

Assessment of the Technical Training Needs of the Lawrence Community

Report to the USD 497 Administrative Task Force
on Technical Education

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Assessment of the Technical Training Needs of the Lawrence Community

Executive Summary

Introduction

The Policy Research Institute (PRI) at The University of Kansas was contacted by the USD 497 Administrative Task Force on Technical Education to assess the technical training needs of the Lawrence community. The purpose of the study was to help the Task Force identify gaps in the technical training system available in Lawrence and assess how these gaps limit the ability of firms in Douglas County to acquire adequately trained workers as well as upgrade the skills of current employees. In other words, the research team at PRI looked at how the workforce training system affects the ability to retain and expand local businesses and to recruit and grow new business. To help determine the gaps, the study also looked at the skill deficiencies of new and current employees, what types of training are available and where, the degree of satisfaction with that training, and the difference between skill requirements and training available.

The assessment occurred from November 2004 through April 2005 and was divided into three study areas: 1) Assessment of the technical training needs of local employers, 2) Assessment of the technical training currently available to local employers, and 3) The ability to meet current and future technical training needs of the community. The assessment of the technical training needs of local employers included two focus groups of local businesses and a telephone survey of local businesses. The assessment of technical training currently available involved conducting an inventory of programs currently available and interviewing key personnel involved with those programs. The third part of the study, determining the community's ability to meet current and future technical training needs, involved conducting additional focus groups of students, administrators, teachers, and counselors and identifying best practices that could serve as models for Lawrence and Douglas County.

The Executive Summary discusses the key findings from the study. A detailed analysis follows and is organized in four parts:

1. Technical Training Needs of Local Employers: Analysis of the Survey of Douglas County Firms,
2. Technical Training Currently Available to Local Employers: Summaries of Interviews with Local Schools,
3. How the Current System Is Working: Focus Group Results, and
4. What Is Needed for the Future: Best Practices for Workforce Training.

Technical Training Needs of Local Employers

The assessment of the technical training needs of Douglas County employers began in November 2004 with focus groups and a survey of local employers. The focus group discussions centered on skills required of jobs now and in the future, skills of new and current employees, where training is now provided and how satisfactory it is, and what kinds of training would firms like. This information was used to help develop the survey of Douglas County firms as well as questions for the interviews with training institutions.

The survey of Douglas County firms gathered information about training needs for newly hired as well as existing employees. The survey included questions on how employers approached training problems, where current employees receive training, what factors are considered by firms in choosing a training provider, and how skill requirements for various jobs have changed and will change in the future.

The Survey Research Center at The University of Kansas administered the survey, which included developing the survey instrument, drawing the sample of firms, and conducting the interviews with local businesses. A list of 3,253 firms in Douglas County was obtained from the Kansas Department of Labor based on unemployment insurance records. Firms that were more likely to hire technical employees were targeted for the study, such as manufacturing, construction, information/managerial, and other technically oriented firms. It was determined that firms with less than five employees should be excluded from the study. This left 571 firms in the sample; these 571 firms became the universe of relevant firms. Firms were contacted beginning in December 2004 and ending in February 2005. In all, 199 firms chose to complete the survey for a response rate of 35 percent. Highlights of results follow and are listed under three main areas: Background Information, Recent and Current Situation, and Planning for the Future.

Background Information

In order to fully understand the results of the survey, it is important to look at the characteristics of the firms completing the survey, such as firm size, location, and industry category. Size distribution and industrial distribution are of particular importance as it seems likely that workforce training needs may vary substantially across these dimensions. Therefore, weights were derived for these two variables and applied throughout the analysis as appropriate. It is also important to look at the person within the firm that participated in the survey. This individual comes with their own set of experiences that influence their knowledge about the firm, its employees, and their training needs.

Characteristics of Firms and Respondents

The majority of firms targeted for the study (around 73 percent) can be categorized as small firms, 5 to 20 employees. The firms completing the survey are a good representation of the universe of firms with regards to number of employees. Most of the firms that completed the study, almost 85 percent, are located in Lawrence. In general, the firms participating in the survey were representative of the industry groups targeted for the study with construction and wholesale trade slightly under-represented and manufacturing and transportation and warehousing slightly over-represented. The person most knowledgeable about the training level

and needs of the employees was asked to complete the survey for the firm. Overall, the survey respondents hold high-level positions within the firm with over half indicating they were Managers, President/CEO, or Owner/Co-Owner/Partner.

Recent and Current Situation

This section looks at the characteristics of the firms, educational background of new employees, employers' satisfaction with skills, where employees get training, and what gaps employers see between needs and skills.

Job Turnover and Business Growth

New employee hires and job turnover rates affect a firm's training needs as well as productivity. Hiring practices vary across the county. For most firms, job turnover is not a major issue, with about 18 percent of the firms experiencing no annual hiring and around half of the firms hiring one to five new employees a year. Four firms, however, indicated that they hire more than 100 new employees annually.

Business growth, as measured by sales and revenues for firms, has mostly been positive or stable for Douglas County firms over the last five year, with 19 percent saying their sales/revenues have grown rapidly, 31 percent saying grown slowly, and 33 percent saying remain fairly stable. A look at growth by industry categories shows 84 percent of the construction firms indicating stable or slow growth. The more rapid growth appears to be in the information/managerial and other categories.

New Employee Characteristics: Residency, Education, Employer's Satisfaction

The majority of workers hired in the past five years come from Douglas County. Almost half of the firms indicated that 76 to 99 percent of the new employees lived in Douglas County and about one-fourth said that 100 percent of their new hires were county residents.

Most Douglas County firms do not hire workers straight from high school, with about 15 percent (weighted by employment) hired straight from high school. A breakdown by industry group shows that the manufacturing sector is more likely to hire new employees straight out of high school, although this is still a small percentage. For those employees hired straight from high school, most did not have specialized vocational or technical training in their high schools. Almost half of the firms that hire high school educated workers said that 100 percent of those employees needed more training to do the job. Nevertheless, most firms said that they were "satisfied" to "very satisfied" with the skills of high school educated employees. A breakdown by industry group suggests a slightly higher percentage of dissatisfaction with skills in the construction industry.

About 15 percent of firms (weighted by employment) indicated that their new employees were trained at an area community college or technical school. In general, Douglas County firms are "satisfied" or "very satisfied" with the skills of these employees. Workers receive training from a variety of places, with 31 percent indicating Johnson County Community College. A breakdown by industry shows that the construction and the information/managerial firms expressed more dissatisfaction than other groups. Still, few firms are dissatisfied.

Around 40 percent of the new employees were educated at a state university or private college. Most firms are “satisfied” to “very satisfied” with the skills of the college-educated employee. A breakdown by industry shows a high level of satisfaction (“very satisfied”) in over half of the firms in the information/managerial group. About 64 percent of the firms indicated that they had new employees educated at The University of Kansas.

Gap between Skills and Needs

The majority of firms indicated a “slight” to “moderate” gap between the skills of newly hired workers and the needs of their business. Looking at responses by industry group reveals more “moderate” to “severe” gaps responses for the construction and manufacturing sectors.

About 36 percent of the firms, when weighted for employment, “agree” to “strongly agree” with the statement: *The employees we hire for their specialized education do not have the knowledge to apply that education in a real-world situation.* A slightly higher percentage of manufacturing and other firms think that workers do know how to apply their knowledge to the real world compared to construction and information/managerial firms.

Difficulty in Finding Skilled Employees

Firms indicated that it was more difficult to get skilled employees from Douglas County than from the state as a whole. Thirty-six firms said it was “extremely difficult” to find skilled employees from Douglas County and 21 firms said it was “extremely difficult” to find skilled employees from Kansas. A look at the responses by industry group shows a higher percentage of “extremely difficult” responses by construction firms.

Skill Areas that Need Improvement

Whether high school, community college/technical school, or college educated, soft skills topped the list of skill areas that needed improvement for workers to do their jobs satisfactorily. No matter how one looks at the results, by education level, by establishments, or by employment, proper attitude toward work and work habits and goal-setting and personal motivation remain the two skills areas that most need improvement (Table A).

Decision-making for Training

Douglas County firms consider a number of factors when making decisions about employee training. Almost all the firms utilize their own employees to train new employees on the job. Firms consider the quality of the program, its ease (such as having on-site training), cost, proximity, having enough employees that need training, and several other factors when making training decisions. Of these, the quality of the program, ease, and cost are considered most frequently.

Table A
Top 10 Skill Areas That Need Improvement by Education Level
Compared to Top 10 Skills Present Employees Need to
Acquire to Adapt to Technological Changes

High School Educated	Community College or Technical School Educated	Public University or Private College Educated	Skills Present Employees Need to Acquire to Adapt to Technological Changes
1. proper attitude toward work and work habits	1. proper attitude toward work and work habits	1. proper attitude toward work and work habits	1. goal-setting and personal motivation
2. goal-setting and personal motivation	2. goal-setting and personal motivation	2. goal-setting and personal motivation	2. proper attitude toward work and work habits
3. problem solving skills	3. supervisory/management	3. supervisory/management	3. (tie) problem solving skills
4. listening and oral communication	4. writing skills	4. problem solving skills	adaptability/flexibility
5. computation skills	5. listening and oral communication	5. listening and communication	5. comprehension/understanding
6. skilled trade/craft	6. teamwork	6. (tie) writing skills	6. supervisory/management
7. teamwork	7. problem solving skills	interpersonal relations	7. listening and oral communication
8. adaptability/flexibility	8. adaptability/flexibility	adaptability/flexibility	8. teamwork
9. comprehension/understanding	9. comprehension/understanding	9. teamwork	9. interpersonal relations
10. (tie) supervisory/management	10. interpersonal relations	10. comprehension/understanding	10. basic computing skills
Second language skills (Spanish)			

Utilization of Training

Seventy-six firms, or about 40 percent, said they had utilized a regional training program to upgrade employee skills in the last five years. Firms found out about the training programs mostly from vendors and suppliers. Almost all the firms said they were “satisfied” to “very satisfied” with the training received. When asked why their firm had not utilized technical or vocational training programs to upgrade the skills of its employees, over half of the firms said because “we do on-the-job training.”

Fifty-five firms, or about 29 percent, indicated they had utilized customized training in the last five years. Construction firms were less likely to have utilized customized training than other industry groups. Five firms said they had used customized training 100 times or more. Most firms had used customized training one to five times. Over half said they had learned about customized training from the vendors. Most of the firms indicated that the quality of the training received was “good.” Private groups, such as private vendors, commercial trainers/consultants, and trade/professional associations provided most of the training. Over 81 percent of the firms said that someone from a community college or area technical school had “never” called upon their firm about providing customized training. Nine firms said that a community college or technical school had called upon them twice or more per year.

Firms' Rate Training

About half of the firms rated geographic accessibility of training for Douglas and surrounding counties as “adequate” or “good.” A large number of firms, 42 percent, said they “do not know” about the content and courses offered for training. About one-third thought the content was “adequate” or “good”. Most of the firms responded that they “did not know” about the quality of the instructors for training or the scheduling convenience of courses and training. When the size of the firm was compared to “very poor” ratings for the various factors to see what kind of firm was experiencing difficulty in training, in general, mostly small firms (5 to 30 employees) rated the factors “very poor.”

Firms were asked to rate a number of factors and their impact on their likelihood of obtaining training services. Those factors were assistance with assessment of training needs, more information about programs available, state assistance with reducing the cost of training, greater flexibility in scheduling, greater relevance of training, more up-to-date equipment for the training, and more highly qualified instructors. Firms seemed least concerned with more up-to-date equipment and assistance with assessment of their training needs. Firms were more concerned with greater relevance of training to my firm’s need and greater flexibility in scheduling to fit company’s needs.

Interest in Working with Local High Schools for Training

In general, about 10 to 20 percent of the firms have a substantial interest in working with local high schools, depending on the task. Douglas County firms are most interested in working with local high schools to talk about career opportunities and job skills required for those opportunities. After talking about career opportunities, firms appear most interested in assisting in developing new training programs and least interested in contributing equipment.

Planning for the Future

In order to assist in planning for the future, questions were asked about the impact the gap between business needs and employee skills has had on the firm’s profitability, expansion, product development, and future plans.

Impact of the Gap between Needs and Skills on the Firm’s Growth and Development

The majority of firms, around 61 percent, disagreed that the gap between needs and skills has harmed profitability while 33 percent agreed. Growth or decline of the firm’s sales or revenues does not appear to impact the opinion about impact on profitability. A closer look at those firms who “strongly agreed” that the gap has harmed profitability reveals small companies, ranging from 5 to 29 employees, in all industry categories.

Around 71 percent of the firms also disagreed that the gap between needs and skills has prevented them from expanding their current operations. However, 49 firms, or 26 percent, agreed that the gap has kept them from expanding. For those firms indicating that sales or revenues have declined, a larger percentage, 47 percent, agreed that the gap has kept them from expanding. The seven firms that “strongly agreed” are mostly small firms, ranging from 5 to 46 employees, and are found in the manufacturing and construction sectors.

With regards to developing new products or services, about three-fourths did not see the gap between needs and skills as preventing this from developing. For those firms in decline, slightly more agreed that the gap was a problem in product and service development. The nine firms who said they “strongly agreed” that the skill gap kept them from developing new products or services are small firms (5 to 29 employees) and cover all industry sectors.

Most firms did not agree that a skill gap had led them to expand outside Douglas County. Firms that have grown, whether it be slowly or rapidly, indicated more frequently that expansion outside the county has occurred due to the skill gap than those firms whose growth has remained stable or declined. Only four firms “strongly agree” that the skill gap has led them to expand outside the county and these firms are small (6 to 33 employees) and vary amongst all industry groups except manufacturing.

The gap between skills and needs does not appear to impact outsourcing for most of the firms. Outsourcing and the skill gap appears to be more of an issue for firms with declining sales or revenues. The nine firms that “strongly agree” that the skill gap has led them to consider outsourcing are small firms (5 to 29 employees) classified under all industry groups.

Likelihood of Utilizing Training in the Next 5 Years

Firms were asked their likelihood of utilizing various kinds of training assistance and programs over the next five years. About 60 percent said they were “somewhat likely” to “very likely” to use a clearinghouse. About three-fourths of the firms were evenly split between access to retraining programs being important and not so important. Most firms believe that technology changes will increase the level of skills required by employees over the next five years.

Skills Present Employees Need to Acquire

Douglas County firms were asked to indicate which skill areas present employees will need to acquire over the next five years to adapt to technological changes anticipated. These are the same skill areas previously discussed. Once again, goal-setting and personal motivation and proper attitude toward work and work habits top the list as do other soft skills (Table A). The business community’s opinion is that the soft skill areas need to be acquired more than the technical skill areas. Employers seem to be saying, ‘give us employees with a good work ethic who are trainable and we will train them to do the job we need.’

Survey Summary

The survey of Douglas County firms offers tremendous insight into what employers needs are with regards to technical training. The survey results are rich in information that can be viewed from a variety of perspectives. However, amidst all this data, several key findings emerge. First, employers said that proper attitude toward work and work habits along with goal-setting and personal motivation are key skill areas now and in the immediate future. Basically, they are satisfied with the technical skills, or general technical aptitude of the workforce, but would like to see improvement in the soft skill areas. In the ideal world, firms would be able to hire workers with the technical skills they need.

Firms have not utilized public education’s technical programs all that much and are not all that aware of the technical training programs offered. As mentioned in the business focus groups,

training is often so specific to the job, or a piece of equipment, that employers find that they must do the training themselves utilizing other employees or private vendors as the trainers. They do not necessarily see having no technical school or community college located in Douglas County as harming their firm's profitability and ability to expand. In general, most Douglas County firms have been growing despite the lack of a technical training system for the county. Technical training needs, or gaps in the system, are not uniform across all firms. It appears that a subset of the larger group is more affected by the gap between a firm's needs and employees' skills. Further analysis is needed to look at this group and determine just what skill areas need improvement and what barriers exist that keep those firms from getting the training needed.

Technical Training Currently Available to Local Employers

This portions of the study looked at the current availability of technical training to Douglas County companies through high schools, area technical schools, and community colleges. Representatives of Lawrence USD 497, Eudora USD 491, Baldwin USD 348, Perry USD 343, the Kaw Area Technical School in Topeka, Johnson County Community College, Kansas City Community College, and The University of Kansas' Continuing Education unit were interviewed. The following is a summary of those interviews.

High Schools

The four school districts included in this study provide traditional technical training programs for high school students. These are for the most part limited in scope but also include some innovative programs that can benefit area employers. The main limitation is that Douglas County does not have an area technical center or school that would have sufficient space, equipment, and staff to offer a comprehensive set of technical programs. Individual school districts often find it difficult to offer sophisticated technical programs on their own. They do not have a sufficient student base or the equipment necessary. The Eudora school district has been successful in establishing partnerships with DeSoto and Olathe school districts to offer programs and they have converted the old Eudora Middle School into a technical school.

Auto repair is one of the stronger programs offered by local high schools; Lawrence High School has an auto mechanics program and Eudora High School has an auto body repair program that is also available to Lawrence students. Perry-Lecompton High School has an innovative program in commercial construction. It was developed and is in cooperation with commercial contractors, who made the programs possible by contributing time and materials to cover one-half of the cost of the 4,000 square foot building to house the program. Business internship programs are also available at several area high schools. These provide students with work experience in area companies, mostly bank and insurance companies. The Eudora school district has partnered with DeSoto to offer an innovative graphic design and printing program. The common thread of these examples is the willingness of area business to work with the high schools to develop programs that assists in preparing students for employment. Another key to success is that school districts have designed these programs to articulate with area community college programs.

The following provides an overview of the types of technical training programs available in Douglas County for high school students.

1. Auto Repair (including collision repair)
2. Business/Computers
3. Welding
4. Drafting
5. Media-Film
6. Family and Consumer Science
7. Internships/On the Job Training
8. Health Careers
9. Printing and Graphic Design
10. Entrepreneurship
11. Commercial Construction
12. Horticulture
13. Culinary Arts

Kaw Area Technical School

The Kaw Area Technical School (KATS) in Topeka is a comprehensive technical school that has a wide range of programs for high school students and provides customized training for local businesses. It has 17 affiliated high schools and is sufficiently large enough to be able to afford the space, equipment, and specialized staff necessary to offer a wide array of technical programs. The only Douglas County School that has joined KATS is Perry-Lecompton High School. Over 30 degree programs are offered by KATS for day school students.

Community Colleges

Johnson County Community College has articulation agreements with area high schools, including those in Douglas County. These agreements recognize some of the courses students take in a technical program and offer college credit for them. These agreements provide an incentive for high school students to take a set of courses that best prepare them for post secondary training in a technical area. We did not determine either the number of articulation agreements or their actual use since such information was beyond the scope of this study.

Customized Training for Business

Our overall conclusions are (1) there is no readily accessible source for company-specific customized training in Douglas County; (2) post secondary schools in nearby counties have not included customized training for Douglas County firms in their mission and offer this kind of training only on a very limited basis; (3) Douglas County firms that require customized training need to initiate contacts with post secondary schools; (4) such training is offered to businesses located in Wyandotte County, Johnson County, and Shawnee County because they have post-secondary schools with customized training as part of their mission; (5) educational providers indicate that the “student base” in Douglas County makes customized training expensive; and (6) there is no centralized source of information on the availability of customized training for Douglas County firms.

High Schools

None of the four school districts in Douglas County offers customized training for area businesses. This has not been part of their mission and they do not have the space, the equipment, or the staff to readily offer this kind of training.

The Kaw Area Technical School

The KATS has a Business and Industry Training Department that provides customized training to firms in its service area. The significant aspect of this department is that it has full time dedicated staff that works with companies in defining and coordinating the kind of training that is needed. The training can be offered at KATS's campus or at the company.

KATS will provide training for Douglas County firms if asked. In the last two years two firms from Douglas County have received customized training. There are no efforts to initiate training with firms in Douglas County or Shawnee County but firms in Shawnee County are better informed about KATS programs and make use of its customized training. There is an annual Job Fair at KATS and information is sent out to area businesses.

Community Colleges

Johnson County Community College and Kansas City Community College will respond to requests for customized training by Douglas County firms but neither attempt to market in this county. The main reasons for the neglect of Douglas County is that it is not seen as part of their service area and their time is better leveraged in their home counties. The main market for JCCC is within 30 miles of its campus and that excludes Douglas County. It focuses on firms in Johnson county and Kansas City, Missouri.

The University of Kansas Continuing Education

The University of Kansas Continuing Education (KUCE) offers skill enhancement programs that are open to Douglas County residents (typically for continuing professional education) but does not usually offer company specific programs for individual companies. This is because Douglas County and its firms are not big enough to cover the costs of programs, most of which are taught by KU faculty. Still, the programs that are offered to a broader audience can be very useful to Douglas County firms. KUCE also responds to partnerships with government and businesses that develop needed training programs. KUCE provides training for most fire and police officers in the state including Douglas County.

