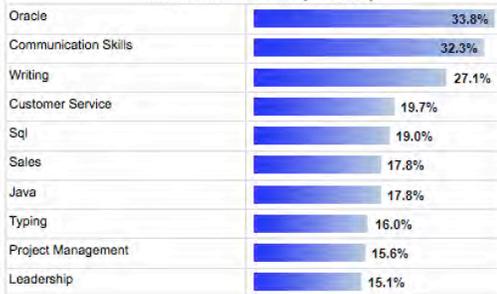
Sample Screens from US Systems

Northeast Research Consortium (8 States in the Northeastern US)

6 Quarter Job Ad Volume for 'Computer and Mathematical' Job Family

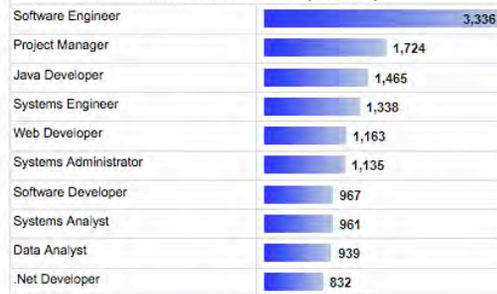


Top Skills Listed in Job Postings for the 'Computer and Mathematical' Job Family
Time Frame: 2011-Q4 (Oct-Dec)



Percentage of 73,439 Total Postings Listing Specified Skills

Top Titles Listed in Job Postings for the 'Computer and Mathematical' Job Family
Time Frame: 2011-Q4 (Oct-Dec)



Job Ad Volume

Education Requirements Listed in Job Postings for the 'Computer and Mathematical' Job Family
Time Frame: 2011-Q4 (Oct-Dec)



Percentage of 73,439 Total Postings Listing Specified Degrees

Top Employers Listed in Job Postings for the 'Computer and Mathematical' Job Family
Time Frame: 2011-Q4 (Oct-Dec)



Job Ad Volume

Experience Requirements Listed in Job Postings for the 'Computer and Mathematical' Job Family
Time Frame: 2011-Q4 (Oct-Dec)



Percentage of 73,439 Total Postings Listing Specified Experience

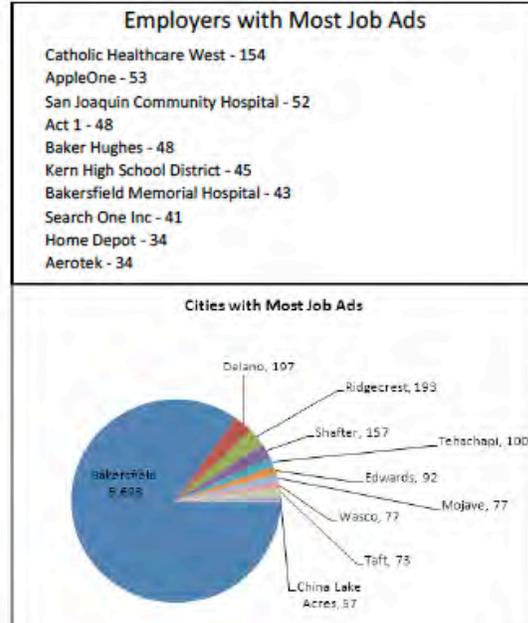
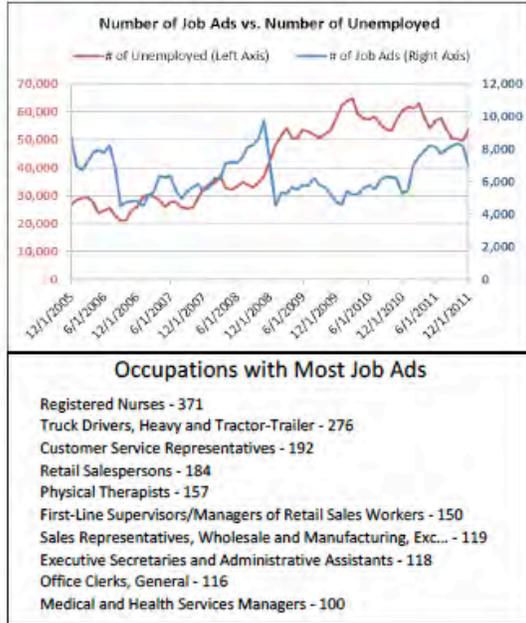
Top Domains With Job Postings for the 'Computer and Mathematical' Job Family
Time Frame: 2011-Q4 (Oct-Dec)



Job Ad Volume

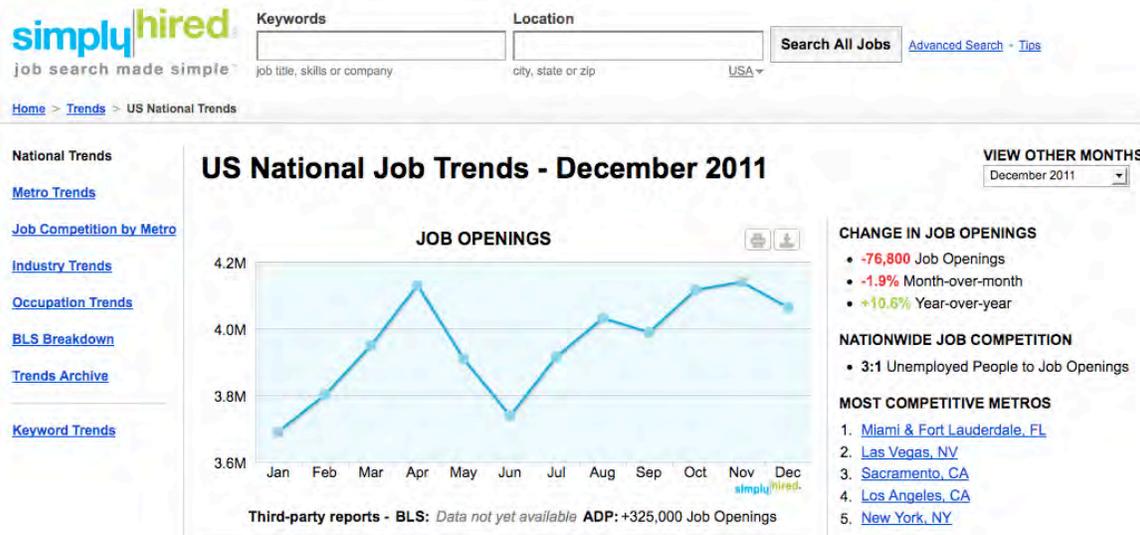
Conference Board – Help Wanted Online

Recent Job Ads for Bakersfield Delano MSA December 2011



Sources: Employment Development Department, Labor Market Information Division; Help Wanted Online from The Conference Board and WANTED Technologies

SimplyHired.com (US and South Africa Job Consolidator)



Indeed.com (US and South Africa Job Consolidator)

indeed[®]
one search. all jobs.