An example of KUCE offerings is a planned series of soft skills enhancement workshops. These would include supervision, report writing, dealing with difficult people, conflict resolution, and building your organization. This will be offered for the Topeka, Lawrence, and Kansas City areas and will include public courses and in-house private instruction. A recent David Allen seminar attracted 200 employees from Lawrence firms.

A second example is an innovative life sciences initiative jointly sponsored with KU's Higuchi Institute. These two organizations are funded by a National Science Foundation Partnership for Innovation grant. Employers in the Metro area will serve as advisors for the types of programs offered. KU will be creating broader, non grant funded initiatives that create partnerships with governments and industry.

Summary/Conclusions

The lack of a technical training center is a major weakness in the County's workforce training effort at the secondary school level. Technical education is undoubtedly too expensive for individual high schools to do by themselves. One major option is for more school-to-school cooperation on specific programs as is done with automotive repair by Lawrence and Eudora high schools. A second option is for cooperation between high schools and specific industries to provide improved technical programs for those industries. A good example is Perry-Lecompton's cooperative effort with firms in the commercial construction industry.

The lack of a technical training center also limits opportunities for Douglas County firms seeking training for their current employees. There is no readily available source of information on what kinds of training are available at each of the area's post secondary educational institutions, all of which are located in other counties. A clearinghouse of available options would provide course listings, contact names, and fee information. Given the lack of information only a few firms have sought training from nearby educational institutions in other counties. It is unlikely that post secondary technical training institutions in other counties will soon start to target Douglas County firms in a manner similar to their targeting of firms in their home counties. The good news is that community colleges will provide training for companies in Douglas County if the initiative comes from Douglas County.

How the Current System Is Working: Focus Group Results

The Policy Research Institute at The University of Kansas conducted four focus groups with former students, technical educators, counselors, and high school administrators from Douglas County schools. Additionally, three individual telephone interviews were held with recent graduates of Lawrence and Free State High Schools. The purpose was to gain a better understanding of how well the current system of technical training is working.

Background Information

In the focus groups with area businesses held in the fall 2004, a number of businesses expressed concern over the lack of employability skills among applicants and new employees. While some businesses have technical training needs, they said they do not look to the county high schools for assistance with this training. Rather, most conduct specialized, in house training of their workers or utilize specialized training offered by the companies that manufacture their equipment.

Based on this information, the task force requested a second set of focus groups to be held with representatives of Douglas County High Schools and their former students, with the goal of gaining an understanding of each group's perspective on workforce preparation issues. In February and March 2005, separate focus groups were held with superintendents and high school principals, technical instructors and counselors, and former students to examine their perspectives. Telephone interviews with a few additional former students were held in March and April. While not every Douglas County public school district participated in the administrator and technical educator/counselor focus group sessions, each district was invited to

participate. The former student focus group and interviews included only former high school students of Lawrence public schools. The former students either graduated or should have graduated from a Lawrence high school within the past five years.

Administrators, Counselors, Educators

Administrators were surprised to learn that technical training was not a greater concern of employers and that soft skills were higher on the list of needs. In fact, one administrator stated that what he heard from the business community was that they wanted more technical education. Administrators said that soft skills were being addressed through curriculum that begins (for some districts) in grade school or (for others) in junior high and includes coursework or activities at the high school levels.

Overall, counselors and technical educators were less surprised than administrators to hear that soft skills were an issue with employers. A number of counselors stated that they were frustrated that they could not do more to assist students with career planning and job placement, particularly if the student was not college bound or perhaps would have been better served by an alternate career path. Counselors and technical educators would like to see additional opportunities for soft skills training/workforce readiness offered in schools. Like administrators, counselors and technical educators would like to see technical training expand the offerings within their schools. Technical educators said there is a strong need for additional or updated offerings within the technical training curriculum to include new areas of student interest and to meet changing employer needs. Some specific programs suggested include hospitality, culinary arts, health care fields, construction/building, and graphic design and printing. A few Douglas County school districts have programs in these fields.

Most Douglas County school districts allow students from other districts to participate in their technical education programs when a similar program is not available in their home district. However, barriers such as distance between schools, and coordination of school schedules, transportation issues, and lack of awareness prevent many students from participating.

Many Douglas County school administrators stated a desire to expand technical offerings but are hampered by constraints such as budgetary issues, facilities, and a perceived lack of community and parental support. The lack of parental support relates to parental desires for their students to take college preparatory coursework rather than pursue potential careers with technical education or alternative career paths. Administrators, teachers, and counselors agree this is a major issue. Administrators, teachers, and counselors would all like to see an increased involvement in technical education programs by the business community. In a few cases, this is happening with good success.

One group of teachers and counselors would like to see a county-wide cooperative of technical training programs that combine the strengths of all the county schools together in a central location. The program would include articulation agreements with places such as Emporia State University, Pittsburg State University, and Johnson County Community College.

Former Students

For a certain group of students, the traditional structure of high school did not serve their needs. Former students who are now participating in the diploma completion program struggled with the inflexible pace and structure of high school, the social environment and peer pressure, and a lack of offerings that matched their interests. Some found the teachers and structure intimidating. These students said the Lawrence Diploma Completion Program (LDCP) offers the right blend of structure, relaxed environment, specialized pacing, and instructional assistance.

The LDCP students stated that they wished they had known the value of a high school diploma while they were still in school; however, they are uncertain as to whether or not that knowledge would have kept them in school at the time. Students believe that a GED is not as valuable to employers and are very happy the LDCP offers them the opportunity to receive a traditional high school diploma.

Many former students (including those who completed high school) were frustrated by the limited amount of career development assistance and counseling they received in high school. They did not believe they were well prepared for employment and desired more help with soft skills, such as resumes, applications, interviews, w-2 forms, body language, how to ask questions about a job, as well as on-the-job etiquette, including the unspoken rules. Like administrators, teachers and counselors, they would welcome increased involvement from the business community in career development and exploration programs.

Former students who were either in college or enrolled for the upcoming year stated that they too struggled with the process of choosing a career and applying to college. They would like more personalized attention from counselors and teachers, and more time for exploring career opportunities. In particular, former students would like to hear about career paths and opportunities from people in those careers.

It appears there is a lack of awareness about career opportunities in Douglas County. None of the former students we talked with had any knowledge of potential careers in the Douglas County area that did not require a college degree. A few had very limited knowledge of potential careers in Douglas County for college graduates. However, many expressed a strong desire to have careers in Douglas County.

Former students in the LDCP were asked to describe a model program that would help prepare them for the workforce. Many of the topics discussed relate to “soft skills” and mirror the topics that employers said they want addressed as well. Key components to the student-designed program include: employer involvement, information about jobs and career paths, how to complete pre- and post-employment forms, how to develop a resume, telephone skills, on-the-job etiquette, interview training, goal-setting, and job shadowing. The program would be housed in a community building or in a local high school, and the program would be open to anyone.

Summary

The needs of the business community, schools, and students are highly interrelated. The business community wants access to motivated workers possessing basic employability skills. Employers want to play a more active role in career education to increase awareness of local opportunities

for good paying jobs and careers. Schools want to prepare students to be successful in the workforce, college, and other post-graduation pursuits. Schools are also interested in engaging the business community in order to create practical linkages between education and the workforce. Students want to understand how what they learn in the classroom transfers to the jobs and education they will pursue after they graduate. Students crave more in depth information from the business community about career options and pathways, applying for jobs, and being a good employee. Each group—the business community, schools, and students—has a stake in the success of the other group. Working together may offer the best opportunity for successfully meeting the needs of all the stakeholders. Developing a cooperative technical education program in Douglas County is one tangible way to address the needs of the business community, schools, and students.

What Is Needed for the Future: Best Practices for Workforce Training

Introduction

This section will examine how other communities comparable to Lawrence manage workforce training. Norman, Oklahoma; Salina, Kansas; St Joseph, Missouri; and Lincoln, Nebraska were looked at to identify possible best practices that could be considered for adoption in Douglas County. Their summaries follow.

Norman, Oklahoma

Norman, Oklahoma is located 17 miles south of Oklahoma City on Interstate 35. In 1972, the State of Oklahoma enacted the Oklahoma CareerTech system that has led to the establishment of 29 Tech Centers in Oklahoma. Local school districts had the option of establishing a Tech Center if they would provide funding. In Norman, the Moore Norman Technology Center (MNTC) is a partnership of the Moore and Norman school districts. Its budget is about \$16 million per year with 78 percent of that from local sources. A 15 mill local property tax is levied that, until this year, had to be approved by the voters each year. In February 2005, this tax was made permanent by votes in Moore and Norman. The mill levy was passed with 70 percent support. This tax provides 58 percent of the Tech Center's total funding.

The MNTC has its own 75 acre campus with 5 buildings and 315,000 square feet of building space. There are 118 full-time employees. In addition, the MNTC also has a newer second campus on 65 acres that has a 79,000 square foot building and a 15,000 square foot business incubator. Approximately 1,200 students from the two high schools attend technical classes at the MNTC. All high school students must meet the same academic standards for graduation and the technical programs are all electives. High school students account for about 50 percent of the MNTC's enrollment.

Three major types of programs are offered by the MNTC. First, there are adult education programs for adults to get a GED. Programs in reading and math are an important part of this effort. Second, MNTC offers customized training programs for area businesses. Customized training for businesses comprises about 50 percent of the hours taught. Third, the Center also does training for federal programs – persons at risk and low incomes – the old JTPA (Job Training Partnership Act) programs.

Cooperation with Economic Development

The Center is very important for economic development and cooperates fully with the City's economic development group, the Norman Economic Development Coalition. When recruiting new companies, the Coalition can offer companies customized training at the Center at no cost. The State will pay the costs of training and firm must only pay the salaries of the employees in training.

While the Tech Center takes the initiative to contact employers, it also participates in the Coalition's retention program. When the Coalition's Executive Director makes calls on companies, he is accompanied by representatives of the Tech Center, the state commerce department, the Chamber of Commerce, the manufacturing alliance, and the assistant City Manager. This kind of team allows for issues to be addressed on the spot. If the company has an interest in training, the initial contact is made and the Tech Center follows up at a later date. The Tech Center has a business services division that works with companies. Each company in Norman is visited by this team at least once every four years.

Conclusion

The MNTC has the mission and capacity to serve the training needs of area businesses and is an excellent example of the competition facing Lawrence. Norman has a clear advantage in attracting and retaining businesses that require significant training of their workforces initially and on an on-going basis.

There is no doubt that having the Tech Center located in Norman makes a great difference for economic development. It is an integral part of the team for economic development and companies know that if they locate in Norman they will have close access to training for employees at all levels of an organization (with the exception of top management training). It is a well respected part of the community.

Our conclusion is that proximity matters. Having the Tech Center located in Norman has made it very accessible to area companies. The state requirement that the 15 mill levy tax be approved by voters each year provided a strong incentive for the Tech Center to work with companies as well as the two school districts. The Moore Norman Technology Center is clearly a best practice and is a good model for Lawrence to consider.

Salina, Kansas

The Salina Area Chamber of Commerce plays a major role in the city's workforce training program. It assumes the role of convener or broker and matches companies with training needs to the appropriate training provider. Technical education in Salina is offered through the Salina Area Tech (SAT). SAT is under Salina's USD 305 and has its own campus at the airport next to Kansas State University. It offers technical training for high school students as well as post secondary students. The District passed a \$90 million bond issue to improve schools and the Tech programs benefited as a participant of the bond issue.

Training for Companies/Adults

Salina Area Tech (SAT) also offers technical training for post secondary students. Many of the programs available to high school students are also available to adults through SAT's continuing education program. Its full array of programs provides adults with significant opportunities to improve their skills. In addition, the Kansas State University at Salina College of Technology and Aviation, which is strong in Engineering Technology and Aviation, offers post-secondary programs in technology in Salina. The focus is on the application of techniques to real world problems.

The Salina Area Chamber of Commerce acts as a broker for companies that desire customized training for their employees. A company can call the Chamber and ask for assistance in finding any kind of training for employees. If a company knows where to obtain training, they can also make arrangements on their own. But they may also ask the Chamber for assistance in finding the right program. The advantage of the Chamber is that staff members maintain contacts to available training. Usually, the Chamber staff will first contact Salina Area Tech and then if necessary will contact Kansas State College of Technology. If management training is needed, the Chamber staff may contact Kansas State University. Referrals can also be made to private schools. On a few occasions the Chamber has hired persons to provide training for a company. The Chamber uses a newsletter to keep members up-to-date on training opportunities. Another service of the Chamber is initial assessments of employees or applicants. Companies can also use the Chamber offices for temporary office space and to hire or train employees.

Cooperation with Economic Development

The Chamber's training staff also participates in the Chamber's business retention program. A two person team, including one person knowledgeable of training availability in the area, will call on companies. If a company has an interest in training its employees, the Chamber staff can begin its broker role quickly.

Conclusion

Salina has an advantage in providing technical training to students and companies thanks to the presence of the Salina Area Tech, technical programs at the two high schools and the Kansas State University - Salina College of Technology and Aviation. The Chamber has played a useful role in the training system by acting as an honest broker between companies and training providers. Its staff has knowledge of what training is available in the community and will work with a company to fill gaps in the training system by offering some training itself.

St. Joseph, Missouri

Two primary purveyors of technical training exist in St. Joseph: The Hillyard Technical Center and Missouri Western State College. The Hillyard Technical Center is part of the St. Joseph School District and offers technical/vocational education for high school students and for displaced/returning adults. Missouri Western State College offers customized, short-term training for industries through its Western Institute.

The Hillyard Technical Center

The Hillyard Technical Center was founded in 1937 as an outgrowth of an area vocational technology center. It serves and is sponsored by the St. Joseph and 14 other school districts. It currently serves approximately 800 students in the secondary school program and 178 adults in the adult full-time program. In addition, it serves between 1,200-1,500 students in its evening, part-time programs. Hillyard's programs are also articulated with those of four year colleges in Missouri and Southeastern Nebraska. Approximately 65 percent of Hillyard graduates from the day program go on to college.

Students attend their regular high school for a half-day and attend the Hillyard Center for the other half for one to two years (usually the junior and senior years). The afternoon programs involve internships and job shadowing. On the high school side, the Center offers an array of programs in health services fields, such as certified nurse assistant programs, and technical programs such as welding; housing construction; agriculture; computer technology; heating and air conditioning; and manufacturing skills. On the adult side, the Center serves mainly displaced workers in programs such as radiology technology, surgical technology, certified nurse assistant, and LPN programs.

The Center is funded by local school districts, and a variety of local and federal funding sources. For example, the Center receives federal Title IV money to serve the retraining needs of the adult population. Funds from the Missouri Workforce Investment Board can also be used providing certain accountability measures can be met.

The Hillyard Center, the St. Joseph Area Chamber of Commerce, and the St. Joseph business community seem to be very well integrated. The Chamber has a person that serves a facilitating role, bringing together the educational and business communities. Business representatives and schools work together to develop appropriate curricula. Because businesses have a say in developing technical curricula, there is a significant amount of community interaction and buy-in according to the director of the adult division of the Hillyard Technical Center. The Hillyard instructors also have good relations with local companies as many of them are or have been employed by them.

Missouri Western State College

The Western Institute (formerly the Division of Continuing Education) of Missouri Western State College provides continuing professional education and customized training for local companies. In its approach to continuing professional education, the Western Institute is not that different from that of KU Continuing Education. It provides certification and recertification programs for many health care programs. The unit routinely does evaluations to determine community needs. The Institute's faculty members come from various institutions and sources, not just Missouri Western State College.

The Institute participates in the Missouri Customized Training program. This is an official state program that provides partial state funding to help companies keep Missouri companies in the state. The Institute helps companies develop proposals to secure funding to facilitate worker productivity. Whenever applicable, the Institute helps with the training. Through this program, the Institute serves companies within a 50 mile radius.

Conclusion

The Western Institute, the Hillyard Technical Center, and local companies have banded together in a manufacturing consortium to offer training. One of the barriers to training in the area is that some companies are not large enough to use the consortium. The Institute meets with businesses through the formal manufacturing consortium four times per year and also at Chamber of Commerce meetings, and attends business meetings throughout the area. The Institute identifies firms locating in the area and meets with them before they arrive to identify needs. No significant barriers were identified aside from that of growing need and limited funding.

Lincoln, Nebraska

Technical training in Lincoln is done through the community college system. The Department of Labor offers retraining using the Unemployment Insurance Trust Fund. Employers apply for these funds and provide a 50 percent match. The local director of the Department of Labor suggested that the local school districts do not do a very good job of providing technical training. He indicated that there are no vocational technical schools in the Lincoln area. The Chamber of Commerce is not particularly involved in education related to workforce development.

Overall Conclusion

The lack of an area technical school in Lawrence means that high school students do not have access to the array of technical education programs that are available to students in communities such as Norman, Oklahoma; St. Joseph, Missouri; and Salina, Kansas. Technical training is weak in Douglas County compared to the communities reviewed. Obviously, creation of an area technical school would respond to some of the workforce training needs of Douglas County. This should remain a long-term goal for the County.

It would be very useful for representatives of the Chamber of Commerce to visit the Moore Norman Technical Center. This would provide essential information on the type of tech center that should be considered for Lawrence.

But even without an area technical school there is more that could be done to provide students with access to more competitive technical education programs. One area that may offer the most opportunity is to form cooperative alliances with industries as has been done in Perry Public Schools (USD 343) for commercial construction. Cooperation among schools to offer more expensive programs on a cooperative basis could also be considered. Cooperation between Lawrence and Eudora schools on automotive training is an example that seems to be effective. Eudora also has established an effective cooperative program in print/graphic design that it could not offer on its own.

One other best practice that could be adapted to Douglas County is the workforce training broker function that is used in Salina. A central clearinghouse for workforce training could serve area businesses well by providing them with information on where technical training is available and by assisting with the initial contacts. Post secondary training is available outside of Douglas County that could be used by firms in this county. However, not much is likely to happen unless the County is more proactive in matching firms with the appropriate training program.

The Chamber of Commerce in St. Joseph, Missouri seems to offer a model of collaborative working relationships among local companies, the Hillyard Center and the Western Institute. The Chamber is the hub of this connection and promotes specific workforce initiatives in response to local needs.

Recommendations

Based on the surveys, interviews, and focus groups, the following recommendations are made for consideration.

- 1. Undertake a feasibility study to explore the costs and benefits of developing a coordinated county-wide technical training center to serve high school and adult training needs.** Several “best practice” models are highlighted in the report from which much can be learned. The strength of each of these models lies in its comprehensiveness, resulting from centralization of resources. Individual school districts in Douglas County are simply not big enough to offer state of the art technical training by themselves. They have neither the student population nor the resources to do so. Partnerships among school districts are an alternative to establishing a central technology training center. The Eudora district has established successful partnerships with neighboring districts to offer high quality programs that provide solid evidence that opportunities for partnerships exist and can thrive when properly developed. These partnerships also demonstrate that there is student interest in high quality technical programs. Partnerships are, however, limited in scope and may be less stable than one technology training center. Although each high school in Douglas County offers some range of technical programs, there are very few programs targeted to meet adult retraining needs. Once faculty and equipment are in place in a coordinated technical training program, these programs could easily be extended to serve adult retraining needs.
- 2. Identify or establish a clearinghouse (a position) within Douglas County to serve as central point of coordination for information about training needs and training programs available in Douglas County.** Again, the “best practice” sites offer different models of how this can be achieved. This individual should serve both as a clearinghouse for information as well as a facilitator of communication between formal high school technical programs and businesses. The clearinghouse would identify and cultivate customized training providers and could facilitate matching company needs and training availability. The size and variability of industries in Douglas County poses particular challenges for customized training efforts. KU Continuing Education, for example, serves largely a professional audience and must reach beyond Douglas County to make its programs profitable. Neither Kansas City Kansas Community College nor Johnson County Community College view Douglas County as a primary target area for their customized programs. Although respondents to our survey did not necessarily see the benefits of a clearinghouse as proposed, we note that such a clearinghouse appears to be an important feature of workforce training in our “best practice” sites. That is, a coordinated approach to workforce training in a community needs more than the existence of training providers to work efficiently.

3. **Technical programs as well as general high school curricula should pay more attention to what employers refer to as “soft skills” and career counseling.** This theme runs through all of our data. Potential employees must have a basic set of attitudes, work habits, and related skills, such as goal-setting, interviewing skills, etc. These skills are seldom industry specific and can benefit all students. High schools (or the proposed technology center) should provide career shadowing, internships, and mentoring for students, particularly for the non-college bound student. High schools must offer adequate career counseling and education in “soft skills.” This is a challenge as much research suggests that high school counselors are overburdened and are hesitant to recommend technical programs to high school students.* Moreover, a focus on “soft skills” and career skills in school is not sufficient; better coordination between employers and high schools is necessary.