HTML5

what: job title, keywords or company

Job Trends

Job Trends
[Job Postings Per Capita](#)
[Job Market Competition](#)
[Industry Employment Trends](#)

Job Trends

Example: HTML5 Job Trends

"HTML5" is the #1 job trend - the fastest growing keyword found in online job postings - ahead of "MongoDB" in second place and "iOS" in third place. The top 10 trends are to the right or you can see the trend for any words or phrases by entering them in the search box above.

Scale: **Absolute** - [Relative](#)

Job Trends from Indeed.com

Percentage of Matching Job Postings

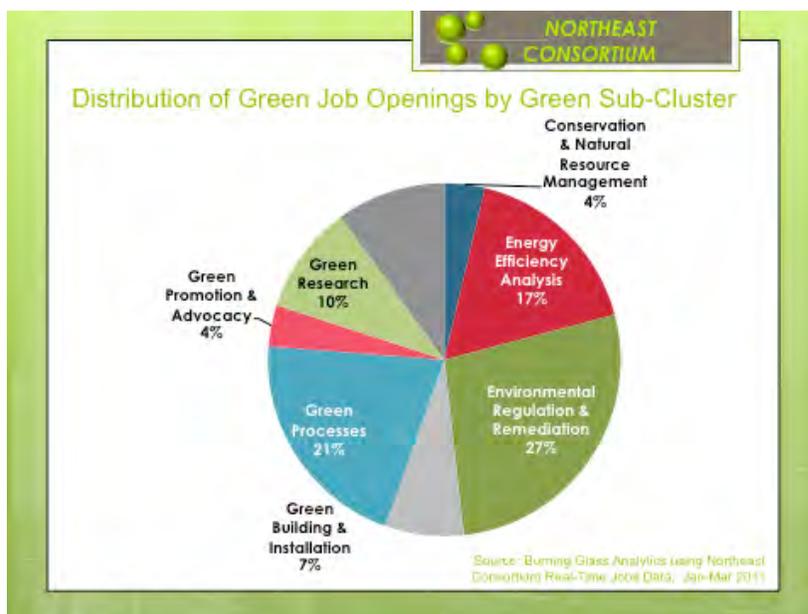
Jan '06 Jan '07 Jan '08 Jan '09 Jan '10 Jan '11

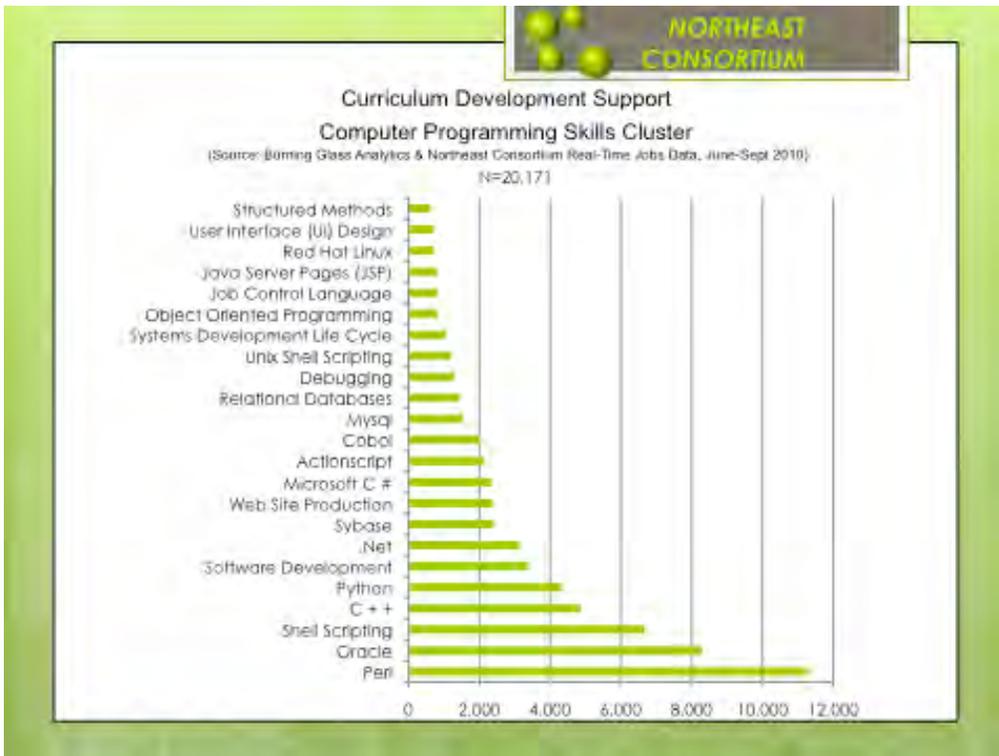
1. [HTML5](#)
 2. [MongoDB](#)
 3. [iOS](#)
 4. [Android](#)
 5. [Mobile app](#)
 6. [Puppet](#)
 7. [Hadoop](#)
 8. [jQuery](#)
 9. [PaaS](#)
 10. [Social Media](#)

Indeed.com searches millions of jobs from thousands of job sites. This job trends graph shows the percentage of jobs we find that contain your search terms.