4. **Better coordination between industries and the school system with respect to curriculum and other related employment skills.** An essential component of improving workforce skills is better coordination among programs, teachers, and employers. Such coordination involves businesses and technical program faculty working closely together to identify needed programs as well as state-of-the-art curricula, including the “soft skills.” Our “best practice” sites facilitate this coordination in different ways but hiring teachers from industry is one successful method of maintaining good contact with employers. This kind of contact has another benefit. Other research on workforce preparation (Rosenbaum, 2001) has shown that if employers want employees with better “soft skills,” a complaint we heard frequently, employers must trust teachers to help them identify the best employees (those who have the best “soft skills”). This involves creating a trusting relationship among teachers in technical programs and employers in which a teacher knows that his or her reputation with businesses depends on recommending individuals who will succeed (who have mastered the soft as well as technical skills) and businesses knowing who they can count on to recommend good employees. When students understand that mastering soft skills as well as technical skills counts in their ability to be placed in jobs, they will perform better. On the other hand, if employers disregard or do not trust high school grades or teacher recommendations, there is little incentive for students to master skills in school.

* Rosenbaum, James E. *Beyond College for All: Career Paths of the Forgotten Half*. New York: Russell Sage Foundation Publications, 2001.

Part One. Technical Training Needs of Local Employers *Analysis of the Survey of Douglas County Firms*

by Genna M. Hurd

Introduction

An assessment of the technical training needs of Douglas County employers began in November 2004 with focus groups and a survey of local employers. The PRI research team worked with the USD 497 Administrative Task Force's steering group to develop the protocol for the focus groups, the survey, and interviews. Two focus groups with participants representing local businesses helped to direct the data gathering for the study. The businesses were asked questions that solicited ideas based on their business expertise and employee training experiences. The focus groups included questions on:

- skill requirements of jobs now and in the future, including technical skills as well as basic skills and reasoning skills,
- skills of new and current employees with respect to job requirements,
- where training is now provided and how satisfactory it is, and
- what kind of training would the business firms like to do and what would they be willing to pay for training.

The information gathered was used to help develop the employers' survey (see Appendix A) as well as structure the interviews for training institutions (see Part 2).

The survey of Douglas County firms gathered information about training needs for newly hired workers as well as for existing employees. Specifically, the survey looked at:

- how employers approached training problems,
- where current employees receive training,
- what factors are considered by firms in choosing a service provider,
- how skill requirements for various jobs have changed in the last five years, and
- what expected changes in skill requirements do employers see for the future.

Survey Methodology

Based on a Kansas Department of Labor list of firms in Douglas County, Kansas, that have unemployment insurance records, the Survey Research Center (SRC) at the Policy Research Institute (PRI) started with a universe of 3,253 firms in the sample. It was determined that firms with less than five employees and firms listed under government, retail sales, bars and restaurants, health services (except long-term care), and professional services should be excluded from the study. Applying these restrictions, 571 firms remained in the sample.¹ Given the small number of firms, the SRC chose to treat the 571-firm sample as the universe of relevant firms rather than randomly sample from the list. In other words, the surveyors attempted to contact

¹ The SRC was able to restrict the sample based on the list provided by government sources. However, in several cases a firm was included in the sample that should have been excluded. Therefore, these cases were excluded during the analysis phase and are not part of the 571 firms mentioned.

each of the 571 firms in the final group. Efforts to contact firms began in December 2004 and ended in February 2005.

Firms were originally contacted by phone to solicit their participation in the study. In January 2005, letters were also mailed from the SRC at PRI and the Lawrence Chamber of Commerce to firms that had not yet participated to notify them of the survey and ask for their participation. Once a contact was established at a firm, the potential respondent was given the option of completing the survey at that time or establishing an appointment to complete the survey at a future date. In all, 199 firms completed the survey, 139 firms refused to complete the survey, and 233 firms never had a contact person established.² Therefore, the response rate for the survey was 34.9 percent and the cooperation rate was 58.9 percent.³

Survey Results

The results of the survey follow and are organized under three main areas:

1. Background Information,
2. Recent and Current Situation, and
3. Planning for the Future.

Background Information

In order to fully understand the results of the survey, it is important to look at the population completing the survey and how that compares to the targeted population. Comparisons have been made between these two groups (Universe of Firms and Completes) based on firm size, firm location, and industry groups. Size distribution and industrial distribution are of particular importance as it seems likely that workforce training needs may vary substantially across these dimensions.⁴ Data is also made available in Appendix C that compares the results (unweighted) with the results for firms from the Basic and Manufacturing Industry (BMI) sector in Douglas County.⁵

It is also important to look at the person within the firm completing the survey. This individual comes with their own set of experiences that influence their knowledge about the firm, its employees, and their training needs. The type of workers employed by the firms and employee turnover also influences the training needs of the firms. All these background factors are important to keep in mind as the results of the survey are discussed and analyzed.

² At least 10 calls were made to each firm before the surveyors categorized the firm as “no contact established.”

³ Telephone surveys typically have a response rate of 28 percent (The Pew Research Center for the People and the Press, “Survey Experiment Shows Polls Face Growing Resistance, But Still Representative,” April 20, 2004).

⁴ This report compares the composition of the universe from which we sampled with the establishments that responded to the survey along these two dimensions. Because some responses are likely to be about establishments, while others are likely to concern employees, PRI looked at both numbers of establishments and employment. Weights were calculated for each response based on these two dimensions and applied throughout the analysis when appropriate. See Appendix B for further discussion of the derivation of sampling weights.

⁵ This group contains firms that completed the survey from the Manufacturing NAICS categories plus firms designated by the Lawrence Chamber of Commerce as Basic Industry. Forty-one firms comprise this group.

Characteristics of Firms in Douglas County

Firm Size

The majority of firms in Douglas County can be categorized as small firms, less than 20 employees – 72.8 percent for the universe of firms compared to 72.9 percent for completed the survey (Table 1.1).⁶ Indeed, both Tables 1.1 and 1.2 illustrate that the firms completing the survey are a fairly good representation of the universe in terms of employment sizes, but there are some differences. Focusing on the distribution of employment, establishments with 6 to 9 and 10 to 19 employees are overrepresented while establishments with 50 to 99 and 1,000 or more employees are underrepresented. Since the issue is workforce employment needs, it makes sense to weight responses by employment size to better capture the needs of these larger employers, or else to look at the needs of these different sized employers separately. Therefore, weights were assigned to each firm’s response based on firm size and those results will be presented throughout this analysis where it is appropriate to look at the results based on the number of employees.

**Table 1.1
Participation by Firm Size**

Employees	Universe of Firms		Completes	
	Number of Firms	Percent	Number of Firms	Percent
5 Employees	89	15.6	26	13.1
6 to 9	180	31.5	61	30.7
10 to 19	147	25.7	58	29.1
20 to 49	96	16.8	35	17.6
50 to 99	32	5.6	8	4.0
100 to 499	23	4.0	9	4.5
over 500	4	0.7	2	1.0
N=	571		199	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

⁶ See Appendix C, Table C-1 to compare the firm size of the Universe of Firm with the Basic and Manufacturing Industry responses.

Table 1.2
Size of Firms Contacted

Employed	Universe	Completes
Mean	31.2942	34.4824
Median	10.0	10.0
Minimum	5	5
Maximum	1240	1240
Valid	571	199
Missing	0	0

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

Firm Location

No surprise here – most of the firms targeted for the study are located in Lawrence (Table 1.3). Almost 85 percent of the firms that completed the study are Lawrence firms.

Table 1.3
Participation by Firm Location

City	Universe of Firms		Completes	
	Number of Firms	Percent	Number of Firms	Percent
Baldwin	26	4.6	9	4.5
Eudora	17	3.0	4	2.0
Lawrence	453	79.3	169	84.9
Lecompton	6	1.1	3	1.5
Other	2	0.4	0	0.0
Missing	67	11.7	14	7.0
Total	571		199	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Industry Groups

As previously mentioned, because this is a study of the technical training needs of Douglas County employers, not all industry groups were included in the survey population. Firms that were more likely to hire technical employees were targeted for the study, such as manufacturing, construction, information/managerial, and other technically oriented firms. Table 1.4 lists the industry groups and compares the target population with the completed population. Some groups were slightly under-represented (such as construction and wholesale trade), while others slightly over-represented (such as manufacturing and transportation and warehousing).⁷ Consequently, weights were calculated for each firm’s response based on establishments by industry group and these results are presented throughout the analysis where it is appropriate to present the results by establishments.⁸ In some cases, the results are also presented by industry group.

**Table 1.4
Participation by Industry**

Industry Groups	Universe of Firms		Completes	
	Number	Percent	Number	Percent
Agriculture, Mining, Utilities	9	1.6	4	2.0
Construction	138	24.2	37	18.6
Manufacturing	53	9.3	25	12.6
Wholesale Trade	41	7.2	12	6.0
Retail Trade	13	2.3	5	2.5
Transportation and Warehousing	25	4.4	13	6.5
Information, Finance and Insurance, Real Estate, Rental and Leasing, Management, Administrative and Support	198	34.7	69	34.7
Educational Services, Health Care Services	25	4.4	11	5.5
Arts, Entertainment, Recreation	12	2.1	5	2.5
Accommodation and Food Service	13	2.3	3	1.5
Other Services (except Public Admin)	44	7.7	15	7.5
Total	571		199	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

⁷ Based on a comparison by 2-digit NAICS codes in the universe and the sample, the sample included too many establishments and employees in manufacturing, retail, agriculture, and educational services, and too few in accommodation and food services, other services, utilities, and construction.

⁸ Results by industry are presented in two ways: 1) A straight breakdown by the four groups: Construction, Manufacturing, Information/Managerial, and Other; and 2) Weighted response by Establishments.

Characteristics of the Respondents

Position within the Firm

In conducting the survey, the surveyors asked to speak to the manager or executive of the business that would be most knowledgeable about the training level of the employees as well as their training needs. Those participating in the survey hold high-level managerial positions with the firm, with almost 23 percent indicating they were Managers and around 15 percent each indicating they were the President/CEO or the Owner, Co-Owner, or Partner (Table 2).

Table 2
Respondents by Title

Title of Respondent	Number	Percent
President/CEO	29	14.6
Owner, Co-Owner, Partner	30	15.1
Director, Executive Director	8	4.0
Manager	45	22.6
Vice-President	10	5.0
Human Resources/Personnel	13	6.5
Administrative/Office	39	19.6
Financial Officer	8	4.0
Other	7	3.5
Missing, No Response	10	5.0
Total	199	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Recent and Current Situation

The following section discusses the recent and current workforce situation in Douglas County based on the survey responses. Specifically, it looks further at the characteristics of the firms, such as the types of employees found in Douglas County firms, new employees hired, and the firms’ anticipated growth. This section will also look at the educational background of new employees, whether they come straight out of high school or have completed some kind of post-secondary training. Employers’ satisfaction with the skills of these employees is also discussed along with where the workers received their training. Finally, this section will look at what firms’ see as the gaps between their needs and employees’ skills and how they go about making decisions for workforce training.

Characteristics of Firms

Types of Employees Found in Firms

Table 3 shows a breakdown of the types of employees found in the firms.⁹ The results are listed in both the unweighted and weighted (by establishments) formats.¹⁰ Over 80 percent of the Douglas County businesses employ managers and clerical staff. Around one-half employ sales and general labor (unskilled) workers. Thirty to 40 percent of firms also have maintenance, data processors, service, operative (semi-skilled), technicians, craft (skilled), and construction workers. It is important to look at the types of employees employed by firms because different employee types have different training needs.

Table 3
Types of Employees Found in Firms Surveyed

Types of Employees	Unweighted		Weighted by Establishments	
	Number	Percent	Number	Percent
Clerical	162	81.4	470	82.3
Officials and Managers	160	80.4	460	80.6
Sales	109	54.8	302	52.9
General Labor (unskilled)	99	49.7	285	49.9
Maintenance	79	39.7	237	41.5
Data Processing Personnel	79	39.7	223	39.1
Service Workers	70	35.2	199	34.9
Operative (semi-skilled)	71	35.7	195	34.2
Technicians	66	33.2	186	32.6
Craft Worker (skilled)	57	28.6	183	32.0
Construction	53	26.6	169	29.6
Mechanics/Machinists	55	27.6	156	27.3
Information Technology	56	28.1	150	26.3
Electronic/Electrical Technicians	43	21.6	127	22.2
Heavy Equipment Operators	30	15.1	90	15.8
Engineers	30	15.1	84	14.7
Draftsmen	29	14.6	84	14.7
Other ^a	20	10.1	50	8.8
Chemical Process/Lab Technicians	8	4.0	23	4.0
N=	199		571	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other: Designers, includes graphic (5), drivers (5), architects (3), and health care workers (3) were mentioned by more than one firm. Mentioned by only one firm were: consultant, investigator, scientist, funeral director, embalmer, technical writer, livestock worker, and therapist.

⁹ See Appendix C, Table C-3 to compare the types of employees found in the firms completing the survey with the Basic and Manufacturing Industry responses.

¹⁰ Responses weighted by establishments give results that are representative of the universe of firms (571 firms); i.e., projecting the results based on the number of establishments within the various industry groups.

Employee Hirings and Business Growth

The respondents were asked about the number of new employees hired annually and the percent of the workforce replaced annually. New employee hires and job turnover rates affect a firm's training needs as well as productivity. For most firms, turnover is not a major issue with about 18 percent of the firms experiencing no annual hiring and around half of the firms (54.4 percent) hiring 1 to 5 new employees a year (Table 4).¹¹ However, four firms indicated that they hire more than 100 new employees annually. Four firms also indicated that they replace 90 to 100 percent of their workforce annually.

Firms were asked to indicate what their sales/revenues have done in the last five years. Almost 19 percent of the firms said that their sales/revenues have grown rapidly compared to 31 percent saying grown slowly and 33 percent remaining fairly stable (Table 4). When looking at the responses by industry group, however, the construction industry comes up as a stable or slow growing industry with 84 of the construction firms falling into one of those categories. Growth appears to be occurring in the information/ managerial or other categories. Few firms are in decline.

Requirement for Job Consideration

Most firms in Douglas County require a standard application in order to be considered for a job (Table 5). Over half of the firms require a resume from the potential employee. Around 40 percent want proof of training/education and about 24 percent look at the results of a performance test. Few employers require the actual school transcript to get a job.

New Employee Characteristics

Douglas County Resident

The majority of workers hired by firms in the past five years come from Douglas County (Table 6).¹² Around 47 percent of the firms indicated that 76 to 99 percent of the new employees hired lived in Douglas County and about one-fourth indicated that 100 percent of their new hires were Douglas County residents. When the responses are weighted by employment, these percentages are even higher. Therefore it appears that Douglas County firms are mostly able to find workers locally.

¹¹ See Appendix C, Table C-4 to compare employee hiring and business growth responses of all the firms completing the survey with the Basic and Manufacturing Industry responses.

¹² See Appendix C, Table C-6 to compare Douglas County residency of new hires for all responses with the Basic and Manufacturing Industry responses.

Table 4
Anticipated Employee Hirings and Business Growth
by Industry Groups*

New Employees Hired <i>Annually</i>:	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
None	33	17.9	16.7	13.3	12.0	25.4
1 to 2	57	31.0	22.2	41.7	32.0	25.4
3 to 5	43	23.4	36.1	18.3	16.0	23.8
6 to 10	18	9.8	16.7	10.0	16.0	3.2
11 to 25	13	7.1	5.6	8.3	8.0	6.3
26 to 50	13	7.1	2.8	3.3	16.0	9.5
51 to 99	3	1.6	0.0	0.0	0.0	4.8
100 or More	4	2.2	0.0	5.0	0.0	1.6
N=	184		36	60	25	63

Percent of Workforce Replaced <i>Annually</i>:	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
0%	29	15.8	16.7	16.1	12.5	16.4
1 to 10%	65	35.5	6.0	35.5	41.7	36.1
11 to 25%	42	23.0	5.5	27.4	20.8	16.4
26 to 50%	34	18.6	4.4	12.9	16.7	23.0
51 to 75%	9	4.9	0.0	4.8	8.3	6.6
76 to 100%	4	2.2	0.5	3.2	0.0	1.6
N=	183		36	62	24	61

In the <i>last 5 years</i>, Firms' Sales or Revenue have:	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Grown rapidly	37	18.6	8.3	25.8	16.0	21.9
Grown slowly	62	31.2	41.7	35.5	24.0	29.7
Remained fairly stable	65	32.7	41.7	32.3	32.0	34.4
Declined slowly	14	7.0	5.6	3.2	20.0	7.8
Declined rapidly	1	0.5	0.0	0.0	0.0	1.6
Don't know	8	4.0	2.8	3.2	8.0	4.7
N=	187		36	62	25	64

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Table 5
Materials Submitted by Job Applicants

Materials Required	Unweighted		Weighted by Establishments	
	Number	Percent	Number	Percent
Standard application	162	81.4	468	82.0
Resume	114	57.3	320	56.0
Results of performance test	48	24.1	136	23.8
Proof of training, education	80	40.2	221	38.7
Transcripts	20	10.1	52	9.1
N=	199		571	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

Table 6
Douglas County Residents When Hired

In the past 5 years, what percentage of new employees lived in Douglas County when hired?

Percentage	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
0%	5	2.6	130	0.8
1 to 25%	11	5.7	315	2.0
26 to 50%	20	10.4	1,399	8.8
51 to 75%	17	8.9	1,920	12.1
76 to 99%	90	46.9	10,328	64.8
100%	49	25.5	1,836	11.5
N=	192		15,928	
Mean=		79.04%		81.01%

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

High School Educated

Firms were asked to estimate what percentage of new employees came straight out of high school, whether or not these employees had specialized vocation or technical training, and if they needed more training to do the job. Most Douglas County firms do not hire workers straight from high school. Responses range from 0 to 95 percent of employees coming straight from high school with the mean response of 10.57 percent unweighted and 14.58 percent weighted by employment (Table 7.1).¹³ Fifty-seven percent of the firms indicated that zero percent of their workers came straight from high school and when this response is weighted by employment, the percentage drops to 36 percent. However, when responses include 1 to 10 percent of new employees, the total becomes almost 77 percent of the respondent firms and 70 percent when weighted by employment. A breakdown by industry group shows that the manufacturing sector is more likely to hire new employees straight out of high school, although this is a small percentage with 12.5 percent of the manufacturing firms indicating that 51 to 99 percent of their employees came straight from high school (Table 7.2).

For those employees hired straight from high school, most of them did not have specialized vocation or technical training in their high schools (Table 7.1). Six firms, however, did indicate that 100 percent of their high school educated employees had technical training; this accounts for only 3.2 percent when weighted by employment. The mean response was 18.61 percent, 10.23 percent when weighted by employment.

Almost 48 percent of the firms, 23 percent when weighted for employment, said that 100 percent of the employees straight from high school needed more training to do the job (Table 7.1). The mean percentage of employees needing more training was 55.09 percent, 28.21 percent when weighted by employment. Extra training was particularly needed for construction and information/managerial firms (Table 7.2).

Firms were also asked to indicate their satisfaction with the technical or vocational skills of high school educated employees. Most firms said that they were “satisfied” to “very satisfied” with the skills of high school educated employees (Table 7.3). When weighted by employment, less than 9 percent indicated dissatisfaction; no firms said that they were “very dissatisfied.” A breakdown by industry group reveals a slightly higher percentage of dissatisfaction in the construction industry (Table 7.4).

¹³ See Appendix C, Table C-7 to compare characteristics of high school educated new employees for all responses with the Basic and Manufacturing Industry responses.

Table 7.1
New Employee Characteristics
High School Educated

In the past 5 years, percentage of new employees came straight out of high school:

Percentage	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
0%	109	57.4	5,768	36.3
1 to 10%	37	19.5	5,308	33.4
11 to 25%	22	11.6	2,726	17.2
26 to 50%	10	5.3	527	3.3
51 to 75%	5	2.6	252	1.6
76 to 99%	7	3.7	1,302	8.2
100%	0	0.0	0	0.0
N=	190		15,882	
Mean=	10.57%		14.58%	
Range: 0 - 95%				

Percentage of high school educated employees had specialized vocation or technical training in their high schools:

Percentage	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
0%	39	52.7	4,997	62.7
1 to 10%	9	12.2	686	8.6
11 to 25%	8	10.8	1,397	17.5
26 to 50%	12	16.2	639	8.0
51 to 75%	0	0.0	0	0.0
76 to 99%	0	0.0	0	0.0
100%	6	8.1	258	3.2
N=	74		7,976	
Mean=	18.61%		10.23%	

Percentage of high school educated employees that needed more training to do the job:

Percentage	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
0%	19	29.2	3,306	45.7
1 to 10%	7	10.8	1,432	19.8
11 to 25%	2	3.1	558	7.7
26 to 50%	3	4.6	57	0.8
51 to 75%	1	1.5	64	0.9
76 to 99%	2	3.1	120	1.7
100%	31	47.7	1,691	23.4
N=	65		7,228	
Mean=	55.09%		28.21%	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table 7.2
New Employee Characteristics: High School Educated
by Industry Groups*

In the **past 5 years**, percentage of new employees **came straight out** of high school:

Percentage	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
0%	109	57.4	51.4	68.8	45.8	53.8
1 to 10%	37	19.5	24.3	17.2	25.0	16.9
11 to 25%	22	11.6	10.8	6.3	16.7	13.8
26 to 50%	10	5.3	8.1	3.1	0.0	7.7
51 to 75%	5	2.6	0.0	3.1	4.2	3.1
76 to 99%	7	3.7	2.7	1.6	8.3	4.6
100%	0	0.0	0.0	0.0	0.0	0.0
N=	190		37	64	24	65

Percentage of high school educated employees had **specialized vocation** or **technical training in their high schools**:

Percentage	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
0%	39	52.7	66.7	52.6	36.4	50.0
1 to 10%	9	12.2	16.7	5.3	18.2	11.5
11 to 25%	8	10.8	-	15.8	9.1	15.4
26 to 50%	12	16.2	16.7	15.8	27.3	11.5
51 to 75%	0	0.0	0.0	0.0	0.0	0.0
76 to 99%	0	0.0	0.0	0.0	0.0	0.0
100%	6	8.1	-	10.5	9.1	11.5
N=	74		18	19	11	26

Percentage of high school educated employees that **needed more training** to do the job:

Percentage	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
0%	19	29.2	23.1	5.6	58.3	36.4
1 to 10%	7	10.8	7.7	22.2	0.0	9.1
11 to 25%	2	3.1	0.0	0.0	8.3	4.5
26 to 50%	3	4.6	7.7	0.0	0.0	9.1
51 to 75%	1	1.5	0.0	0.0	0.0	4.5
76 to 99%	2	3.1	0.0	11.1	0.0	0.0
100%	31	47.7	61.5	61.1	33.3	36.4
N=	65		13	18	12	22

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Table 7.3
Satisfaction with Skills
High School Educated

Satisfaction with the technical or vocational skills of high school educated employees:

Satisfaction	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Very dissatisfied	0	0.0	0	0.0
Dissatisfied	7	14.3	304	8.2
Satisfied	32	65.3	3,137	84.3
Very satisfied	10	20.4	281	7.5
N=	49		3,722	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table 7.4
Satisfaction with Skills: High School Educated
by Industry Groups*

Satisfaction with the technical or vocational skills of high school educated employees:

Satisfaction	Total		Construction Percent	Information/ Managerial Percent	Manufacturing Percent	Other Percent
	Number	Percent				
Very dissatisfied	0	0.0	0.0	0.0	0.0	0.0
Dissatisfied	7	14.3	22.2	13.3	12.5	11.8
Satisfied	32	65.3	55.6	60.0	75.0	70.6
Very satisfied	10	20.4	22.2	26.7	12.5	17.6
N=	49		9	15	8	17

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Community College or Technical School Educated

Firms were also asked to indicate the percentage of new employees trained at an area community college or technical school, their satisfaction with the skills of those employees, and where they were trained. About 15 percent of the firms indicated that their new employees were trained at an area community college or technical school (Table 8.1).¹⁴ In general, Douglas County firms indicated that they were “satisfied” to “very satisfied” with the skills of those employees. When the responses are weighted by employment, only three percent of the firms are “dissatisfied” to “very dissatisfied” with their community college or technical school educated employees. Workers received technical training from a variety of places, with 31 percent of the firms indicating that their employees were trained at Johnson County Community College. A breakdown of responses by industry groups shows that the construction and information/managerial firms expressed more dissatisfaction than other groups; overall, however, few firms are dissatisfied (Table 8.2).

State University or Private College Educated

To further determine the education level of Douglas County workers, firms were also asked what percentage of new employees were educated at a state university or private college, how satisfied they were with the skills of those employees, and where they were trained. Around 40 percent of the new employees were educated at state universities or private colleges (Table 9.1).¹⁵ Most firms are “satisfied” to “very satisfied” with the skills of these employees. When weighted by employment, only two percent indicated that they were “dissatisfied” to “very dissatisfied.” A breakdown of responses by industry group shows a high level of satisfaction (very satisfied) in over half of the firms in the information/managerial group (Table 9.2).

About 64 percent of the firms indicated that they had new employees that were educated at The University of Kansas, followed by 30 percent that had employees educated at Kansas State University (Table 9.1). With regard to private colleges, 22 percent of the firms responding said they had employees trained at Baker University and about 20 percent indicated Washburn University.

¹⁴ See Appendix C, Table C-8 to compare characteristics of community college or technical school educated new employees for all responses with the Basic and Manufacturing Industry responses.

¹⁵ See Appendix C, Table C-9 to compare characteristics of state university or private college educated new employees for all responses with the Basic and Manufacturing Industry responses.

Table 8.1
New Employee Characteristics
Community College or Technical School Educated

*In the **past 5 years**, percentage of new employees trained at an area **community college** or **technical school**:*

Percentage	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
0%	86	46.0	4,181	27.9
1 to 10%	42	22.5	4,977	33.2
11 to 25%	29	15.5	2,778	18.5
26 to 50%	18	9.6	2,605	17.4
51 to 75%	4	2.1	86	0.6
76 to 99%	2	1.1	37	0.2
100%	6	3.2	322	2.1
N=	187		14,985	
Mean=	14.40%		15.48%	

*Satisfaction with the technical or vocational skills of **community college** or **technical school** trained employees:*

Satisfaction	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Very dissatisfied	1	1.0	61	0.5
Dissatisfied	7	7.2	303	2.5
Satisfied	67	69.1	10,248	84.2
Very satisfied	22	22.7	1,560	12.8
N=	97		12,172	

Community college or technical school where trained:

School	Number	Percent
Johnson County	63	31.7
Kansas College of Technology	10	5.0
Other ^a	52	26.1
N=199		

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

^a Other: Kansas technical school (20), which includes Topeka Kaw Valley (9) and Beloit, North Central (8); Kansas community college (12), which includes KCKS (4) and Neosho County (4); Private technical school in KC area (8); Out of state technical school (6); Pittsburg State (5); Out of state community college (2); Private technical school (2); and Don't know/not sure (7).

Table 8.2
New Employee Characteristics: Community College or Technical School Educated
by Industry Groups*

In the past 5 years, percentage of new employees trained at an area community college or technical school:

Percentage	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
0%	86	46.0	44.1	46.2	45.8	46.9
1 to 10%	42	22.5	17.6	23.1	16.7	25.0
11 to 25%	29	15.5	14.7	16.9	25.0	10.9
26 to 50%	18	9.6	8.8	9.2	8.3	10.9
51 to 75%	4	2.1	2.9	1.5	4.2	1.6
76 to 99%	2	1.1	2.9	0.0	0.0	1.6
100%	6	3.2	8.8	1.5	0.0	3.1
N=	187		34	65	24	64

Satisfaction with the technical or vocational skills of community college or technical school trained employees:

Satisfaction	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Very dissatisfied	1	1.0	5.3	0.0	0.0	0.0
Dissatisfied	7	7.2	10.5	12.1	0.0	2.9
Satisfied	67	69.1	63.2	69.7	72.7	70.6
Very satisfied	22	22.7	21.1	18.2	27.3	26.5
N=	97		19	33	11	34

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Table 9.1
New Employee Characteristics
State University or Private College Educated

In the past 5 years, percentage of new employees educated at a state university or private college:

Percentage	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
0%	40	21.1	1,679	9.6
1 to 10%	30	15.8	3,749	21.4
11 to 25%	19	10.0	1,497	8.5
26 to 50%	36	18.9	5,725	32.7
51 to 75%	20	10.5	2,533	14.5
76 to 99%	25	13.2	1,570	9.0
100%	20	10.5	779	4.4
N=	190		17,529	
Mean=	40.25%		39.17%	

Satisfaction with the skills of employees from regional colleges and universities:

Satisfaction	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Very dissatisfied	2	1.3	134	0.8
Dissatisfied	4	2.5	204	1.2
Satisfied	73	45.9	10,914	65.7
Very satisfied	64	40.3	4,341	26.1
Don't know	16	10.1	1,024	6.2
N=	159		16,617	

State university or private college where trained:

University or College	Number	Percent
University of Kansas	128	64.3
Kansas State University	59	29.6
Baker University	43	21.6
Washburn University	39	19.6
Emporia State	28	14.1
Pittsburg State	26	13.1
Fort Hays State	22	11.1
Other ^a	31	15.6
N=199		

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

^a Other: Out of state public university (17); Out of state private college (10); Kansas public university (2); and Kansas private college (1).

Table 9.2
New Employee Characteristics: State University or Private College Educated
by Industry Groups*

In the **past 5 years**, percentage of new employees educated at a **state university** or **private college** :

Percentage	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
0%	40	21.1	28.6	12.1	16.7	27.7
1 to 10%	30	15.8	22.9	6.1	29.2	16.9
11 to 25%	19	10.0	11.4	6.1	25.0	7.7
26 to 50%	36	18.9	20.0	13.6	8.3	27.7
51 to 75%	20	10.5	8.6	15.2	4.2	9.2
76 to 99%	25	13.2	5.7	24.2	12.5	6.2
100%	20	10.5	2.9	22.7	4.2	4.6
N=	190		35	66	24	65

Satisfaction with the skills of employees from regional colleges and universities :

Satisfaction	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Very dissatisfied	2	1.3	0.0	0.0	0.0	3.9
Dissatisfied	4	2.5	3.7	1.7	0.0	3.9
Satisfied	73	45.9	63.0	40.0	47.6	43.1
Very satisfied	64	40.3	25.9	51.7	42.9	33.3
Don't know	16	10.1	7.4	6.7	9.5	15.7
N=	159		27	60	21	51

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Employee Skills and Firm Needs

Firms were asked a series of questions to help determine the gaps between newly hired skilled workers and the needs of their business. First they were asked if a gap existed and then they were asked more specifics about application to real-world situations and difficulty in finding skilled employees. Then firms were asked to respond to skill areas and whether or not employees needed improvement, based on the education level of the employee.

New Hires

The majority of firms participating in the survey indicated a “slight” to “moderate” gap between newly hired skilled workers and the needs of their business (Table 10.1).¹⁶ When weighted by employment the percentage indicating a “slight” gap increased slightly. Only six percent (weighted response) said that there was “no gap” between skills and needs and about seven

¹⁶ See Appendix C, Table C-10 to compare the gap between skills and needs of the newly hired for all responses with the Basic and Manufacturing Industry responses.

percent said that the gap was “severe.” Looking at responses by industry groups shows more “moderate” to “severe” gap responses for the construction and manufacturing sectors (Table 10.2).

Table 10.1
Gap between Skills and Needs
Qualifications of Newly Hired

<i>Gap between newly hired skilled workers and the needs of business:</i>		Unweighted		Weighted by Employment	
Gap	Number	Percent	Number	Percent	
No gap	21	11.1	1,054	6.0	
Slight	59	31.2	6,967	39.6	
Moderate	72	38.1	6,809	38.7	
Severe	25	13.2	1,180	6.7	
Don't know	12	6.3	1,582	9.0	
N=	189		17,592		

<i>"The employees we hire for their specialized education do not have the knowledge to apply that education in a real-world situation."</i>		Unweighted		Weighted by Employment	
Disagree/Agree	Number	Percent	Number	Percent	
Strongly disagree	14	7.2	1,244	7.2	
Disagree	77	39.7	8,951	51.7	
Agree	72	37.1	5,492	31.7	
Strongly agree	13	6.7	668	3.9	
Don't know	18	9.3	950	5.5	
N=	194		17,305		

<i>Difficulty with finding skilled employees from Douglas County:</i>		Unweighted		Weighted by Employment	
Level of Difficulty	Number	Percent	Number	Percent	
Fairly easy	42	21.8	5,830	33.2	
Somewhat difficult	55	28.5	5,553	31.6	
Moderately difficult	57	29.5	4,403	25.1	
Extremely difficult	36	18.7	1,674	9.5	
Don't know	3	1.6	103	0.6	
N=	193		17,564		

<i>Difficulty with finding skilled employees from Kansas:</i>		Unweighted		Weighted by Employment	
Level of Difficulty	Number	Percent	Number	Percent	
Fairly easy	62	32.5	6,302	37.4	
Somewhat difficult	47	24.6	5,408	32.1	
Moderately difficult	51	26.7	3,971	23.6	
Extremely difficult	21	11.0	778	4.6	
Don't know	10	5.2	385	2.3	
N=	191		16,844		

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table 10.2
Gap between Skills and Needs: Qualifications of New Hired
by Industry Groups*

Gap between newly hired skilled workers and the needs of business:

Gap	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
No gap	21	11.1	5.7	10.6	4.2	17.2
Slight	59	31.2	20.0	40.9	20.8	31.3
Moderate	72	38.1	51.4	33.3	45.8	32.8
Severe	25	13.2	20.0	10.6	16.7	10.9
Don't know	12	6.3	2.9	4.5	12.5	7.8
N=	189		35	66	24	64

*"The employees we hire for their specialized education do **not** have the knowledge to apply that education in a real-world situation."*

Disagree/Agree	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Strongly disagree	14	7.2	2.7	10.4	4.0	7.7
Disagree	77	39.7	32.4	34.3	56.0	43.1
Agree	72	37.1	43.2	38.8	40.0	30.8
Strongly agree	13	6.7	13.5	9.0	0.0	3.1
Don't know	18	9.3	8.1	7.5	0.0	15.4
N=	194		37	67	25	65

Difficulty with finding skilled employees from Douglas County :

Level of Difficulty	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Fairly easy	42	21.8	16.2	22.7	25.0	22.7
Somewhat difficult	55	28.5	21.6	36.4	29.2	24.2
Moderately difficult	57	29.5	29.7	27.3	29.2	31.8
Extremely difficult	36	18.7	32.4	13.6	12.5	18.2
Don't know	3	1.6	0.0	0.0	4.2	3.0
N=	193		37	66	24	66

Difficulty with finding skilled employees from Kansas :

Level of Difficulty	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Fairly easy	62	32.5	25.0	37.9	37.5	29.2
Somewhat difficult	47	24.6	19.4	21.2	16.7	33.8
Moderately difficult	51	26.7	33.3	28.8	29.2	20.0
Extremely difficult	21	11.0	22.2	7.6	8.3	9.2
Don't know	10	5.2	0.0	4.5	8.3	7.7
N=	191		36	66	24	65

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Firms were also asked if they agreed or disagreed with the following statement: *The employees we hire for their specialized education do not have the knowledge to apply that education in a real-world situation.* Around 44 percent of the firms “agree” to “strongly agree” with that statement; this percent dropped to about 36 percent when weighted for employment (Table 10.1). A breakdown of responses by industry groups shows a higher percentage of construction and information/managerial firms agreeing that workers’ do not know how to apply their knowledge to the real world, while a higher percentage of manufacturing and other firms think that workers do know how to apply their knowledge to the real world (Table 10.2).

Employers were asked about the difficulty in finding skilled employees from Douglas County and from Kansas. It appears that it is more difficult to get skilled employees from Douglas County than from the state as a whole (Table 10.1). Most firms responded “somewhat difficult” to “moderately difficult” to find skilled employees in Douglas County and in Kansas. About one-third of firms said that it was “fairly easy” to find skill employees from Douglas County and 37 percent when asked about Kansas. Thirty-six firms said it was “extremely difficult” to find skilled employees from Douglas County and 21 firms indicated it was “extremely difficulty” to find skilled employees from Kansas. A look at the responses by industry group shows a higher percentage of “extremely difficult” responses by construction firms (Table 10.1).

Skill Areas that Need Improvement

Firms were asked to indicate which skills areas needed improvement in order for employees to perform their job satisfactorily based on the educational background of the employees – high school, community college or technical school, and university or college. Their responses are presented in the next three tables (Tables 11, 12, and 13), which also display the responses weighted by establishments and by employment.¹⁷ The results have all been sorted by the weighted establishment percentage to illustrate the training needs by the number of businesses.¹⁸

¹⁷ See Appendix C, Tables C-11, C-12, and C-13 to compare the skill areas that need improvement employees for all responses with the Basic and Manufacturing Industry responses.

¹⁸ The weighted employment number indicates the need by the potential number of workers – however, businesses were not asked to indicate the number of employees that needed improvement in these areas, but rather employees in general from the different education levels. Therefore, the number can not be interpreted as the number of workers in Douglas County that need improvement in this area, but rather the number of workers represented by the firms responding that improvement is needed.

High School Educated

Soft skills topped the list of the skill areas that needed improvement in order for high school educated workers to do their jobs satisfactorily (Table 11). The ten most frequently mentioned skill areas (weighted by establishments) are:

1. proper attitude toward work and work habits (27.8 percent),
2. goal-setting and personal motivation (26.6 percent),
3. problem solving skills (25.4 percent),
4. listening and oral communication skills (21.5 percent),
5. computation skills (20.3 percent),
6. skilled trade/craft (19.1 percent),
7. teamwork (18.9 percent),
8. adaptability/flexibility (18.6 percent),
9. comprehension/understanding skills (18.0 percent), and
10. (tie) supervisory/management skills (14.7 percent)
second language skills (Spanish).

A look at the results weighted by employment yields a different configuration of areas that need improvement. For example, the skilled trade/craft area becomes less critical than all but five other areas (Table 11). Interpersonal relations, writing, reading, basic computing, and basic office skills emerge as areas of concern as well.

Table 11
Skill Areas of Employees that Need Improvement
High School Educated

Considering your employees that came straight out of **high school**, in which of the following skill areas do employees hired by your firm **need improvement** in order to perform their jobs **satisfactorily**?

Skill Areas	Unweighted		Weighted by Establishments*		Weighted by Employment	
	Number	Percent	Number	Percent	Number	Percent
proper attitude toward work and work habits	56	28.1	159	27.8	9,032	50.5
goal-setting and personal motivation	55	27.6	152	26.6	8,765	49.1
problem solving skills	51	25.6	145	25.4	8,514	47.6
listening and oral communication skills	45	22.6	123	21.5	8,353	46.7
computation skills	42	21.1	116	20.3	6,764	37.9
skilled trade/craft	34	17.1	109	19.1	3,142	17.6
teamwork	40	20.1	108	18.9	8,333	46.6
adaptability/flexibility	39	19.6	106	18.6	7,965	44.6
comprehension/ understanding skills	37	18.6	103	18.0	7,336	41.1
supervisory and management	33	16.6	84	14.7	3,875	21.7
second language skills (Spanish)	27	13.6	84	14.7	6,383	35.7
writing skills	32	16.1	82	14.4	6,686	37.4
technical	25	12.6	76	13.3	2,496	14.0
interpersonal relations	29	14.6	75	13.1	7,726	43.2
mechanical	24	12.1	71	12.4	2,332	13.1
reading skills	25	12.6	64	11.2	4,340	24.3
machine operation	22	11.1	63	11.0	2,708	15.2
basic computing skills	22	11.1	59	10.3	4,864	27.2
basic office skills	21	10.6	58	10.2	4,956	27.7
general labor	20	10.1	57	10.0	2,933	16.4
electrical	17	8.5	48	8.4	2,023	11.3
other ^a	3	1.5	9	1.6	326	1.8
N=	199		571		17,869	

* This table is sorted by the weighted Establishments number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: confidence, adult choices, life skills, such as parenting.

Community College or Technical School Educated

For employees that come from community colleges or technical schools, the areas that need improvement varies somewhat from the high school educated worker, but the first two remain the same (Table 12). The top 10 areas that need improvement in order for employees to perform their job satisfactorily, weighted by establishments, are:

1. proper attitude toward work and work habits (25.6 percent),
2. goal-setting and personal motivation (25.4 percent),
3. supervisory and management (21.2 percent),
4. writing skills (20.5 percent),
5. listening and oral communication skills (19.6 percent),
6. teamwork (18.4 percent),
7. problem solving skills (17.9 percent),
8. adaptability/flexibility (16.1 percent),
9. comprehension/understanding (14.4 percent), and
10. interpersonal relations (13.7 percent).