[Find Html5 jobs](#)

Sample Report Items from a Skill Cluster Analysis Northeast Consortium





Note – There are no active systems doing supply analysis.

Concept Paper

South Africa's National Labor Exchange

Problem Statement

Most modern economies have publicly supported national labor exchanges to help workers to more quickly find employment and employers to more quickly find qualified workers. Since the mid-1990s, having a national exchange has also meant having an Internet job and talent bank. South Africa does not have a national labor exchange, however. It does have a number of commercial job boards and a large number of newspaper help wanted sections that are Internet accessible. The Labor Ministry, through its career centers, runs a large labor exchange but one that is not visible on the Internet.

The labor exchange is an essential tool in having an efficiently functioning labor market. It allows employers, advertising vacancies and job seekers to display their availability more broadly and accurately. An exchange also generates significant information as a by-product. It helps to answer several key questions posed by labor market actors:

- Where are the jobs?
- Where are the good job candidates?
- What skills are in demand right now?
- What do jobs pay?
- Is this a “buyer’s” (employer) or a “seller’s” (job seeker) market?
- Are jobs or candidates available outside of my home area?

Creating a National Labor Exchange for South Africa

The model we recommend for a South African National Labor Exchange (SA-NLX) is similar to the public/private partnership structure that is currently managing the national labor exchange in the US. While the national labor exchanges of some countries use a predominantly public structure, this public/private model has been highly effective and most fits South African context because the private models already exist and the public side is relatively underdeveloped. In the US, that partnership is between the Direct Employers Association, a non-profit organization with over 500 businesses as members, and the National Association of State Workforce Agencies (representing the State public employment services throughout the US). The US national labor exchange is now JobCentral (www.jobcentral.com now US.jobs).

The technology used by Job Central to gather jobs is powerful and low cost. JobCentral will index (the technique used by Google) the jobs on corporate sites each night. It is currently indexing over 8,000 sites and that number continues to grow. The nightly indexing ensures that the jobs are fresh and also allows JobCentral to send candidates directly to employers' websites where they can apply for the positions. (The process for getting new firms to agree to have their jobs indexed is described below.)

We estimate that the indexing approach will generate a database of between 75,000 and 100,000 active job vacancy announcements on any given day. Those vacancies will be updated nightly so that they are always fresh. The national labor exchange would offer to "index" any corporate site at no charge but would provide special services to member companies (those forming the South African Direct Employers Association). The South African Chamber of Commerce and Industry should be approached to either create or serve as the employer partner. (What level of financial participation will be discussed in the finance section below.)

An alternative approach could be to form a partnership with one or more of the job consolidators already operating in South Africa (Indeed -- www.indeed.co.za/, SimplyHired -- <http://za.simplyhired.com/>, or Job Rapido -- www.jobrapido.co.za/) to perform the indexing. As noted in the paper on real time LMI, such a partnership, at least initially, would be very beneficial. It would generate a history file (one or more years of collected job ads) and will immediately increase the size of the NLX. However, also as noted on the real time paper, ultimate control by the public sector of the indexing (spidering) process will be essential to ensure the quality of the data to be used for the real time analysis.

In addition to the indexed jobs, the database would be supplemented by job announcements gathered through various public sector sources. The "career centers" run by the Labor Ministry to assist the unemployed currently generate local job postings that are displayed at each center. The SA-NLX would create a tool that would allow those openings to be uploaded onto the national database. FET College and University placement offices would be able to add jobs from local employers to the system as well. (Employer registration and job ad entry screens are described below.)

DHET in partnership with Jobs for the Future is piloting an employer outreach survey that is designed to locate employers with vacancies and those willing to provide work-based learning experiences to students and lecturers. The pilot is being conducted by the Middelburg Chamber of Commerce and Nkangala FET College. The surveys help the colleges fulfill several of their performance requirements. If the pilot is successful, the surveys will be expanded to all FET colleges and therefore cover the whole country. The surveys are likely to locate job vacancies in small and medium sized firms that might be missed by national outreach efforts.

Within a couple of years, we would expect between 250-300,000 vacancy announcements will be available to users on a daily basis throughout South Africa through the SA-NLX.

The labor exchange would collect CVs through a version of the career management accounts that are part of the SAQA career advisory services. (Basic CV collection screens are described below.) Once the career management account (CMA) is built within the SAQA system, it should become the default job seeker account within the NLX. Versions of the CMA would be built into the systems provided to the FET colleges and the other public higher education institutions. The CVs created within these systems will become part of the national CV database. Likewise, the CMA would be integrated within the application process for collection unemployment benefits so that each newly unemployed person would generate a CV that would be added to the national CV database. Establishing a CMA and creating a CV should become a mandatory part of applying to take any qualifications exam or trade test. Overtime, a version should be created for individuals who are exiting the military and for veterans.

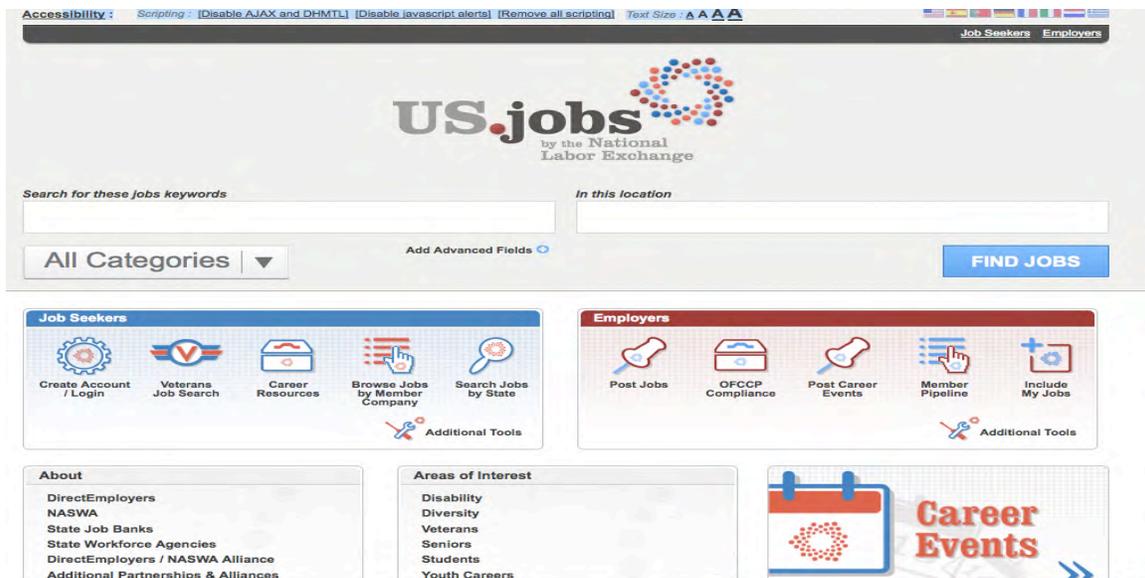
If the CV tool is inserted within all of the suggested venues as well as within the NLX itself, several million CVs will be generated in just a few years. The size of the CV database itself will be attractive to employers (particularly if job candidates from all skill levels are included) who will both search the database and post jobs within the NLX. As large employers begin to use the system, more job candidates will be attracted because they will not want to miss an opportunity to be seen and potentially selected by high quality employers.