A look at the responses when weighted by employment shifts the areas around and moves computation skills into the top 10. Again, it is mostly the soft skills that employers are saying that their workers need to improve in order to perform their job satisfactorily.

State University or Private College Educated

Once again, proper attitude toward work and work habits along with goal-setting and personal motivation topped the list for what employers see improvement is needed (Table 13). Interestingly, more firms indicated that the state university or college educated worker needed improvement in these areas than did less-educated workers. The top 10 areas that needed improvement, weighted by establishments, for the university or college educated employee are:

1. proper attitude toward work and work habits (32.0 percent),
2. goal-setting and personal motivation (28.7 percent),
3. supervisory and management (25.9 percent),
4. problem solving skills (25.0 percent),
5. listening and oral communication skills (24.0 percent),
6. (tie) writing skills (22.2 percent),
7. (tie) interpersonal relations,
8. (tie) adaptability/flexibility,
9. teamwork (18.6 percent), and
10. comprehension/understanding skills (16.3 percent).

No matter how one looks at the results, by education level, by establishments, or by employment, proper attitude/work habits and goal-setting/motivation remain the two top skill areas for improvement (Tables 11, 12, and 13).

Table 12
Skill Areas of Employees that Need Improvement
Community College or Technical School Educated

Considering your employees that come from **community colleges** or **technical schools** in which of the following skill areas do employees hired by your firm **need improvement** in order to perform their jobs **satisfactorily** ?

Skill Areas	Unweighted		Weighted by Establishments*		Weighted by Employment	
	Number	Percent	Number	Percent	Number	Percent
proper attitude toward work and work habits	47	23.6	146	25.6	8,350	46.7
goal-setting and personal motivation	49	24.6	145	25.4	7,955	44.5
supervisory and management	43	21.6	121	21.2	6,137	34.3
writing skills	40	20.1	117	20.5	6,534	36.6
listening and oral communication skills	39	19.6	112	19.6	6,285	35.2
teamwork	33	16.6	105	18.4	6,215	34.8
problem solving skills	36	18.1	102	17.9	6,841	38.3
adaptability/flexibility	30	15.1	92	16.1	6,164	34.5
comprehension/ understanding skills	27	13.6	82	14.4	5,435	30.4
interpersonal relations	29	14.6	78	13.7	6,269	35.1
second language skills (Spanish)	24	12.1	77	13.5	4,802	26.9
computation skills	25	12.6	74	13.0	5,438	30.4
technical	24	12.1	74	13.0	2,163	12.1
mechanical	22	11.1	73	12.8	2,089	11.7
skilled trade/craft	21	10.6	70	12.3	2,136	12.0
basic office skills	21	10.6	61	10.7	4,060	22.7
electrical	19	9.5	61	10.7	2,024	11.3
basic computing skills	19	9.5	55	9.6	4,062	22.7
machine operation	16	8.0	49	8.6	2,780	15.6
reading skills	16	8.0	46	8.1	2,148	12.0
general labor	12	6.0	43	7.5	1,854	10.4
other ^a	3	1.5	10	1.8	251	1.4
N=	199		571		17,869	

* This table is sorted by the weighted Establishments number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: basic geography, customer service skills.

Table 13
Skill Areas of Employees that Need Improvement
State University or Private College Educated

Considering your employees that come from **colleges** and **universities**, in which of the following skill areas do employees hired by your firm **need improvement** in order to perform their jobs **satisfactorily**?

Skill Areas	Unweighted		Weighted by Establishments*		Weighted by Employment	
	Number	Percent	Number	Percent	Number	Percent
proper attitude toward work and work habits	67	33.7	183	32.0	8,212	46.0
goal-setting and personal motivation	62	31.2	164	28.7	7,423	41.5
supervisory and management	55	27.6	148	25.9	7,022	39.3
problem solving skills	52	26.1	143	25.0	6,981	39.1
listening and oral communication skills	53	26.6	137	24.0	6,845	38.3
writing skills	48	24.1	127	22.2	3,806	21.3
interpersonal relations	50	25.1	127	22.2	6,958	38.9
adaptability/flexibility	46	23.1	127	22.2	6,676	37.4
teamwork	40	20.1	106	18.6	4,337	24.3
comprehension/ understanding skills	33	16.6	93	16.3	2,801	15.7
second language skills (Spanish)	32	16.1	89	15.6	3,470	19.4
technical	27	13.6	73	12.8	1,174	6.6
computation skills	25	12.6	66	11.6	2,333	13.1
basic office skills	23	11.6	64	11.2	2,045	11.4
electrical	23	11.6	63	11.0	1,221	6.8
mechanical	21	10.6	59	10.3	1,168	6.5
basic computing skills	20	10.1	55	9.6	2,189	12.3
skilled trade/craft	19	9.5	52	9.1	973	5.4
machine operation	16	8.0	44	7.7	1,936	10.8
reading skills	17	8.5	43	7.5	1,761	9.9
general labor	10	5.0	28	4.9	471	2.6
other ^a	4	2.0	10	1.8	98	0.5
N=	199		571		17,869	

* This table is sorted by the weighted Establishments number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: common sense, critical thinking, customer service skills, database work, marketing, geography, and small business orientation.

Firm's Decision-Making for Training

Factors Considered

Douglas County firms consider a number of factors when making decisions about employee training. No surprise here – almost all the firms utilize current employees to train new employees on the job (Table 14). About 27 percent said that they send the new employee to regional training programs while about 26 percent said they send them off site to a commercial trainer. Around 16 percent indicated that they conduct on the job/on site with a commercial trainer.

Firms consider the quality of the program, its ease (such as having on-site training), cost, proximity, having enough employees that need training, and several other factors when making training decisions. Of these, the quality of the program, ease, and cost are considered most frequently (Table 14). Cost is considered the most important factor when making the decision, followed closely by quality of program.

Regional Training: Utilization, Identification, Satisfaction

In the last five years, 76 firms, or about 40 percent of the firms surveyed, indicated that they utilized regional training programs to upgrade employee skills (Table 15.1). A breakdown by industry groups show that 46 percent of the information/managerial firms had utilized regional training compared to 32 percent for manufacturing firms. Douglas County businesses found out about regional training programs mostly from vendors and suppliers. Trade/industry associations, word of mouth, and direct mail advertising also played a role in how businesses learned about the training.

Almost all the firms said they were “satisfied” to “very satisfied” with the training received (Table 15.2). For those that received training, almost half of the training came from private vendors or trade/professional associations. Around 12 percent came from in-house. Public institutions played a minor role in upgrading employees’ skills.

Table 14
Employee Training
Factors Considered

How Firm Addresses Training	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Needs of New Employees				
On the job/on site with other employees	185	93.0	17,229	96.4
Send employee to a regional training program	54	27.1	5,855	32.8
Send employee off site to a commercial trainer	51	25.6	6,437	36.0
On the job/on site with commercial trainer	31	15.6	3,081	17.2
Other ^a	16	8.0	1,123	6.3
N=	199		17,869	
Factors Considered When Making Training Decision	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Quality of program	140	70.4	13,936	78.0
Ease, such as having on-site training	129	64.8	13,771	77.1
Cost	120	60.3	12,926	72.3
Proximity	117	58.8	11,517	64.5
Having enough employees that need training	95	47.7	9,789	54.8
Other ^b	13	6.5	1,476	8.3
N=	199		17,869	
Factors Considered Most Important When Making a Training Decision	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Cost	92	46.2	10,628	59.5
Quality of program	89	44.7	9,839	55.1
Ease, such as having on-site training	52	26.1	5,215	29.2
Proximity	46	23.1	2,097	11.7
Having enough employees that need training	36	18.1	2,716	15.2
Other ^c	12	6.0	1,665	9.3
N=	199		17,869	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

^a Other: On-line training (5), seminars and conferences (3), and self-study/provide literature (2) were mentioned by more than one firm. Mentioned by only one firm were continuing education programs, local high school, technical school, and training with similar agencies.

^b Other: Applicability/viability of program (7), time and workload (4), stability/investment in employee (3), and flexibility/expertise of trainer (2) were mentioned.

^c Other: Time/timing factors (5), such as concerns about the length of the program (2) and quality of the time invested, the future employability of the employee (2), and availability of the training program (2) were mentioned by more than one firm. Mentioned by only one firm were licensing requirements, workload, and own expertise.

Table 15.1
Regional Training Programs: Utilization and Identification
by Industry Groups*

In the last 5 years, utilized **regional training** programs to upgrade employee skills:

Utilized Training	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Yes	76	39.8	38.9	46.2	32.0	36.9
N=	191		36	65	25	65
Located Program		Number	Percent			
Vendors/Suppliers		22	28.9			
Trade/Industry Associations		15	19.7			
Word of Mouth		10	13.2			
Direct Mail Ad		9	11.8			
Websites/Internet		7	9.2			
In-House		7	9.2			
Brochures from Associations		6	7.9			
Local Sources		6	7.9			
State Agency		3	3.9			
Unknown		3	3.9			
N=		76				

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Table 15.2
Regional Training Programs: Satisfaction and Utilization
by Industry Groups*

Level of Satisfaction	Total		Construction	Information/Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Very dissatisfied	2	1.9	0.0	3.1	0.0	2.4
Dissatisfied	1	0.9	4.3	0.0	0.0	0.0
Satisfied	55	51.4	56.5	46.9	60.0	50.0
Very satisfied	49	45.8	39.1	50.0	40.0	47.6
N=	107		23	32	10	42
Training Programs Utilized		Number	Percent			
Private Vendors		29	27.1			
Trade/Professional Associations		20	18.7			
In-House		13	12.1			
Johnson Co. Community College		11	10.3			
Commercial Trainers/Consultants		10	9.3			
Technical/Vocational Schools		9	8.4			
Other Community Colleges		7	6.5			
Universities and Colleges		6	5.6			
State of Kansas		2	1.9			
N=		107				

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Customized Training: Utilization, Identification, Quality, Effectiveness

Douglas County firms were also asked if they had utilized customized training programs in the last five years; 55 firms, or about 29 percent, said that they had (Table 16.1). Construction firms were less likely to utilize customized training than other industry groups surveyed. For those firms that utilized customized training, five said that they had used it 100 times or more. Most firms had used it one to five times. Over half of the firms learned about customized training from the vendors and about one-fourth learned about it from corporate headquarters. Few learned about it from public sources, such as the training institution or public officials.

Firms were asked to list a provider for the customized training and rate its quality. Most of the training providers listed were from private groups, such as private vendors, commercial trainers/consultants, trade/professional associations (Table 16.2). Not even a handful mentioned public institutions, such as a community college or technical school. When asked about the quality of customized training received, most said that it was “good.” Only five firms said that it “needs improvement.”

Table 16.1
Customized Training Programs: Utilization and Identification
by Industry Groups*

In the last 5 years, utilized *customized training* programs:

Utilized Training	Total		Construction	Information/ Managerial	Manufacturing	Other
	Number	Percent	Percent	Percent	Percent	Percent
Yes	55	28.9	13.5	35.9	32.0	29.7
N=	190		37	64	25	64
Times Utilized			Learned about Training		Number	Percent
1 - 2 times	20	39.2	Vendor		30	54.5
3 - 5 times	13	25.5	Corporate headquarters		14	25.5
10 - 20 times	9	17.6	Association advertising		9	16.4
25 - 95 times	4	7.8	Training institution		6	10.9
100 times or more	5	9.8	State and local officials		7	12.7
N=	51		Business associate		6	10.9
			Other ^a		8	14.5
			N=		55	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

^a Other: Includes do our own (2), word of mouth (2), and Internet (2).

Firms were asked to agree or disagree with the following statement about customized training: *Customized training is more cost effective than other forms of training.* While the firms surveyed mostly agreed (54 percent) with this statement, about an equal number disagreed or did not know (Table 16.2). A breakdown by industry groups showed 35 percent of the construction and 29 percent of the manufacturing firms responding “don’t know” when asked about cost effectiveness. These two groups also had a larger percentage disagreeing with the statement.

When asked how often over the last five years that someone from a community college or area technical school had formally called upon the firm about providing customized training, over 81 percent said “never” (Table 16.2). Nine firms indicated that a community college or technical school had called upon them twice or more per year.

Table 16.2
Customized Training Programs: Quality and Effectiveness
by Industry Groups*

Quality of Training	Total		Construction Percent	Information/ Managerial Percent	Manufacturing Percent	Other Percent
	Number	Percent				
Needs improvement	5	7.4	12.5	12.5	0.0	3.7
Adequate	15	22.1	50.0	12.5	22.2	22.2
Good	45	66.2	37.5	70.8	77.8	66.7
Don't know	3	4.4	0.0	4.2	0.0	7.4
N=	68		8	24	9	27

Training Provider	Number	Percent
Private Vendors	25	39.1
Commercial Trainers/Consultants	16	25.0
Trade/Professional Associations	13	20.3
In-House	11	17.2
Community College	2	3.1
Technical/Vocational Schools	1	1.6
N=	64	

"Customized training is more cost effective than other forms of training."

Agree/Disagree with Statement	Total		Construction Percent	Information/ Managerial Percent	Manufacturing Percent	Other Percent
	Number	Percent				
Strongly disagree	8	4.3	5.9	3.2	0.0	6.3
Disagree	34	18.4	23.5	12.7	29.2	17.2
Agree	78	42.2	29.4	50.8	33.3	43.8
Strongly agree	22	11.9	5.9	14.3	8.3	14.1
Don't know	43	23.2	35.3	19.0	29.2	18.8
N=	185		34	63	24	64

Over the last 5 years, how often someone from a community college or area technical school formally called upon firm about providing customized training:

Number of Times Formally Called Upon	Total		Construction Percent	Information/ Managerial Percent	Manufacturing Percent	Other Percent
	Number	Percent				
Never	152	81.7	88.9	83.9	76.0	77.8
Once in 3 years	9	4.8	5.6	0.0	0.0	11.1
Once per year	8	4.3	0.0	6.5	4.0	4.8
Twice or more per year	9	4.8	2.8	6.5	16.0	0.0
Don't know	8	4.3	2.8	3.2	4.0	6.3
N=	186		36	62	25	63

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Non-Utilization of Technical Training Programs

Firms were asked why their organization had not utilized technical or vocational training programs to upgrade the skills of its employees. Over half of all the firms participating in the survey and three-fourths of the construction firms said because “we do on-the-job training” (Table 17). In-house training was the second most frequent reason why the firms had not utilized technical training programs. An equal number of firms, 45 each, also said that their employee had not needed training or that they can not find the type of training needed. Only 11 percent said that the training was too expensive.

Table 17
Technical Training Programs: Why Not Utilized
by Industry Groups*

Why organization has not utilized technical or vocational training programs to upgrade the skills of its employees:

Reasons Why Not Utilized Training	Total		Construction Percent	Information/ Managerial Percent	Manufacturing Percent	Other Percent
	Number	Percent				
We do on-the-job training	118	59.3	75.7	50.0	68.0	57.4
We've developed in-house training	72	36.2	40.5	35.3	32.0	36.8
Employees haven't needed training	45	22.6	16.2	23.5	28.0	23.5
Can't find the type needed	45	22.6	29.7	19.1	20.0	23.5
Training is too expensive	22	11.1	8.1	13.2	12.0	10.3
Other ^a	9	4.5	2.7	5.9	8.0	2.9
N=	199		37	69	25	68

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

^a Other: Includes not available locally (4), only available privately (3), and lack of time (2).

Firms' Ratings of Technical Training Programs

To help determine why firms utilize or do not utilize vocational and technical training programs, firms were asked to rate vocational and technical training for Douglas and surrounding counties based on geographic access, content, instructors, and convenience. Their responses are presented in Table 18. About half of the firms rated geographic accessibility of training for Douglas County and surrounding counties as “adequate” or “good.” When weighted by employment, geographic accessibility of training programs receives lower ratings with almost 42 percent rating access as “very poor” or “needs improvement.”

A large number of firms, 42 percent, indicated that they “don’t know” about the content of programs and courses offered for vocational and technical training for Douglas and surrounding counties (Table 18). About one-third, or 42 percent when weighted by employment, said that the content of programs and course offered was “adequate” to “good.”

Table 18
Rating of Vocational and Technical Training
for Douglas and Surrounding Counties
Access, Content, Instructors, Convenience

<i>Geographic accessibility:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Rating for Area				
Very poor	24	12.6	1,401	8.0
Needs improvement	36	18.8	5,943	33.7
Adequate	47	24.6	3,243	18.4
Good	47	24.6	5,512	31.3
Don't know	37	19.4	1,515	8.6
N=	191		17,614	

<i>Content of programs and courses offered:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Rating for Area				
Very poor	16	8.4	952	5.5
Needs improvement	31	16.3	3,942	22.7
Adequate	39	20.5	4,340	25.0
Good	24	12.6	2,971	17.1
Don't know	80	42.1	5,163	29.7
N=	190		17,369	

<i>Vocational and technical training instructors:</i>	Unweighted		Weighted by Establishments Employment	
	Number	Percent	Number	Percent
Rating for Area				
Very poor	7	3.7	247	1.4
Needs improvement	10	5.3	555	3.2
Adequate	38	20.1	5,146	29.3
Good	19	10.1	1,778	10.1
Don't know	115	60.8	9,851	56.0
N=	189		17,576	

<i>Scheduling convenience of training for employees:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Rating for Area				
Very poor	16	8.6	1,087	6.2
Needs improvement	18	9.6	2,948	16.8
Adequate	32	17.1	4,549	25.9
Good	20	10.7	1,782	10.2
Don't know	101	54.0	7,178	40.9
N=	187		17,544	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

The size of the firm was compared to “very poor” ratings for the various factors as well as industry sectors to see just what kind of firm was experiencing difficulty with training. In general, mostly small sized firms (5 to 30 employees) rated the factors “very poor.” One exception was a medium-sized (88 employees), information/managerial firm that responded “very poor” in three of the four categories: geographic accessibility, content of training offered, and scheduling convenience.

With regards to rating vocational and technical training instructors in Douglas County and surrounding counties, the firms surveyed mostly did not know (Table 18). About 20 percent said they were “adequate” and 10 percent said they were “good.” Only nine percent considered instructors as poor or needing improvement.

Finally firms were asked to rate the scheduling convenience of courses and training for employees seeking new skills training or retraining at vocational and technical schools in the Douglas County area. Once again, a large number of firms did not know how to rate this aspect of training (Table 18). Fifty-four percent of the firms surveyed indicated “don’t know.” Eleven percent of the firms responding rated scheduling convenience as “good” and 17 percent rated it as “adequate.”

Likelihood of Obtaining Training Locally

Firms were asked to rate a number of factors and their impact on their likelihood of obtaining training services locally. Those factors were assistance with assessment of training needs, more information about programs available, state assistance with reducing the cost of training, greater flexibility in scheduling, greater relevance of training, more up-to-date equipment for the training, and more highly qualified instructors. Firms seemed least concerned with more up-to-date equipment and assistance with assessment of their training needs with 49 percent and 47 percent, respectively, indicating that these two services would “not at all” increase their likelihood of obtaining training services locally (Tables 19.1 and 19.2).

Those factors that garnered the highest percentage of “substantially” responses were greater relevance of training to my firm’s need with 35 percent and state assistance in reducing the cost of training with 26 percent (Tables 19.1 and 19.2). When “moderately” and “substantially” are combined the factors fall into the following order:

1. greater relevance of training to my firm’s need (61.8 percent),
2. greater flexibility in scheduling to fit company’s needs (54.9 percent)
3. more information about available training programs in Kansas (52.3 percent),
4. state assistance in reducing the cost of training (50.8 percent),
5. more highly qualified instructors (44.5 percent),
6. more up-to-date equipment (36.1 percent), and
7. assistance with assessment of training needs (27.7 percent).

A closer look was given to those firms that responded “substantially” increase the likelihood in order to determine if a specific firm size or industry group is more likely to be influenced by that particularly factor. In general, most of the firms responding “substantially” increase the

likelihood were small firms, from 5 to 30 employees. They covered all sectors with a few exceptions.¹⁹

Table 19.1
Likelihood of Firm Obtaining Training Services Locally
Assistance, Information, Cost

<i>Assistance with assessment of training needs:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	89	46.6	6,828	38.8
Slightly	49	25.7	4,963	28.2
Moderately	47	24.6	5,528	31.4
Substantially	6	3.1	300	1.7
N=	191		17,619	
 <i>More information about available training programs in Kansas:</i>				
	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	52	27.2	4,419	25.1
Slightly	39	20.4	3,645	20.7
Moderately	65	34.0	8,015	45.5
Substantially	35	18.3	1,541	8.7
N=	191		17,619	
 <i>State assistance in reducing the cost of training:</i>				
	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	67	35.1	5,681	32.2
Slightly	27	14.1	2,419	13.7
Moderately	48	25.1	5,565	31.6
Substantially	49	25.7	3,955	22.4
N=	191		17,619	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

¹⁹ Assistance with assessment of training needed included one firm of 122 employees. When firms that responded “moderately” increase the likelihood are added, three firms with over 250 employees also emerged. With regards to more information about programs available in Kansas, two larger sized firms, one with 87 and one with 122 employees, are included. Only two manufacturing firms are included with this group of 35. Those 49 firms “substantially” influenced by state assistance in reducing training costs include four firms over 50 employees, of which one has 355 employees. Six manufacturing and 10 construction firms are included in this group. Forty-one of the 44 firms wanting greater flexibility in scheduling training have 5 to 45 employees. Sixty-seven firms said they are substantially influenced by greater relevance of training. Three of these firms have more than 100 employees. One fairly large firm’s (355 employees) likelihood of training locally would be increased substantially by more up-to-date equipment. And, finally, another large firm (264 employees) would also be substantially more likely to get training locally if more highly qualified instructors were available.

Interest in Working with Local High Schools

Firms were also asked to state their degree of interest in working with local high schools to develop programs to prepare students to enter the workforce by serving on advisory boards, contributing equipment, developing new training programs, and donating staff time. Their responses are found in Table 20, which also includes a breakdown by industry groups. In general, about 10 to 20 percent of the firms have a substantial interest in working with local high schools, depending on the task. Douglas County firms are most interested in working with high schools to talk about career opportunities and job skills required for those opportunities with 20 percent responding “substantial” and 28 percent responding “moderate.”

After talking about career opportunities, firms appear most interested in assisting in developing new training programs and least interested in contributing equipment (Table 20). A look at the breakdown by industry groups combined with the “moderate” and “substantial” responses gives some idea of what industry firms are interested in working with high schools and in what ways. All the industry groups have a healthy interest (36 to 45 percent) in working with high schools to develop new training programs with construction and other firms having a slightly higher interest. Local firms are relatively interested (32 to 39 percent) in serving on advisory boards for specific programs, except for manufacturing. Only 24 percent of manufacturing firms said they were moderately/substantially interested in serving on advisory boards; this percentage also holds for manufacturing with regards to donating staff time. Firms are not all that interested in contributing equipment to the high schools with just 14 to 24 percent by industry groups expressing an interest.

A more detailed look at firm size and interest in working with local high schools varies by area with mostly the smaller firm interested in working with the high schools. Several exceptions are worth noting. First two large firms with over 150 employees (158 and 786 employees) indicated a substantial interest in serving on area high school advisory boards. The smaller of those two companies (158 employees) was also interested in assisting with the development of training programs. This company would be classified as an information/managerial company. The largest company participating in this survey (1240 employees) indicated a substantial interest in donating staff time to work with high schools to develop programs to prepare students to enter the workforce. And the second largest company participating in the survey with 786 employees is also substantially interested in educating students about career opportunities.

Table 19.2
Likelihood of Firm Obtaining Training Services Locally
Flexibility, Relevance, Equipment, Instructors

<i>Greater flexibility in scheduling to fit company's needs:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	57	29.8	4,499	25.5
Slightly	29	15.2	2,720	15.4
Moderately	61	31.9	7,885	44.8
Substantially	44	23.0	2,515	14.3
N=	191		17,619	
<i>Greater relevance of training to my firm's need:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	42	22.0	4,056	23.0
Slightly	31	16.2	2,134	12.1
Moderately	51	26.7	6,324	35.9
Substantially	67	35.1	5,105	29.0
N=	191		17,619	
<i>More up-to-date equipment:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	94	49.2	7,274	41.3
Slightly	28	14.7	3,536	20.1
Moderately	55	28.8	5,026	28.5
Substantially	14	7.3	1,783	10.1
N=	191		17,619	
<i>More highly qualified instructors:</i>	Unweighted		Weighted by Employment	
	Number	Percent	Number	Percent
Increase Likelihood of Training				
Not at all	76	40.2	6,956	39.6
Slightly	29	15.3	3,974	22.6
Moderately	50	26.5	4,178	23.8
Substantially	34	18.0	2,476	14.1
N=	189		17,584	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table 20
Interest in Working with Area High Schools
by Industry Groups*

Degree of interest firms have in working with area high schools to develop programs to prepare students to enter the workforce:

<i>Advisory boards for specific programs:</i>		Total		Construction	Information/Managerial	Manufacturing	Other
Degree of Interest	Number	Percent	Percent	Percent	Percent	Percent	Percent
No interest	72	38.1	29.7	34.9	44.0	43.8	
Slight	52	27.5	32.4	33.3	32.0	17.2	
Moderate	41	21.7	29.7	19.0	8.0	25.0	
Substantial	24	12.7	8.1	12.7	16.0	14.1	
N=	189		37	63	25	64	

<i>Contribute equipment:</i>		Total		Construction	Information/Managerial	Manufacturing	Other
Degree of Interest	Number	Percent	Percent	Percent	Percent	Percent	Percent
No interest	108	57.4	54.1	50.0	56.0	67.2	
Slight	50	26.6	21.6	33.9	36.0	18.8	
Moderate	23	12.2	18.9	14.5	8.0	7.8	
Substantial	7	3.7	5.4	1.6	0.0	6.3	
N=	188		37	62	25	64	

<i>Assist in developing new training programs:</i>		Total		Construction	Information/Managerial	Manufacturing	Other
Degree of Interest	Number	Percent	Percent	Percent	Percent	Percent	Percent
No interest	59	31.4	21.6	35.5	36.0	31.3	
Slight	53	28.2	35.1	29.0	28.0	23.4	
Moderate	58	30.9	37.8	27.4	32.0	29.7	
Substantial	18	9.6	5.4	8.1	4.0	15.6	
N=	188		37	62	25	64	

<i>Donate staff time:</i>		Total		Construction	Information/Managerial	Manufacturing	Other
Degree of Interest	Number	Percent	Percent	Percent	Percent	Percent	Percent
No interest	61	32.4	27.0	25.8	40.0	39.1	
Slight	62	33.0	40.5	37.1	36.0	23.4	
Moderate	44	23.4	27.0	21.0	16.0	26.6	
Substantial	21	11.2	5.4	16.1	8.0	10.9	
N=	188		37	62	25	64	

<i>Educate students about career opportunities and skills needed for jobs:</i>		Total		Construction	Information/Managerial	Manufacturing	Other
Degree of Interest	Number	Percent	Percent	Percent	Percent	Percent	Percent
No interest	41	22.4	20.0	16.4	28.0	27.4	
Slight	48	26.2	31.4	31.1	24.0	19.4	
Moderate	52	28.4	28.6	34.4	28.0	22.6	
Substantial	36	19.7	17.1	16.4	16.0	25.8	
Don't know	6	3.3	2.9	1.6	4.0	4.8	
N=	183		35	61	25	62	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

* **Industry Groups:** **Construction** (NAICS 23); **Information/Managerial**=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); **Manufacturing** (NAICS 31, 32, 33); and **Other**=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Planning for the Future

The survey of Douglas County firms also sought to gather information that would assist in planning for the future technical training needs of local businesses. To that end, questions were asked about impact that the gap between business needs and employee skills has had on the firm's profitability, expansion, product development, and future plans. These responses were also categorized based on what the firms' sales or revenues have done in the past five years. Douglas County firms were also asked about their future needs for training assistance and programs as well as skills present employees are going to need to acquire. Firms were then asked an open-ended question about what kind of training programs they would like to see established in Douglas County or nearby and where they would like to see this program housed. Finally, firms were given the opportunity to comment in general about their workforce training needs.

Impact of Employee Skills on Firm's Future

Impact on Profitability, Expansion, Future Development

Firms' opinions were sought in a series of statements about the gap between needs and employee skills may have affected profitability, expansion, and future development. The majority of firms, around 61 percent, disagreed ("disagree" or "strongly disagree") that the gap between needs and employee skills has harmed profitability (Table 21.1).²⁰ Around 33 percent of the firms agreed ("agree" or "strongly agree") with the statement. Growth or decline of the firm's sales or revenues does not appear to impact the opinion for this question with the majority of firms in decline (60 percent) as well as those that indicated rapid growth (67 percent) disagreeing that the gap between the firm's need and employee's skill has harmed profitability. A closer look at the 13 firms that "strongly agree" that the gap has harmed profitability reveals small companies, ranging from 5 to 29 employees, in all industry categories.

Around 71 percent of the firms also disagreed that the gap between needs and skills has prevented them from expanding their current operations (Table 21.1). About 26 percent, or 49 firms, agree ("agree" or "strongly agree") with the statement. However, a much larger percentage, 47 percent, of the firms indicating that sales or revenues have declined agrees that the gap has prevented them from expanding current operations. The seven firms that "strongly agree" that the gap has prevented them from expanding operations are mostly small firms, ranging from 5 to 46 employees, and found in the manufacturing and construction sectors.

²⁰ See Appendix C, Table C-21 to compare the gaps between skills and needs and its impact on the firm for all responses with the Basic and Manufacturing Industry responses.

Douglas County firms surveyed were also asked if the gaps between needs and skills had prevented them from developing new products or services. About three-fourths did not see this as preventing the development of products or services (Table 21.1). For those firms in decline, slightly more agreed that the gap was a problem in product or service development. Nine firms “strongly agree” that the skill gap has kept them from developing new projects or services; these firms are small (5 to 29 employees) and cover all industry sectors.

Most firms did not agree that a skill gap had led them to expand outside Douglas County (Table 21.1). Thirty-four firms, or 18 percent, found the gap between skills and needs to have led them to expand outside the county. Firms that have grown, whether it be slowly or rapidly, indicated more frequently that expansion outside the county has occurred due to the skill gap than those firms whose growth has remained stable or declined. Only four firms “strongly agree” that the skill gap had led them to expand outside Douglas County. These firms range in size from 6 to 33 employees and vary amongst all industry groups but manufacturing.

Impact on Outsourcing

Finally firms were asked their opinion about whether or not the gap between needs and skills had led them to consider outsourcing. Again, most firms disagree that this is the case (Table 21.2). However, about 29 percent to agree (“agree” or “strongly agree”) that the gaps has led them to consider outsourcing. Outsourcing and the skill gap appears to be more of an issue for firms with declining sales or revenues. The nine firms that “strongly agree” that the skill gap has led them to consider outsourcing are small firms (5 to 29 employees) classified under all the industry groups.

Table 21.1
Gap between Skills and Needs: Opinions on
Impact on Profitability, Expansion, Development, Future Plans

<i>The gap between our needs and employee skills has:</i>					<i>In past 5 years, firms' sales or revenues have:</i>			
<i>Harmed our firm's profitability:</i>	<u>Unweighted</u>		<u>Weighted by Establishments</u>		<u>Grown Rapidly</u>	<u>Grown Slowly</u>	<u>Remained Stable</u>	<u>Declined</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Disagree/Agree								
Strongly disagree	26	13.8	71	13.1	8.1	21.0	13.8	6.7
Disagree	90	47.6	247	45.6	59.5	40.3	47.7	53.3
Agree	49	25.9	148	27.3	21.6	29.0	20.0	40.0
Strongly agree	13	6.9	36	6.6	8.1	3.2	12.3	0.0
Don't know	11	5.8	39	7.2	2.7	6.5	6.2	0.0
N=	189		542		37	62	65	15
<i>Prevented us from expanding current operations:</i>								
	<u>Unweighted</u>		<u>Weighted by Establishments</u>		<u>Grown Rapidly</u>	<u>Grown Slowly</u>	<u>Remained Stable</u>	<u>Declined</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Disagree/Agree								
Strongly disagree	39	20.7	118	21.9	18.9	29.5	15.4	13.3
Disagree	95	50.5	269	49.8	56.8	42.6	56.9	40.0
Agree	42	22.3	122	22.6	13.5	23.0	21.5	46.7
Strongly agree	7	3.7	18	3.3	8.1	3.3	3.1	0.0
Don't know	5	2.7	13	2.4	2.7	1.6	3.1	0.0
N=	188		540		37	61	65	15
<i>Prevented us from developing new products/services:</i>								
	<u>Unweighted</u>		<u>Weighted by Establishments</u>		<u>Grown Rapidly</u>	<u>Grown Slowly</u>	<u>Remained Stable</u>	<u>Declined</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Disagree/Agree								
Strongly disagree	33	17.5	95	17.5	18.9	19.4	15.4	13.3
Disagree	109	57.7	319	58.9	59.5	59.7	52.3	53.3
Agree	34	18.0	90	16.6	8.1	17.7	23.1	33.3
Strongly agree	9	4.8	26	4.8	10.8	3.2	4.6	0.0
Don't know	4	2.1	12	2.2	2.7	0.0	4.6	0.0
N=	189		542		37	62	65	15
<i>Led us to expand outside Douglas County:</i>								
	<u>Unweighted</u>		<u>Weighted by Establishments</u>		<u>Grown Rapidly</u>	<u>Grown Slowly</u>	<u>Remained Stable</u>	<u>Declined</u>
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>	<u>Percent</u>
Disagree/Agree								
Strongly disagree	37	19.6	103	19.0	18.9	14.5	21.5	26.7
Disagree	105	55.6	307	56.6	54.1	53.2	61.5	53.3
Agree	30	15.9	86	15.9	18.9	19.4	10.8	13.3
Strongly agree	4	2.1	10	1.8	0.0	4.8	1.5	0.0
Don't know	13	6.9	36	6.6	8.1	8.1	4.6	6.7
N=	189		542		37	62	65	15

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table 21.2
Gap between Skills and Needs: Opinions on
Impact on Operations

<i>Led us to consider outsourcing:</i>				<i>In past 5 years, firms' sales or revenues have:</i>							
Disagree/Agree	Unweighted		Weighted by Establishments		Weighted by Employment		Grown Rapidly	Grown Slowly	Remained Stable	Declined	
	Number	Percent	Number	Percent	Number	Percent	Percent	Percent	Percent	Percent	
Strongly disagree	37	19.8	104	19.3	3,005	17.1	16.2	24.6	14.1	20.0	
Disagree	91	48.7	257	47.8	9,667	55.1	48.6	49.2	54.7	40.0	
Agree	45	24.1	131	24.3	4,098	23.4	27.0	24.6	18.8	26.7	
Strongly agree	9	4.8	29	5.4	462	2.6	8.1	1.6	6.3	6.7	
Don't know	5	2.7	17	3.2	298	1.7	0.0	0.0	6.3	6.7	
N=	187		538		17,530		37	61	64	15	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Future of Firm in Douglas County

The future of the individual firm in Douglas County looks at training assistance and programs and likelihood that the firm would utilize along with the firm’s short-term need (next five years) for access to certain programs and the impact of technology on skill needs. This section also looks at firms’ views on what kinds of skills employees are going to need to acquire in order to adapt to technological changes. These responses will provide direction for future training programs for Douglas County.

Need for Training Assistance

Firms were asked the likelihood that they would utilize a clearinghouse service on regional training programs. About 38 percent of the firms responding to the survey said that they were “very unlikely” to “somewhat unlikely” to use such a service (Table 22).²¹ About 60 percent said that they were “somewhat likely” to “very likely” to use a clearinghouse.

The importance of access to retraining programs over the next five years was also assessed. About one-fourth of the firms said that this was “not important” (Table 22). Access to retraining is about evenly split between being important (“important” or “very important”) and not so important (“not important” or “of minor importance”).

Most firms believe that technology changes will increase the level of skills required by employees over the next five years (Table 22.0). Only 12 percent thought that the level of skills would “not at all” increase over the next five years.

²¹ See Appendix C, Table C-22 to compare the need for training and assistance programs for all responses with the Basic and Manufacturing Industry responses.

Table 22
Future of Firm in Douglas County
Need for Training Assistance/Programs

<i>Likelihood that firm would utilize a clearinghouse on regional training programs:</i>			Weighted by Establishments	
Likelihood of Using Service	Unweighted		Number	Percent
	Number	Percent		
Very unlikely	33	17.6	89	16.5
Somewhat unlikely	39	20.7	114	21.2
Somewhat likely	85	45.2	242	44.9
Very likely	27	14.4	80	14.8
Don't know	4	2.1	13	2.4
N=	188		539	

<i>Over the next 5 years, importance for firm to have access to retraining programs:</i>			Weighted by Establishments	
Importance of Retraining	Unweighted		Number	Percent
	Number	Percent		
Not important	45	24.2	135	25.2
Of minor importance	46	24.7	129	24.1
Important	57	30.6	162	30.3
Very important	33	17.7	93	17.4
Don't know	5	2.7	15	2.8
N=	186		535	

<i>Over the next 5 years, technology changes will increase the level of skills required by employees:</i>			Weighted by Establishments	
Impact of Technology on Skill Level of Employees	Unweighted		Number	Percent
	Number	Percent		
Not at all	23	12.2	66	12.2
To a small degree	56	29.8	155	28.8
To a moderate degree	55	29.3	165	30.6
To a substantial degree	51	27.1	146	27.1
Don't know	3	1.6	7	1.3
N=	188		539	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Skills Present Employees Need to Acquire

Douglas County firms were asked to indicate which skill areas present employees will need to acquire over the next five years to adapt to technological changes anticipated. These are the same skill areas previously discussed in this chapter (Tables 11, 12, and 13). Once again, goal-setting/personal motivation and proper attitude toward work/work habits top the list as do other soft skills (Table 23).²² The top 10 skill areas, weighted by establishments, are:

1. goal-setting and personal motivation (58.0 percent),
2. proper attitude toward work and work habits (57.6 percent),
3. (tie) problem solving skills (54.5 percent),
4. (tie) adaptability/flexibility,
5. comprehension/understanding skills (54.3 percent),
6. supervisory/management (53.9 percent),
7. listening and oral communication skills (53.6 percent),
8. teamwork (51.8 percent),
9. interpersonal relations (43.3 percent), and
10. basic computing skills (42.2 percent).

When weighted by employment, the percentages go even higher covering almost 73 percent. The same skill areas that employees need to acquire continue to favor those soft skills. Acquisition of the more technical skills does not appear to be as necessary in the business community's opinion. Employers seem to be saying give us employees with a good work ethic who are trainable and we will train them to do the job we need.

Training Programs Firms Would Like to See

Firms were given the opportunity in an open-ended format to say what kinds of training programs they would like to see established in Douglas County or nearby counties and where they would like to see these programs housed. About 55 percent of the firms (108) responded with 185 program ideas that could be categorized under three areas: Soft Skills, Basic Skills, and Vocational/ Technical (Table 24). About half of the firms responded with vocational/technical programs ideas with about one-third of these responses as not specific in nature, but rather a general statement that more technical training is needed. For those that did articulate a specific area, electrical/electronics, carpentry, mechanical/machine operations, and construction topped the list. Around 23 percent said that they wanted more soft skills training, with about half of those interested in training that would address work ethic, motivation, teamwork, and problem solving. About 20 percent of the respondents said that they would like to see programs dealing with basic skills, mostly basic computer skills. About one-fourth did not know what kind of training was needed and almost 8 percent said that no programs were needed.

Firms most frequently mentioned that they would like to see training programs located at the local high school (Table 24). Next they would like to see training programs established for Douglas County or nearby housed at a vocational school, followed by university or college, and

²² See Appendix C, Table C-23 to compare the skills present employees need to acquire for all responses with the Basic and Manufacturing Industry responses.

then community college. It appears that the larger sized firms (264 to 1,240 employees) preferred to see the training programs housed at the college or university or some location other than the high schools. The kinds of programs also influenced where the firm would like to see them housed. Basically, firms would like to see more training programs at the high school level for soft and basic skills and more vocational/technical training at both the high school and vocational school levels.

Table 23
Skills Present Employees Need to Acquire
to Adapt to Technological Changes Anticipated

Skills present employees need to acquire to adapt to technological changes anticipated over the next 5 years:

Skill Areas	Unweighted		Weighted by Establishments*		Weighted by Employment	
	Number	Percent	Number	Percent	Number	Percent
goal-setting and personal motivation	117	58.8	331	58.0	13,012	72.8
proper attitude toward work and work habits	114	57.3	329	57.6	13,000	72.8
problem solving skills	109	54.8	311	54.5	12,885	72.1
adaptability/flexibility	108	54.3	311	54.5	12,754	71.4
comprehension/ understanding skills	106	53.3	310	54.3	12,296	68.8
supervisory and management listening and oral communication skills	106	53.3	308	53.9	12,067	67.5
teamwork	104	52.3	306	53.6	11,550	64.6
interpersonal relations	102	51.3	296	51.8	12,758	71.4
basic computing skills	85	42.7	247	43.3	11,834	66.2
computation skills	87	43.7	241	42.2	10,791	60.4
writing skills	80	40.2	233	40.8	8,006	44.8
second language skills (Spanish)	70	35.2	208	36.4	8,331	46.6
technical reading skills	61	30.7	185	32.4	8,889	49.7
skilled trade/craft	66	33.2	181	31.7	5,212	29.2
basic office skills	57	28.6	167	29.2	7,891	44.2
mechanical	53	26.6	163	28.5	4,313	24.1
machine operation	58	29.1	156	27.3	7,866	44.0
general labor	53	26.6	150	26.3	4,961	27.8
electrical	49	24.6	146	25.6	5,992	33.5
other	47	23.6	141	24.7	5,971	33.4
	45	22.6	123	21.5	4,616	25.8
	4	2.0	10	1.8	336	1.9
N=	199		571		17,869	

* This table is sorted by the weighted Establishments number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

Other includes: common sense, life skills, not sure at this point.