Basic Design of the NLX

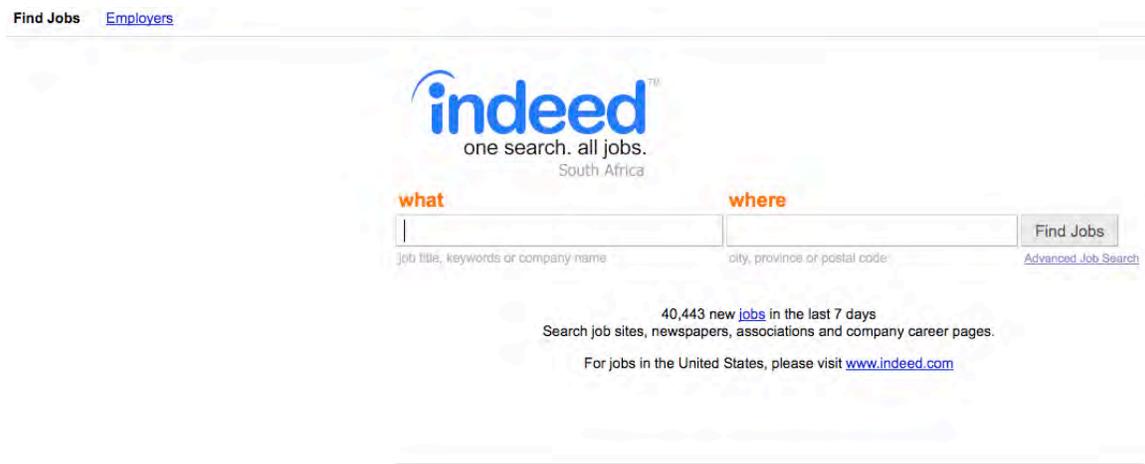
Below, we provide brief descriptions of the key functions and interfaces that would comprise the NLX web site. More screen shots of a sample of web-pages that perform these functions are included at the end of this concept paper narrative.

Home Page – Select Employer or Job Seeker Functions

The home page should be simple. There should be a keyword search for jobs and links for job seekers and employers to other services. It should be easy for employers to navigate to the set of tools that are most relevant to them, and for job seekers to navigate to pages that meet their needs. The US National Labor Exchange provides a clear example of this approach --



One of the South African job consolidation sites, Indeed, provides another example –



While the Indeed site achieves the necessary simplicity, the US site might be a more appropriate starting point because it allows both job seekers and employers to do more.

Create a Job Seeker Account

An individual job seeker would be invited to create an account from the home page and in several other places on the site when s/he might want to save a search or establish a job scout (automated search for new jobs which when found are sent by e-mail or SMS to the job seeker).

Initial account registration should be simple. The individual's name, e-mail address or cell phone number, a user ID (e-mail address can be the ID) and a password would be all that needs to be required. Additional information can be collected

when the job seeker wants additional services. The account would include several subsections:

- My information (registration and related data)
- My CV
- Explore career options
- Explore education and training options
- My Career Targets
- Job searches and job scouts
- Labor Market Information and Information Scouts
- My Education

Each of these sections will be expanded upon in the Concept paper for the Career Management Account. The critical items to discuss immediately are: 1) My CV, and 2) Job searches and job scouts.

Create 'My CV'

This section would permit the user to create and manage one or more CVs. It would guide the user through a series of questions to build a profession resume, store it on-line, allow employers to search for it, and modify it for use with different employers. See the screen mock-ups in the last section for more details.

Job Searches and Job Scouts

This section would permit the user to execute job searches from within the account. The advantage of being within the account is the ability to use one of the saved CVs to respond directly to a job opening. The site should also let you save information on jobs that you have applied for through the site. Job scouts are automated searches that run periodically and then send an e-mail alert to you when they have found new jobs that match your search criteria.

See the screen mock-ups in the last section for more details.

Employer Pages

An individual employer would be invited to create an account if s/he wanted to post jobs or to search CVs. The registration page would collect contact information and would a standard profile of the company. The employer desktop (see example from US.jobs) would allow the employer to post jobs, manage jobs that have been posted and search resumes (CVs). Samples of these pages are included in the last section of this paper.

The process to have your company's jobs indexed can be done without creating an employer account. Samples of pages from that process for US.jobs are included in the last section.

Accessibility : [Scripting](#) : [\[Disable AJAX and DHMTL\]](#) [\[Disable javascript alerts\]](#) [\[Remove all scripting\]](#) Text Size : [A](#) [A](#) [A](#)

[Home](#) [States](#) [Cities](#) [Companies](#)

US.jobs
for the National Labor Exchange

[Employers](#) [Job Seekers](#) [Logout](#)

Employer Desktop

Job Posting

You may post single jobs with approval necessary for each job, however, those jobs will not go "live" until full site access is granted.