Table 24
Training Programs Firms Would Like to See Established in Douglas County or Nearby
By Preference for Where Housed

If you had your choice, what kinds of training programs firms would like to see established in Douglas County or nearby counties?

Response Categories*	Housing Preference								Total	Percent
	High School	Vocational School	Community College	College or University	Other	No Preference	On-site, At Firm	Missing		
Soft Skills ^a	25	8	10	12	2	2	1	0	45	22.6
Basic Skills ^b	16	11	3	9	2	3	0	0	39	19.6
Vocational/Technical Programs ^c	38	42	13	13	0	4	1	0	101	50.8
Don't know, didn't answer	1	1	1	0	0	0	0	44	47	23.6
None needed	0	1	0	1	0	0	0	13	15	7.5
N=199	80	63	27	35	4	9	2	57		

**This was an open-ended questions. Responses were categorized for reporting purposes. The numbers do not necessarily sum to total because the firm could give more than one housing preference for a particular program(s).*

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

^a Soft skills includes: work ethic/responsibility/motivation/teamwork/problem solving (18), communication skills/interpersonal (10), customer service/sales (10), and management/supervisory (7).

^b Basic skills includes: computer skills (28), writing and reading skills (4), basic office/clerical (3), math and computation (2), and foreign language (2).

^c Vocational/Technical programs includes: not specific (33), electrical/ electronics (10), carpentry (9), mechanical/machine operation (7), construction (6), skilled trades (5), welding (5), automotive (4), health care/health aids (4), maintenance (4), bank/financial (3), drafting (2), driving (2), agriculture, commercial design, engineering technician, HVAC, plumbing, printing, and security training.

General Comments

Firms were given the opportunity to comment about problems with the regional workforce or their firm’s need for employee training. Forty-five firms chose to make an additional comment. These comments mostly touched upon issues already raised in the survey, such as a need for workers with a better work ethic and specialized training. The following comments capture the general consensus of the group. See Appendix D for all the comments.

“We have a tremendous need for skilled workers. There’s a big gap between the college educated white collars and the McDonalds crowd. Douglas County has suffered for lack of dedicated and skilled employees.”

“The only comment that I’d make is that I believe in the high schools that they need to be educated more in life skills, that’s an area we see a huge problem with. Include things like work attendance, habits, etc. I believe if they started in the high school we wouldn’t have to teach them.”

“Soft skills are more important in our case, such as respect, multi-tasking, ability to work with others, etc.”

“Our company is specialized, no degree in [omitted to protect confidentiality]. So we look for intelligent high school grads. What they lack is a deeper understanding of what they are doing.”

“I think we’ve felt that the high schools do not promote technical schools as an option for the kids.”

“The biggest difficulty is finding people who are willing to work and have a proper work ethic.”

“I think the workforce needs training in good work habits; that goes a long way.”

“It gets worse every year. There is a great need for motivation.”

“The firm does not feel connected with training programs directly. The employees have to provide it by themselves and that’s it.”

“Work ethic needs to be reintroduced. Honest, respectful, timely.”

Summary/Conclusions

The survey of Douglas County firms offers tremendous insight into what employers needs are with regards to technical training. The preceding tables are rich in information that can be viewed from a variety of perspective. Amidst all this data, several key findings emerge. First, employers are saying that proper attitude toward work and work habits along with goal-setting and personal motivation are key skill areas now and in the immediate future. Basically, they are satisfied with the technical skills, or general technical aptitude of the workforce, but would like to see improvement in the soft skill areas. In the ideal world, firms would be able to hire workers with the technical skills they need.

Firms have not utilized public education’s technical programs all that much and are not all that aware of the technical training programs offered. As mentioned in the business focus groups, training is often so specific to the job, or a piece of equipment, that employers find that they must do the training themselves utilizing other employees or private vendors as the trainers. They do not necessarily see having no technical school or community college as harming their firm’s profitability and ability to expand. In general, most Douglas County firms have been growing despite the lack of a technical training system for the county. Technical training needs, or gaps in the system, are not uniform across all firms. It appears that a subset of the larger group is more affected by the gap between a firm’s needs and employees’ skills. Further analysis is needed to look at this group and determine just what skill areas need improvement and what barriers exist that keep those firms from getting the training needed.

Part Two. Technical Training Currently Available to Local Employers *Interview Summaries with Local Schools*

by Charles E. Krider and Susan Twombly

Introduction

This portion of the study looked at the current availability of technical training to Douglas County companies through high schools, area technical schools, and community colleges. Representatives of Lawrence USD 497, Eudora USD 491, Baldwin USD 348, Perry USD 343, the Kaw Area Technical School in Topeka, Johnson County Community College, Kansas City Community College, and The University of Kansas' Continuing Education unit were interviewed. The following is a summary of those interviews.

Overview of Programs Available

Technical Training for High School Students

High Schools

The four school districts included in this study provide traditional technical training programs for high school students. These are for the most part limited in scope but also include some innovative programs that can benefit area employers. The main limitation is that Douglas County does not have an area technical center or school that would have sufficient space, equipment, and staff to offer a comprehensive set of technical programs. Individual school districts often find it difficult to offer sophisticated technical programs on their own. They do not have a sufficient student base or the equipment necessary. The Eudora School District has been successful in establishing partnerships with DeSoto and Olathe school districts to offer programs and they have converted the old Eudora Middle School into a technical school. Also, schools are restricted by state and federal mandates, such as high stakes testing. In some cases, there is a gap between what employers want and what students are interested in pursuing. Eudora attempted to start a building trades program but found student interests lacking.

The following provides an overview of the types of technical training programs available in Douglas County for high school students.

14. Auto Repair (including collision repair)
15. Business/Computers
16. Welding
17. Drafting
18. Media-Film
19. Family and Consumer Science
20. Internships/On the Job Training
21. Health Careers
22. Printing and Graphic Design
23. Entrepreneurship

- 24. Commercial Construction
- 25. Horticulture
- 26. Culinary Arts

Auto repair is one of the stronger programs offered by local high schools. Lawrence has an auto mechanics program that focuses on diagnostic services and vehicle repair. Eudora has an auto body repair program that is also available to Lawrence students. In addition, students have an opportunity to attend an advanced program in Wyoming. Students trained in these programs are employed by area auto dealers.

Perry-Lecompton High School has an innovative program in commercial instruction. It was developed and is offered in cooperation with commercial contractors, who made the program possible by paying for one-half of 4,000 square foot building to house the program. This is a two-year program. In the first year students are exposed to about 10 areas of commercial construction including as site preparation, concrete, plumbing etc. In the second year, internships to work on a construction site are available. During the 12 week internship, students work as helpers in two or three areas. The students who complete the program have good knowledge about careers in commercial instruction as well as some entry level skills. This is an excellent example of cooperation between a school district and an industry to provide needed skill training.

A third example is the business internship programs at several of the area high schools. These provide students with work experience in area companies, such as banks or insurance companies. The students receive work experience and greater knowledge about the requirements of work.

Eudora School District has partnered with DeSoto School District to offer an innovative graphic design and printing program that enrolls about 15 students per year. Students from this program compete in national competitions and visitors from outside of Kansas come to see the program. Eudora also has a popular hospitality program (in partnership with DeSoto, enrolling 25-35 students per year).

The common thread in these examples is the willingness of area business to work with the high schools to develop programs that assist in preparing students for employment. Another common thread is that school districts have designed these programs to articulate with area community college programs. For example, the students in the hospitality program offered by the Eudora/DeSoto partnership can go on to the culinary arts program at Johnson County Community College.

Kaw Area Technical School

The Kaw Area Technical School (KATS) in Topeka is a comprehensive technical school that has a wide range of programs for high school students and provides customized training for local businesses. It has 17 affiliated high schools and is sufficiently large enough to be able to afford the space, equipment, and specialized staff necessary to offer a wide array of technical programs. The only Douglas County School that has joined KATS is Perry-Lecompton High School. Since

the Perry school district pays an annual membership fee its high school students can attend KATS without paying tuition.

Over 30 degree programs are offered by KATS for day school students. These include:

1. electricity, heating and air conditioning
2. building and industrial technology
3. civil engineering technology
4. legal office professional
5. medical office specialist
6. technical drafting
7. computer repair and networking
8. nursing assistant
9. automotive technology
10. welding

Such technical training programs are obviously more than a single school district could provide. By banding together the Topeka school district and 16 other nearby districts become cost efficient and can offer a wider set of technical programs than any single district could offer by itself.

Community Colleges

Johnson County Community College has articulation agreements with area high schools, including those in Douglas County. These agreements recognize some of the courses students take in a technical program and offer college credit for them. These agreements provide an incentive for high school students to take a set of course that best prepare them for post secondary training in a technical area. We did not determine either the number of articulation agreements or their actual use since such information was beyond the scope of this study.

Customized Training for Business: Interview Results

Our overall conclusions are (1) there is no readily accessible source for company specific customized training in Douglas County; (2) post secondary schools in nearby counties have not included customized training for Douglas County firms in their mission and offer this kind of training only on a very limited basis; (3) Douglas County firms that require customized training need to initiate contacts with post secondary schools; (4) such training is offered to businesses located in Wyandotte County, Johnson County, and Shawnee County because they have post-secondary schools with customized training as part of their mission; (5) educational providers indicate that the “student base” in Douglas County makes customized training expensive; (6) there is no centralized source of information on the availability of customized training for Douglas County firms.

High Schools

None of the four school districts in Douglas County offers customized training for area businesses. This has not been part of their mission and they do not have the space, the equipment, or the staff to readily offer this kind of training.

The Kaw Area Technical School

The KATS has a Business and Industry Training Department that provides customized training to firms in its service area. The mission of this department is:

The Business/Industry Training Department provides the opportunity for specialized instruction designed to fit specific needs. Traditional classes or programs may not allow the specialized study and learning that Business & Industry Training offers. The programs of study are tailored to meet interests and requirements of the students and/or businesses. With the flexibility to customize and design training, in all areas, Kaw Area Technical School (KATS) can fit all of your needs. Students must be 16 years of age or older to enroll in Business and Industry Training classes.

The significant aspect of this department is that it has full time dedicated staff that work with companies in defining and coordinating the kind of training that is needed. The training can be offered at KATS's campus or at the company.

KATS will provide training for Douglas County firms if asked. In the last two years two firms from Douglas County have received customized training. There are no efforts to initiate training with firms in Douglas County or Shawnee County but firms in Shawnee County are better informed about KATS programs and make use of its customized training. There is an annual Job Fair at KATS and information is sent out to area businesses. It would be appropriate for the Lawrence Chamber of Commerce to assist firms in having their names added to this mailing list as a way of increasing awareness of KATS in Douglas County.

Community Colleges

Johnson County Community College and Kansas City Community College will respond to requests for customized training by Douglas County firms but neither attempt to market in this county. The main reasons for the neglect of Douglas County is that it is not seen as part of their service area and their time is better leveraged in their home counties. The main market for JCCC is within 30 miles of its campus and that excludes Douglas County. It focuses on firms in Johnson county and Kansas City, Missouri. But will do training anywhere in the U.S. if such training is considered part of a larger strategic effort. It is currently doing training in Cincinnati, Pennsylvania, and Dallas.

Johnson County Community College will provide training for firms with more than 100 in Douglas County. It does not provide one time training programs for firms with less than 100 employees. When training is provided in Douglas County the price is the same as on-site except that there will be a charge for the extra mileage.

The University of Kansas Continuing Education

The University of Kansas Continuing Education (KUCE) offers skill enhancement programs that are open to Douglas County residents (typically for continuing professional education) but does not usually offer company specific programs for individual companies. This is because Douglas

County and its firms are not big enough to cover the costs of programs, most of which are taught by KU faculty. Still, the programs that are offered to a broader audience can be very useful to Douglas County firms. KUCE also responds to partnerships with government and businesses that develop need training programs. KUCE provides training for most fire and police officers in the state including Douglas County.

An example of KUCE offerings is a planned series of soft skills enhancement workshops. These would include supervision, report writing, dealing with difficult people, conflict resolution, and building your organization. This will be offered for the Topeka, Lawrence, and Kansas City areas and will include public courses and in-house private instruction. A recent David Allen seminar attracted 200 employees from Lawrence firms.

A second example is an innovative life sciences initiative jointly sponsored with KU's Higuchi Institute. These two organizations are funded by a National Science Foundation Partnership for Innovation grant. Employers in the Metro area will serve as advisors for the types of programs offered. KU will be creating broader, non grant funded initiatives that create partnership with governments and industry.

Summary/Conclusions

The lack of a technical training center is a major weakness in the County's workforce training effort at the secondary school level. Technical education is undoubtedly too expensive for individual high schools to do by themselves. One major option is for more school-to-school cooperation on specific programs as is done with automotive repair by Lawrence and Eudora high schools. A second option is for cooperation between high schools and specific industries to provide improved technical programs for those industries. A good example is Lecompton's cooperative effort with firms in the commercial construction industry.

The lack of a technical training center also limits opportunities for Douglas County firms seeking training for their current employees. There is no readily available source of information on what kinds of training are available at each of the area's post secondary educational institutions, all of which are located in other counties. A clearinghouse of available options would provide course listings, contact names, and fee information. Given the lack of information only a few firms have sought training from nearby educational institutions in other counties. It is unlikely that post secondary technical training institutions in other counties will soon start to target Douglas County firms in a manner similar to their targeting of firms in their home counties. The good news is that community colleges will provide training for companies in Douglas County if the initiative comes from Douglas County.

Part Three: How the Current System Is Working

Focus Group Results

by Susan M. Mercer

Overview

The Policy Research Institute at the University of Kansas conducted four focus groups with current Douglas County secondary school administrators, secondary school teachers and counselors, and former Lawrence USD 497 high school students participating in the Lawrence Diploma Completion Program who should have graduated from a Lawrence high school within the past five years. In addition, PRI conducted three interviews with graduates of USD 497 who received their diploma within the past five years.

This round of focus groups was designed to learn what former high school students, technical instructors, school counselors, and administrators see as the workforce preparation and technical education issues. Specifically, the focus groups sought to answer six questions:

1. How prepared to enter the workforce do students believe they are when they leave high school? And, how prepared do secondary school administrators, teachers, and counselors believe students are?
2. What gaps do students, administrators, teachers and counselors perceive in their high school education regarding workforce preparation?
3. How do students become prepared for the workforce? (What resources do they utilize?)
4. How do students learn about career opportunities and the training requirements? (Do they know about career opportunities within Douglas County?)
5. In what ways would administrators, counselors, and teachers like to enhance cooperative relationships with area businesses for workforce preparedness?
6. What new programs are administrators, counselors, and teachers interested in developing to assist students with workforce preparation?

Definitions

Douglas County public school districts included in this study: Baldwin City, Eudora, Lawrence, and Perry. Unless otherwise noted, the phrases “Douglas County schools” or “schools” refer to all of the aforementioned districts. (Although the Perry school district is located in Jefferson County, its catchment area includes Lecompton, which is located in Douglas County.)

Superintendents and principals from Douglas County schools participated in the focus group sessions. Unless otherwise noted, the term “administrators” refers to this group of participants.

Vocational/technical faculty and high school counselors from Lawrence High School and Free State High School participated in the focus group sessions. Unless otherwise noted, the term “educators” refers to this group of participants.

Former students of Free State High School and Lawrence High School participated in the focus group and interview sessions. All former students either completed high school within the past

five years or *should have* completed high school within the past five years. Unless otherwise noted, the term “students” refers to this group participants. In cases where the discussion refers to only one of the two types of former students, the appropriate designation (“graduate” or “non-graduate”) has been added for clarity.

Methodology

Potential participants were identified in consultation with Dr. Bruce Passman, Executive Director of Student Services, Lawrence Public Schools, and co-chair of the Lawrence Chamber of Commerce/USD 497 Task Force on Career Technical Education. Douglas County School superintendents and high school principals received a letter from Bruce Passman introducing the study. (The letter is included as Appendix E.)

For the administrator focus group, the Policy Research Institute telephoned and e-mailed each administrator to solicit participation in the school administrator focus group. Each participant received a confirmation e-mail a few days before the focus group. The focus group was held at the Lawrence Chamber of Commerce.

A list of teachers and counselors from each Douglas County school was provided by Dr. Passman. The Policy Research Institute contacted individuals from each Douglas County school through e-mail to request their participation in a focus group session. The response rate was very low and we were unable to find a common time for the interested persons to meet. As an alternative, two small focus groups were held at Lawrence and Free State High Schools and were comprised of teachers and counselors from the respective schools. Principals at each building recruited participants.

One former student focus group session was held at the Lawrence Diploma Completion Program in Lawrence. Participants were recruited by Sharen Steele, Director of the Lawrence Diploma Completion Program. This group included students who should have completed high school within the last five years and were currently enrolled in the Lawrence Diploma Completion Program. With one exception, all participants were formerly enrolled in a Lawrence public high school. The other student was a former high school student from another county who had relocated to Lawrence.

A second former student focus group session was to be held with recent graduates (within the past 5 years) of Lawrence and Free State High Schools. Dr. Passman provided a list of recent graduates and the Policy Research Institute attempted to recruit participants for the focus group session. However after several unsuccessful attempts to schedule a session with recent graduates, a series of telephone interviews were conducted instead. This group of former students included one who was currently in college and two who were currently in the workforce, but were enrolled at KU for the fall 2005 semester.

Overall, 22 people participated in the study. Table 3.1 provides a breakdown of participation statistics.

The focus group protocol was customized for each of the three focus group session categories; however, a core set of themes were included throughout all groups. The student interview questions followed the same set of questions utilized in the student focus groups. The protocols

are included as Appendix F. Each session was moderated by the same PRI focus group facilitator and assistant. Each session was digitally-recorded and the facilitator and assistant took notes. The facilitator conducted the focus group interviews and analyzed the focus group sessions and telephone interviews. In addition, the facilitator wrote this report.

Table 3.1
Focus Group Sessions and Participants

Date	Group Type	Participants
	Focus Groups	
Feb. 24	Lawrence Diploma Completion Program Students	8
March 8	Douglas County Superintendents & HS Principals	4
March 10	Free State High School Technical Faculty & Counselors	4
March 15	Lawrence High School Technical Faculty & Counselors	3
	Interviews	
Mar./April	Recent graduates of LHS/FSHS	3

Source: Assessment of the Technical Training Needs of the Lawrence Community, Policy Research Institute, The University of Kansas, April 2005.

Report Contents

This report summarizes the overall findings, organizing the results topically, including both similarities and differences in views between participants or participant types. The report includes many verbatim quotes, illustrating the various participant points of view. Verbatim quotes are indented and italicized. The designations [A], [E], or [S] immediately following the quote passage indicate the source of the quote: administrator, educator, or student.

Care should be taken in generalizing the findings, since the number of participants is too small to be fully representative of the general population. However, the ideas expressed by focus group participants often provide important insight that can lead to greater understanding of a particular issue or subset of issues.

Background

Douglas County business leaders who participated in the fall 2004 focus groups discussed the importance of soft skills training for new and existing employees. (A brief summary of the business focus group findings is included as Appendix G.) A number of participants expressed concern and frustration about the lack of soft skills possessed by new employees. Although some businesses have technical training needs, they said they do not look to Douglas County high schools for assistance with this training. Instead, most conduct specialized, in house training of their workers or utilize specialized training offered by the companies that manufacture their equipment.

This series of focus groups was designed to study what former high school students, technical instructors, school counselors, and administrators see as the workforce preparation and technical education issues.

Findings

Analysis of the focus groups and interviews reveals many common themes across two or more participant groups—administrators, educators, and students. It is interesting to note that most of the overlap of topics common to two groups occurs between educators and administrators or educators and students.

While the overlap of a topic among all three participant group types does not automatically mean the given topic is or should be a top priority, it may give strong clues in that direction and provides a good starting point for this discussion. Similarly, topics discussed only by one group can provide valuable, and often new, insight into that group.