-  **Post free to a State**
Post a job to a state's workforce system, if it is a participating state, US.jobs will receive the job as well, usually in less than 24 hours.
-  **Manage Your Jobs**
Edit/copy/repost/expire jobs you have previously posted on US.jobs
-  **Post a Job to the entire US.jobs Network**
Post a job to US.jobs, VetCentral (if you are a Federal Contractor), the entire US.jobs Network, and the relevant state's Web-based State Employment system (if participating).

Search

Your resume search access expired on 3/16/2010.

-  **Request Resume Search (\$25)**
Search resumes posted on US.jobs by candidates in the US and Worldwide.
-  **Manage Account**
-  **Update Registration Information**
Edit your personal/company information.
-  **Update Account Information**
Edit your basic account information (Username, Password, Phone Number, etc.).

Job and CV Matching Software

Keywords and occupation matches tend to be the primary way in which individuals find jobs and employers find CVs. There is other technology that allows for matching directly the full text of the job ad and the CV. That technology would make the site more attractive to high-end job seekers and large employers.

For the job seeker, it will mean that job search results will be a better fit for the full set of skills and experiences. It will also mean that good jobs that might have been missed by the other searches will appear highly ranked on the search results. The software will also allow the job search agents to be more effective. The job seeker would specify a search using his/her CV as the search criteria and then specify that only jobs with relevance rankings above a certain level (e.g. 85% or higher) be considered.

For employers, it will mean that search results will be a better fit for the full set of skill, knowledge, education and experience requirements. It will permit more sophisticated keyword searches by targeting the keyword search only to certain sections of the CV (e.g. only at jobs help in the last 5 years). It will also allow the employer to quickly sort through CVs sent in response to job ads only allowing through which have sufficiently high relevance scores.

Points of Integration with Overall South Africa Human Capital Development System

The SA-NLX is critical because it connects employers and job seekers. It also produces the feed stock for the real time labor market analysis. The job seeker and employer customers of NLX will also become major consumers of the real time LMI.

Experience in the US indicates that the NLX will be the engine that drives traffic to other aspects of the Human Capital Development System. Once there, the customers can be introduced to tools like the career management account and the learning exchange.

Cost Estimates

Costs are presented in US dollars and will need to be converted into Rand and in the case of labor costs converted to SA pay scales.

Cost Item	Set up Cost	Annual Cost
Indexing (annual cost)		*
Hardware and related software	\$65,000	\$10,000
Hosting and Internet		\$45,000
Job Matching Software -- Burning Glass (or similar)		\$175,000*
Initial Site Development and On-going Maintenance	\$900,000	\$200,000
Outreach Survey		\$125,000
Operations Staff		
Employer and job listing approval (4 analysts, 1 support)		\$250,000
Member Services for Employers (4 customer services representatives)		\$200,000
New Member Sales (4 sales representatives)		\$240,000
Database Administrators		\$300,000
Report programmer (special member reports)		\$125,000
Director		\$125,000
Support staff (2 clerical)		\$70,000
Totals	\$965,000	\$1,865,000

* Cost is either covered or reduced by expenditures made in the real time LMI system

Potential Revenue Sources

If the US model is used, employers would provide the bulk of the resources. Such an entirely employer-focused approach in South Africa may not be possible for a

number of reasons. The creation would be delayed if the employer support base needed to be put into place prior to developing the site. Part of the motivation of US employers was the very high cost of commercial job boards with the NLX being viewed as a low cost alternative. Another motivation was the need for large employers who also accepted federal contracts (tenders) to be able to distribute their jobs to local employment offices (a legal requirement in support of hiring unemployed veterans). Those motivations do not really exist in South Africa. The employer support is likely to have more significant symbolic than monetary value.

Membership dues for the South Africa Direct Employers Association should be minimal (10,000 Rand per year) with some fraction of that rebated from the employers SETA levy. That approach will allow for the creation of a large employer base quickly which will lend credibility to the NLX.

The primary sources of funds will need to be from the public sector. DHET is likely to be the largest source through the national skills funds and from the FET branch for support of the outreach survey. The benefits for DHET will be in the form of better employment outcomes for their graduates. The connection of employers to the NLX may also result in increases in the number of businesses using FET colleges and other higher education institutions for short courses and customized training.

The Labor Ministry should also provide both in kind contributions (the job flow from their career centers) and monetary. They should also contribute because Labor may in fact generate substantial savings in UIF payments once the NLX is integrated into the UIF claim process.

Value Proposition

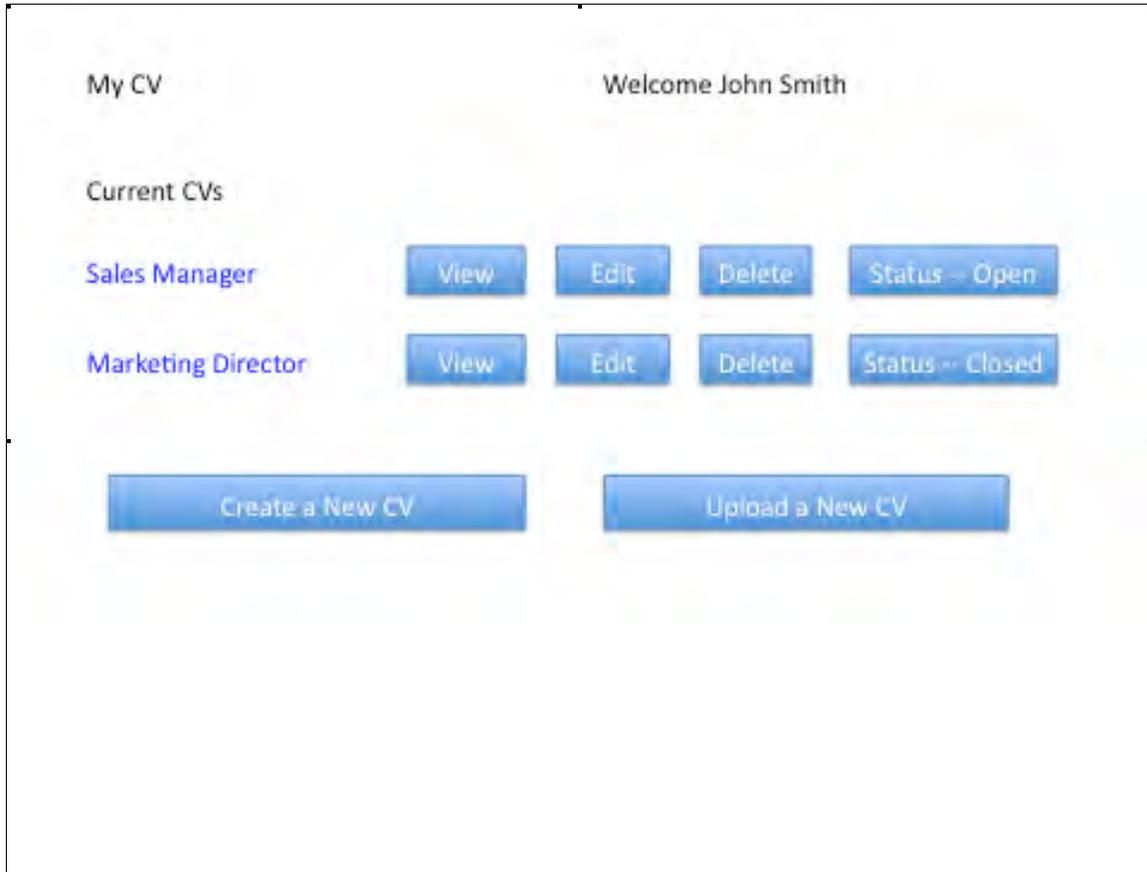
The NLX will make the South African labor market work more efficiently by making the connection between employers and job seekers easier and more comprehensive. It will allow employers and job seekers to display their vacancies and availability to larger but more targeted audiences and help to address an important part of South Africa's skills gap. The NLX will also provide large amounts of data that can become the feed stock for the real time labor market analysis.

The NLX will also make collaboration more widespread by engaging employers in a significant way. By better meeting their own hiring needs and learning more about national skills supply and demand in their industries, they will be more willing partners in the public skills development efforts. And as noted earlier, the NLX is likely to be the primary customer attraction for other aspects of the Human Capital Development System. Such a system will help all stakeholders find accurate information for their decision making, and meet the immediate need of linking jobs to workers.

Sample Screens from the NLX

Job Seeker Accounts

Creating My CV



This would be the screen that a job seeker would see when s/he clicked on the My CV navigation link. Most of the buttons are self-explanatory. The status button allows the user to set the level of privacy on a particular resume. There would be four possible status options: 1) Open – contact information displayed on resume and available to employer, 2) Restricted – contact information is suppressed but no other masking of the CV is done; contact is through a blind e-mail link, 3) Confidential – contract information is suppressed and the names of prior employers and their locations are also suppressed; contact is through a blind e-mail link, and 4) Closed – CV is not searchable but is available for use by the job seeker.

Uploading a CV in a common format (doc, pdf) would be permitted. Uploaded CVs could not be edited and would be permitted only in Open or Closed status.

Create a New CV

(Example from US.jobs)

Privacy Settings



Home States Cities Companies

US.jobs by the National Labor Exchange

Keywords Location(s)

job title, industry, keyword, or company enter city, state, or country

Employers Job Seekers Logout

Add / Edit Resume

Complete the fields below to post your resume. Once you've completed the Qualifications/Preferences section, you have the choice of using the resume builder, pasting your own resume in plain text format, or pasting your own in HTML format.

*Required fields - Fields required only within section

Privacy Settings

Searchable Resume : Yes, include my resume in the resume search...

When you make your resume searchable, you must choose what types of employers may view your resume. Please check at least one of the following :

- when Staffing Firms are searching
- when Employers are searching

Contact info : You have the option to keep your contact information confidential, meaning employers may only contact you through an email sent to you by US jobs. If you choose to show your contact information, your name, address and other information you choose will be visible to employers. Please check at least one method of contact if you do not choose "confidential".

- Keep contact info confidential
- Show contact info (name, address, etc.) and
 - Email Address
 - Home Phone
 - Work Phone

No, do not allow my resume to be searchable by employers

General Qualifications/Preferences Section

Qualifications / Preferences

*Education Level Achieved :

Certification(s) : I have acquired one or more certifications
List them here...

License(s) : I have one or more licenses
List them here...

Relocation : I am not willing to relocate
 I am willing to relocate

- anywhere in the US
- to the following US regions
- to the following states
- near the following cities
- outside the US

Work Authorization : I am authorized to work in the US
 I am NOT authorized to work in the US

*Work Type : Full Time Part Time Contract

Potential Start Date : (m/d/yyyy)

Resume (CV) Builder

Resume Body

Resume Entry Method : Use resume builder
 Enter plain text resume
 Create resume using HTML

Fill out the fields that apply to you, and a formatted resume will be built for you.

***Objective :**

Skills :

Work Experience : Fields marked * only required if you begin this section

***Company Name** Keep Confidential

***Job Title**

***Dates Employed (m/yyyy, leave end date blank if still employed)**
 to ex: 4/2004

***Location**

Duties

 [remove this job]

[\[add more work experience\]](#)

Education : Fields marked * only required if you begin this section

***School Name**

***Degree / Diploma / Level Achieved**

Date Completed (m/yyyy or blank if still ongoing)
 ex: 4/2004

***Location**

Accomplishments

 [remove this degree]

[\[add more education\]](#)

Special Interests :

***Resume Title :** (Shows in resume search results)

Job Search Results Page

The screenshot shows a search for "critical AND care AND nurse" in "20191" (Washington, DC) within 25 miles. The results page displays 500+ jobs found, with the first 10 of 176 results shown. The jobs listed include:

- Critical Care RN** at Kaiser Permanente (Washington Dc, DC), first acquired 2011-12-22 10:25 PM.
- Registered Nurse - RN - Per Diem Shifts** at Maxim Staffing Solutions (Silver Spring, MD), first acquired 2012-1-19 10:42 PM.
- Perioperative Service Assistant Director** at Kaiser Permanente (Kensington, MD), first acquired 2011-10-21 6:35 PM.
- Vascular Nurse** at Kaiser Permanente (Silver Spring, MD), first acquired 2011-11-17 7:29 PM.
- Advice Nurse** at Kaiser Permanente (Fairfax, VA), first acquired 2011-12-3 7:23 PM.
- Advice Nurse** at Kaiser Permanente (Fairfax, VA), first acquired 2011-12-3 7:23 PM.
- Advice Nurse** at Kaiser Permanente (Fairfax, VA), first acquired 2011-12-3 7:23 PM.
- Research Nurse Manager** at General Dynamics Information Technology (Silver Spring, MD), first acquired 2011-11-22 10:25 PM.

The right sidebar includes filters for Location (of 1st 500), Company (of 1st 500), Time Range, Occupation Title, Posted By, and Industry. It also features an "Advanced Tools" section with options like "Save Search", "Create Job Search Agent", "Save as RSS feed", "Recent searches", and "Saved Searches".

Clicking on “create job search agent” allows you to have to the system re-run this search periodically and alert you about new jobs via e-mail.

Sign Up for a Job Search Agent Page

The screenshot shows the "Manage your Saved Searches / Job Search Agents" page. It includes a navigation bar with "Home", "States", "Cities", and "Companies". Below the search bar, there is a table of saved searches:

Name	Summary	Scheduled Frequency	Actions
critical AND care AND nurse	critical AND care AND nurse in 20191 (within 25 miles)	Do not schedule	Save

The "Scheduled Frequency" dropdown menu is open, showing the following options:

- Do not schedule
- Run every day
- Run every 2 days
- Run every 3 days
- Run every 7 days

Employer Account

Registration (Primary Contact Information)

Accessibility: Scripting: [Disable AJAX and DHMTL] [Disable javascript alerts] [Remove all scripting] Text Size: A A A

Home States Cities Companies

US.jobs
by the National Labor Exchange

Keywords:
job title, industry, keyword, or company

Location(s):
enter city, state, or country

Job Seekers Employers

Employer Registration

If your company maintains a career site with postings that reflect your current hiring needs, then consider [requesting the indexing of your site by US.jobs](#) in lieu of posting individual jobs through this system. In addition, if your company is a Federal Contractor and requires your job listings (FCJL) tracked and recorded for Vietnam Era Veterans Readjustment Assistance Act (VEVRAA) and Jobs for Veterans Act compliance as required by the Office of Federal Contract Compliance Programs (OFCCP), then consider [membership in DirectEmployers Association and The National Labor Exchange](#) for the indexing of your career site and automated delivery of jobs to veterans for OFCCP compliance.

Read this before posting. You can stop manually posting jobs! If you have a corporate career site, find out how to [automatically post](#) your jobs.

*Required fields - Fields required only within section

Primary Contact (Admin only, never seen by job seekers)

*First Name :

*Last Name :

Position Title :

*Email Address : jamesvollman@yahoo.com

*Phone Number :

Fax Number :

*Country : United States

*Address :

*City :

*State : Alabama

*Zip Code :

Company Detail

Company Information

*Company Name :

Website Address :

You must enter an FEIN if you intend to post job(s) to VetCentral ?

FEIN: ?

SEIN / UI Tax ID :

Federal Contractor : Federal Contractor covered by the Vietnam Era Veterans' Readjustment Assistance Act (VEVRAA) and the Jobs for Veterans Act.

*Industry : Aerospace / Defense

*Company Description :

You may use [HTML](#) or text. If you use HTML, the entire description must be formatted. If not, the system will convert line breaks to html to format your job, as well as create links where urls or email addresses are included

*Staffing Firm : No Yes

[- Copy Address Information From Above -](#)

*Country : United States

*Address :

*City :

*State : Alabama

*Zip Code :

Employer Desktop (Main Page Once Logged In)

Accessibility : Scripting : [\[Disable AJAX and DHTML\]](#) [\[Disable javascript alerts\]](#) [\[Remove all scripting\]](#) Text Size : [A](#) [A](#) [A](#)

[Home](#) [States](#) [Cities](#) [Companies](#)

US.jobs
by the National Labor Exchange

[Employers](#) [Job Seekers](#) [Logout](#)

Employer Desktop

Job Posting

You may post single jobs with approval necessary for each job, however, those jobs will not go "live" until full site access is granted.

-  **Post free to a State**
Post a job to a state's workforce system, if it is a participating state, US.jobs will receive the job as well, usually in less than 24 hours.
-  **Post a Job to the entire US.jobs Network**
Post a job to US.jobs, VetCentral (if you are a Federal Contractor), the entire US.jobs Network, and the relevant state's Web-based State Employment system (if participating).
-  **Manage Your Jobs**
Edit/copy/repost/expire jobs you have previously posted on US.jobs

Search

Your resume search access expired on 3/16/2010.

-  **Request Resume Search (\$25)**
Search resumes posted on US.jobs by candidates in the US and Worldwide.
-  **Update Registration Information**
Edit your personal/company information.
-  **Update Account Information**
Edit your basic account information (Username, Password, Phone Number, etc.).

Manage Account

Post a Job Page (Initial Information)

Read this before posting. You can stop manually posting jobs! If you have a corporate career site, find out how to [automatically post](#) your jobs.

*Required fields - Fields required only within section

Primary Contact (For this particular job)

[Edit your Primary Contact information for this particular job](#)

Company Information

[Edit your company information for this particular job](#)

Title and Location

*Job Title :

Requisition ID/Ref Code :

*Country :

*City :

*State :

Job Requirements

Experience Required :

Minimum Education Required :

License(s) Required :

Training Required/Provided :

Post a Job (Job Description)

Job Information

Expected Start Date : (m/d/yyyy)

Salary Unit : yearly

Enter salaries below in numeric format (examples : 37,000 or 7.50)

Salary Minimum : \$

Salary Maximum : \$

*Hours per Week : 40

*Number of Positions : 1

*Duration : Full Time Regular

Shift : First Shift (Day)

Hurricane Irene Disaster Recovery Job? Check box if position is a Hurricane Irene Disaster Recovery Job and is located in one of the following states: NY

*Job Description :

You may use HTML or text. If you use HTML, the entire description must be formatted. If not, the system will convert line breaks to html to format your job, as well as create links where urls or email addresses are included

*Expiration Date : 2/22/2012

Note that this would be customized to fit the South African context.

Post a Job (Application Procedure)

Application Information

How would you like Candidates to apply? Enter information for one or more methods. At least one method is required.

Apply Online

Copy URL From Above
URL/Link :

Apply by Email

Copy Email Address Information From Above
Email Address :
 Allow application emails from US jobs?

Apply by Phone

Copy Phone Number Information From Above
Phone # :

Apply by Fax

Copy Fax Number Information From Above
Fax # :

Apply by Mail or Direct

Apply to Address : In Person? By Mail?
Copy Address information From Above
*Country :
Address :
City :
State :
Zip Code :

Application Instructions

Copy Name From Above
Contact Name :
Special Instructions :

POST YOUR JOB

Index My Jobs Page

Note – the indexing process does not necessarily require the creation of an employer account.

Accessibility : Scripting : [Disable AJAX and DHMTL] [Disable javascript alerts] [Remove all scripting] Text Size : A A A

Home States Cities Companies

US.jobs by the National Labor Exchange

STATEWORK FORCE AGENCIES

Job Seekers Employers

Add Your Jobs to US.jobs and Participating State Sites at No Cost

The National Labor Exchange is provided as a public service by [leading global employers](#) in alliance with the National Association of State Workforce Agencies (NASWA) and participating states.

US.jobs uses an "indexing" process to identify links to jobs on corporate web sites. Job seekers who click on a job title on the search results page are taken directly to the job listing on the corporate web site. This is essentially the same process that is used by all high-level Internet search engines.

Indexed jobs are included in US.jobs and made available to participating state workforce agency career sites. [Learn more about membership in DirectEmployers Association and the National Labor Exchange.](#)

If you would like jobs on your corporate web site indexed at no cost, please check to see if your company is already in the list of currently indexed companies by selecting the first letter of your company name below:

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

[My company is not on the list, please index jobs from our corporate web site at no cost](#)

Page for Employer to Sign Up for Indexing

Accessibility : Scripting : [Disable AJAX and DHMTL] [Disable javascript alerts] [Remove all scripting] Text Size : A A A

Home States Cities Companies

US.jobs by the National Labor Exchange

STATEWORK FORCE AGENCIES

Job Seekers Employers

Add Your Jobs to US.jobs and Participating State Sites at No Cost

By this request, you are authorizing US.jobs to index jobs from your corporate web site and provide links from The National Labor Exchange search results page back to your jobs. You will be notified if, for any reason, US.jobs is unable to index the jobs from your web site.

NOTE: Only federal contractor job listings (FCJL's) from DirectEmployers Association member companies and FCJL's entered as single postings are tracked and recorded for Vietnam Era Veterans Readjustment Assistance Act (VEVRAA) and Jobs for Veterans Act compliance as required by the Office of Federal Contract Compliance Programs (OFCCP). [Learn more about membership in DirectEmployers Association and the National Labor Exchange.](#)

*Required Fields

*Company Name	<input type="text"/>	*Company Contact	<input type="text"/>
*Company URL	<input type="text"/>	*Email Address	<input type="text"/>
*Career Site URL	<input type="text"/>	*Phone Number	<input type="text"/>
ATS (Provider)	<input type="text"/>	*Referring State	<input type="text"/>
*Company Size	<input type="text"/>	*Federal Contractor? <input type="radio"/> YES <input type="radio"/> NO	
*Number of Jobs	<input type="text"/>	*Currently using AJP PI? <input type="radio"/> YES <input type="radio"/> NO	

ENDNOTES

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- ² Manpower Talent Shortage Survey Results, 2011.
- ³ Kisker, C. B., & Carducci, R. (2003). "Community College Partnerships with the Private Sector: Organizational Concepts and Models for Successful Collaboration." *UCLA Review: Community College Review*, Vol. 31, No. 3, 55-74.
- ⁴ *Building FET College Responsiveness: The Role of Linkages and Programmes Units.* HSRC, May 2006.
- ⁵ National Alliance of Business, 2001.
- ⁶ <http://www.coeforict.org/>
- ⁷ <https://www.nims-skills.org/web/nims/3>
- ⁸ For more information, see www.dacum.org.
- ⁹ Holm, Robert and Ray, Chinita (2010). *Community College Strategies for Engaging Employers.* Jobs for the Future. For the AACC Walmart Workforce Economic Opportunity Initiative.
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- ¹¹ Holm, Robert and Ray, Chinita (2010) *Community College Strategies for Engaging Employers.* Jobs for the Future. For the AACC Walmart Workforce Economic Opportunity Initiative.
- ¹² A PSKD Partner, YouthBuild International, is developing a parallel guidebook focused on career development, "Safe Sustainable Livelihoods for Young People."
- ¹³ *Policy and Requirement Handbook for the U.S. Dept of Labor Office of Job Corps,* 2009.

¹⁴ From the UK: *Getting Employers Involved: Improving Work-based LEARNING THROUGH EMPLOYER LINKS*, by Sue Taylor, published by the Learning and Skills Development Agency, United Kingdom.

¹⁵ *Reaching Further: Workforce Development Through Employer-FET College Partnership*. CBI, London England, 2009; National Alliance of Business, Inc. "The Future of Worker Training: Business/Community College Partnerships," *Workforce Economics*, Vol. 7., 2001; Gruber, David. "We're Education ... You're Semiconductors." *Working Ventures*, Public/Private Ventures, New York, NY, 2000.

¹⁶ While a hard copy of the spreadsheet does not relay the underlying formulas, JFF has created an Excel spreadsheet that contains the necessary formulas. It is associated with this document and available online at www.jff.org.



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