Technical Education: Terminology and Perceptions

When it comes to technical education, all program names are not equal. According to administrators and educators, the labels used for technical programs are nearly as important as the programs themselves. They said the traditional name for technical education, “vocational” education, becomes an instant barrier in people’s minds that is difficult to cross. People are stuck on decades-old images of programs designed to prepare students for a specific job rather than a career. Educators and administrators point to the wide array of career training programs that can be found in many high school technical education programs, with even more opportunities available at the community college and post-secondary technical education levels.

It’s a baby-boomer’s perception. Everybody on the block wants to be able to say, ‘Johnny and Sherrie are going to college.’ In ’55, ’60, vocational became a dirty word as the service economy became reality and now technical [economy]. [E]

...[T]raditional vocational is seen as dead end. It’s for “those other people’s kids.” Or they came from that and their job dried up and went away. [A]

We’re still stuck in an industrial arts mentality. The industrial arts is to show you basically what the vocation looks like. The vocational is to train you and prepare you for on the job. But it requires the same equipment that you would find on the job. [E]

I try to use the word technical. [A]

What you call it is important around here. [A]

Vocational education almost takes on a stigma. Technical education is not for kids who are failing, it’s for kids who can do anything. I’m trying to put a different spin on it here because we’re dealing with perceptions that we’re trying to create some option to failure. [A]

To break that perception cycle, we have to start earlier, almost in grade school. We’re going to have to get some seed of a program started so people can see you can do this in a formal way. We have to put some kind of school-to-career type program in place and people have to see that it is working. Seeing is believing around here. There’s not a lot of vision around here. Lawrence is a pretty tight, conservative place. It’s hard to sell vision and ideas. [A]

Technical Education: The University Influence

According to educators and administrators, another aspect influencing community attitudes about technical education is the perception of parents that college is *the* pathway to their children's success. They attribute this attitude to the presence of the University of Kansas.

...Part of it is the culture of Lawrence, which becomes the culture of the schools, which is 'everybody's going to college.' We're in a college town. Nobody talks about vocational education or that kind of thing here. I have tried for the last 5 years to get Lawrence refocused because all of our kids don't go to college. [A]

This is a college town, and in general our population...sees the greatest thing their child could achieve is a college degree. Regardless of what employment they're capable of seeking, that college degree is very important to most parents and they see that as their [child's] road to success, which is a good thing to have. The difficult thing is that they don't see any other option as a viable option. [A]

The jobs [available] are not necessarily post four-year degree. [A]

We're not addressing the need for a large percentage of students graduating high school. [A]

Educators and administrators recognize that there are alternate, and sometimes more fitting, paths to success in lieu of a college degree. Educators struggle with how to best serve student needs when parents have conflicting ideas or plans.

I have parents who come in here and say, 'You know, I'm embarrassed to say this, but my child wants to go to Johnson County Community College and study culinary arts.' They're apologizing. And I'm thinking, 'Well you know, they'll make a lot more money with that than with a lot of other things.' It's like it's an embarrassment. [E]

I had a parent conference...The mother said, 'We saw little Johnny in his crib and imagined him in engineering school at KU. What have you done with my son?...All of a sudden he's got all these car magazines all over his bed. He's doing this, he's doing that. This is not what we wanted our son to do. What have you done?' And I've heard this more times than not. And I said, 'Do you understand the transportation industry? Do you understand where he can be at in a very short amount of time with this level of enthusiasm?' So we have to educate parents... 'He can be a person, a son that you're very proud of, but he is looking at it in a very different angle. He can go off to school and graduate in 9 months. These are the students that have gone on before him who are sitting at the \$50,000 to \$100,000 [salary] range at the age of 21. This is the diversity in the field that he can choose...' [E]

Where are we downfalling? Thinking that everyone is college material. Folks, they're not. I can walk down the hallways and say, 'You're not college material. It's not that you couldn't be. It's that you don't want to be. You don't want to put in the time. You don't

want to put in the effort. You see no need in it. So why are we trying to force you into an unsuccessful mold and we know it?’ And that’s the saddest part about the situation. [E]

Lawrence is a college town. The majority of people that are vocal are looking a KU. [E]

We keep [all students] in college bound courses. We don’t know what else to do. It’s a funding issue and a philosophy of Lawrence: we go to college. We’re all sitting here with college degrees, and we believe in that, but we also know the reality of so many people, that it’s not for everybody. [E]

If you look at who does go to technical colleges, a lot of them have BS degrees. They couldn’t get a job. [E]

Technical Education: Existing High School Programs and Facilities

All Douglas County high schools have some technical programs, with most having one or more highly regarded, successful program, such as automotive/collision repair, hospitality, culinary arts, commercial construction, health careers, printing, and general business.

Eudora High School has a cooperative program with DeSoto High School that offers career technical education programs such as collision repair, culinary arts/hospitality, health careers, printing, and landscaping. They have a dedicated building (the former middle school) in Eudora separate from the high school. EHS expanded their career technical education programs because they were sending students to other districts for technical education—a practice that was very costly to the district.

We have 96 kids at Eudora, mostly from Eudora High School or DeSoto High School, with about eight students from Lawrence. [A]

In addition to more traditional vocational offerings, Perry-Lecompton High School has an innovative commercial construction program with its own facility. The program is a partnership with the commercial construction industry and remains full.

Contractors donated labor or materials at cost or some other level of donation to put up the construction building for what we estimate at about half cost. Contractors assist with teaching modules alongside teachers. It’s been excellent. In fact, the Kaw Area Technical program has decided to start a program exactly like ours. [A]

Also, Perry-Lecompton High School includes technical education as an educational component for most students.

Virtually all of our students are going to be involved in technical education at some point because it’s been such a focus in our school district for a good number of years. In fact, for a school our size, we would probably be the exception because we have a staff member who really focuses on coordinating the program. It’s more of a career ed., but the similarities and the lap over is significant. We actually constructed a facility a few years ago for a construction science class. In our high school we really focus on that

area. In fact at times, we have a certain percentage of our population who thought maybe we went a little overboard and shortchanged the college bound focus. Probably not, but... [A]

Lawrence high school programs include mostly traditional vocational offerings. Core offerings such as family and consumer science (foods, childcare/development, sewing, interior design, etc.), woodworking/shop, and business can be found at both Lawrence High and Free State High Schools. Students interested in automotive technology must participate in the program offered at LHS because FSHS does not have an adequate facility. The LHS auto tech program also includes an arrangement with a local car dealership. However, few students (25 to 30 per year) from FSHS make the trip to LHS because of transportation and scheduling issues between the schools.

We really have a very small group of industrial tech because we don't have the facilities. When this [building] was built, that part of the facility was cut. We have the beginning courses of a couple of areas. [A]

There's not what I would call any highly technical type of vocational training. [A]

We don't even have a shop area in the building. [E]

We do not have the facility here to support [technical education]. We don't really have the lab here [at FSHS for fields such as interior design, culinary arts, child care, and graphic design.] A lot of those kids who are interested could find entry-level positions where they could be skilled [if we had those offerings]. ... We have kids who are really interested in culinary arts lumped into the same class with kids who want to learn to cook to survive. There's not class for them to [study culinary arts]. They're fairly turned-off with the idea that they would be lumped into a class with someone who [finds] boiling water is a challenge. [E]

I've had more kids I could send to culinary arts than you could shake a stick at. Hotel/motel management could be filled 3 times a day. We need a separate facility for this type of operation. [E]

The community's not interested in this. If you go out of this district, you'll see all these types of programs offered. If they were going to have it (here), they would have had it years ago. If [the community] would have wanted it and if the employers would have wanted it and the schools would have wanted it, you would have had it years ago. They're just not interested. [E]

Most programs offer the option for students from other districts to participate, but barriers such as geographic distance between programs, coordination of schedules, transportation costs, limited program openings, and program awareness prevent many potential students from participating in programs offered in other districts.

[We] send students to Eudora, Topeka, because Lawrence doesn't have the programs. It's pretty difficult... Students are responsible for own transportation. [A]

Our program is full, but if we had space [students from other districts] could participate.
[A]

Technical Education: The Role for the Business Community

Educators and administrators believe that industry involvement is necessary for moving technical education forward in Douglas County. Examples from around the world as well as within the county demonstrate the difference business involvement can make.

Students also said they want to see greater business involvement. The survey findings suggest businesses may be willing to take the step toward closer ties with education as well.

Part of it just has to do with the country we're living in. ...In Japan, the marriage between business and education is so tight. When you go into a high school in Japan, there'll be 150 students, that as they start as sophomores, they'll be training with Toyota equipment and the day they graduate they're in a high paying job with Toyota. And you see that across the board in terms of industry, and even small businesses. There are some places in the United States that do that, but it's not something I see a lot of. [A]

[Here] there's not really a marriage between business and education. It's more, 'Well, you give us this raw product that has these soft skills and we'll teach them how to do the technical stuff.' What [business] fails to realize is that if you're going to hook these kids into it, they've got to come in and work with us in schools. There isn't any reason that with as many people as we have around here, that we couldn't have some little seamless program. They just say, 'Well can you teach them to be on time?' That's not how you hook kids. [A]

[We] need a "let us in" mentality from businesses. One of the successes that we've had is the association of general contractors saying, 'let us come in and partner with you because we need folks and we need folks that have exposure to these trades. We're willing to put out money, we're willing to commit our time come in and help teach because we need the folks and we're willing to get after it.' And that's completely different than us sending out a survey and saying, 'what do you need?' [A]

We had a manufacturing corporation donate \$100,000 of press equipment for printing [program]. [A]

We have a company willing to donate \$20,000 in equipment [after a recent upgrade] for an industrial maintenance/mechanics program. [A]

It only works if [businesses] can find a niche in relating to the school. It all gets down to relationships in the end. If you can find niches in those relationships, then I think you've got something. [A]

You've got to get some recognizable interest – recognizable by students, staff and the community. Recognizable in that if I have success here, I can go out and be a success..

What are the businesses out here that could be real attractors and how can they fit with the high school. ...Can I find four or five businesses...willing to go in with both feet, teach with you, train kids, put them out in particular places where they can work. [A]

As a start, administrators and educators suggest interested businesses ask a few questions of themselves:

What can you (business) bring to the table? [A]

Are businesses willing to make the investment given the uncertainty of the returns? [A]

How much do our employers want to step up to it? [E]

Administrators who have worked closely with business on technical education caution that once industry gets involved, the expectations for both the program and the business must be realistic to avoid conflict.

Whoever's going to come in and work with the kids, they need a dose of reality. High school kids, they're weird sometimes. And if you have this image of this kid coming out and going to work with you as a mature, accomplished...[A]

The first year we put contractors in our school teaching kids, they were ready to give it up. This is not what they expected. Kids, sometimes act up. ...Surprisingly, after they figured out what was going on, they've been fine with it. Their expectations changed...this is what these 16, 17 year olds really are. [A]

We're putting these kids in a position where they have potential. [A]

To me, you start with one. If we can't make one of these things work, then that's a model. [A]

To be clear, educators and administrators are quick to point out that many members of the business community are working with education in numerous ways already. However, they would welcome even greater involvement and have heard businesses express a desire for a deeper involvement in education.

Businesses are wonderful. I've never had a problem placing a student for the coop. We have more spots than we have kids. [E]

Technical Education: Collaboration as a Solution

Just as Eudora has found success in technical education by working cooperatively with other school districts and the business community, educators, and administrators believe Lawrence and Douglas County can achieve success by combining efforts. Key partners for the collaboration include Douglas County school districts and businesses, plus higher education entities. Collaborative efforts could provide opportunities for enhancing the quality of all programs by combining strengths and conserving resources by eliminating duplication of offerings.

It would be important, especially in the Douglas County area, especially as districts and try to avoid situations where we would be competing for the same kinds of kids. If we can do that, I think there are some things we can offer each other. [A]

Haskell has a lot of nice equipment, but we don't have access. [A]

We've got to get a few spokes in a wheel and start limping along. People will get excited and pump resources into it. ...some visible options with an employable end to them for those kids who just don't realize that that's a path they can take. [A]

At least one educator has a specific plan for advancing technical education in Douglas County:

Take the strengths of Lawrence, Eudora, Johnson County [Community College], and we incorporate a school [in Douglas County] where students come in and the interests of their study, like culinary arts, automotive, business, and we teach toward that. It's not a vocational school, it's a technology academy coop. and students are brought in their senior year, and they will get their senior English, their senior math, their senior history, but it applies to their interest. Their senior sciences, everything applies to their interests. For instance, senior science—automotively, we [can] do ground samples to see if we're polluting it with oils. We can take water samples. And these students will demand to come to school. It's a super-duper idea, but everyone's afraid of change.

Johnson County is willing to move to Lawrence. They're land locked. ...They're willing to move their vocational program to the same building we're in. So our high school students are in the same building with college kids. When they complete their high school education, they already know what college students are experiencing so they can step right into an accredited program either as second semester freshman or second year students. We're making solid small transitional steps for the students that thought they couldn't do it at all. In a program that accelerates them. But yet, as you're hearing, we're trying to close them into a high school. We're trying to college prep 'em and they're fighting us. So let's give them what they want. It's what we want. It's a win-win situation. It's extra money, but money well spent.

I looked at the old E&E plant, 600,000 square feet. Johnson County wants to expand this to everything, plumbing, heating, building trades, nursing, everything that's under this [technical] envelope. But the E&E building is \$4.2M. And Johnson County goes, "so." There'd be some renovation involved. But there is money in so many different schools. And they all have needs. Why can't we combine all the funds into one to fit everybody's needs? Greenbush is available;, Carl Perkins is available at this time. You have the college funding from Johnson County. We have all these pockets of gold everywhere, why can't we combine them together and make one solution? [E]

Technical Education: Motivation to Stay in School

Educators and administrators discussed the estimated five to 10 percent of students whose needs are not being met in the traditional high school setting. They also see a technical training program that integrates business and industry into the educational process as one way to motivate students who might otherwise drop-out or struggle.

So many of the young people that walk into my program, they don't have enough confidence in themselves to think that they can be educated. I hate to say it that way. But they have a stigma about themselves that, 'hey, maybe I just can't learn.' And so what we work on in the classroom is: 'You are learning a field that you desire, you'll be surprised how quickly you motivate yourself and start wanting to go to school.' [It] gives kids a chance to visually see the future and how they get there. [E]

You could have an education program where the math, and other things tied-in in an applied sense. That's where we're going to pick up an interest from our students. And, frankly, pick up some interest from some students that I think we're losing, that just don't see any meaning, if they're not thinking about college, or don't see a lot of relevance in a lot of the stuff we're putting them in. [A]

It's almost like they don't have a voice here. [E]

If we had programs like that, they would beat us to the job everyday. [E]

Parents are so afraid that if their kids get into our program sometimes, that they're not going to have enough of the academics to make it at KU or K-State or whatever. But what it's going to do is turn them on fire. ...It comes back a million fold. [E]

One of the goals we have is that our students are like the vehicles we use to work on – we want a good product when they leave our shop. ... If you add all their courses together, they're mine for a year. So I know their parents, I know their dog, I know their last girlfriend. I know their strengths, I know their weaknesses. So we are able to have a real close one on one with the development of the child. [E]

[S]tudents need to be able to see the light at the end of the tunnel. Once they know the expectations and the reason behind it, they rise to meet expectations. [E]

I tell them, 'Nobody's going to hand you the keys to your castle. You have to build your own. Let me show you how you can do this.' Those that have an environmental problem (at home)... we try to break them away from that. [E]

Technical Education: Other Threats

One group of educators were particularly concerned about the impacts that No Child Left Behind and proposed cuts in federal funding for the Carl Perkins grant program and other funding programs would have on technical education programs. However, when asked about No Child Left Behind, administrators stated that they were not concerned about any effects it could have on technical education.

What I see now is a total turn around [in government program emphasis]...I think they're going to hurt our programs because they're going to say that you're going to have to take all this academic coursework and you're not going to have room for electives and our programs. [E]

Unless the philosophy of the federal government changes. I see one that's going to hurt exactly what these employers want and that's no child left behind. Because parents are going to become afraid, oh my goodness, kids are not going to be prepared for KU. [E]

I think the point of No Child Left Behind is to privatize every school. Because no school can meet the requirements. Because you have to upgrade, upgrade, upgrade, and eventually every school will be put on probation. Eventually every school is going to have a problem. [E]

This is how we're going to meet No Child Left Behind... If we can tie academics to vocational, they will jump start No Child Left Behind beyond belief. [E]

My take on the No Child Left Behind is that they're looking at the reading and the math, those areas. And if students aren't meeting that, they're going to need additional funds to provide something extra for those kids that need support. And they're going to take the money from vocational programs. [E]

The Case for Employability Skills

In the focus groups with business leaders and from the survey of employers, we learned that employers desire workers with better employability, or “soft”, skills. These are the same skills students said they want to learn more about in high school.

They do have career...not really a class, but programs in certain classes where you sit down, answer a bunch of questions on a computer and it will tell you what you are going to be. Once it told me that I was going to be an embalmer, that I would stuff dead bodies for a living. And I thought about that, and thought, wow, that says a lot about my character. And, uh, I don't think that's the way to go. I think that's the right idea, but I think they should do it differently. [S]

It needs to be one on one. Not in a group setting. [S]

What I think they should do is have a career class for the whole year your junior or senior year, or at least for a semester. And let you have a credit for it. That way they could teach you how to do a resume, the steps of an interview, and pretty much teach you the process of interviews and the right and wrong ways about going to find a job. Things like that. [S]

I think it would teach younger adults how to do things better. And basically, it would teach them, 'Hey, somebody's trying to teach me how to do this. And when I get out of high school I'm not going to know everything, but at least I'll know something about it. Yeah, I may not get it right the first couple of times, but it's ok.' In high school, you don't get any heads up about what the work environment's going to be. [S]

When I got my first job, I had no idea what was going on. I just showed up when they told me to and answered questions. At the end of the interview, he [threw] me an apron and

said get to work. I was just thrown into a job. And I'm lucky I got it, but I didn't know anything about what was going on and it would have been nice if I had. [S]

I didn't know anything about a w-2 form when I got a job. [S]

I had to look stupid and go and ask for my W-2 form back because I filled it out wrong. [S]

I think the career shadow thing is still a good idea. I followed a photographer and I loved it. I still want to be a photographer. That's what I'll be going to college for. [S]

Students talked extensively about the importance of a program or class that would help to prepare them for the workforce. Even students bound for or in college stated a desire for more assistance from high school teachers and counselors with career planning as well as with the college application process.

A lot of the information is available from many sources, but it's all really general. They don't give you details like body language and stuff, tone of voice, that's the stuff I want to know. [S]

There was one week in senior consumer math and one week in business where they discussed jobs and for me that was pretty much it, plus the career day in 9th grade. [S]

I had a class my senior year about applying for jobs, giving speeches, doing resumes and it was really good. I think it was required. [S]

It was hard to find a job [after high school]. I knew I needed references and I knew how to do an application, but I would have been clueless if I needed to do a resume. The one class I had that talked about resumes was not helpful. Nothing in my high school experience would have taught me how to write a more complete resume. [S]

We asked the student focus group participants to each design their own 'model program' for employability training. The characteristics they discussed are listed below:

- Community based (located in a high school or separate, possibly in a public library, or own building) or included as part of the high school curriculum (either required or strongly recommended.)
- One to two months in duration; if the program is part of the high school curriculum at least one semester up to two full years, during junior and/or senior year.
- For current or former high school students, including drop-outs
- Engages area business leaders or employees who would: teach job skills, tell about jobs (what they do, how many hours they work, etc.), discuss career path steps, and discuss likes and dislikes about the job or career.
- Assist students with developing a resume and how to properly fill out applications and post-employment forms, such as W-2 forms. Discuss how to make a phone call about a job.

- Cover the interview process; conduct mock interviews, have role playing skits that show the right and wrong ways to act and dress for interviews. Include information about body language, tone of voice, questions to ask in an interview.
- Discuss other topics related to finding and keeping a job, including the unspoken/unwritten employment rules, on-the-job etiquette, attendance, and how to dress.
- Include topics such as goal-setting, including understanding the steps to a career and mapping out a plan for achieving career goals.
- Utilize job shadowing, but for longer periods than a day.

Though the non-graduate former students would now jump at the chance to participate in a program with the characteristics described above, when asked about whether or not they would have taken such a class when they were in high school, the responses were mixed.

If I knew the things in high school that I know now... [S]

I think personally that it should be required. It's something you need to know outside of high school. [S]

Exchange City, a one-day program in Kansas City that many area sixth grade classes often utilize, was mentioned by students as another good approach to career education that could be expanded for older students. For example, they suggested that the program could be lengthened and made more challenging, giving students a better taste of some career opportunities. (Careers participants can explore at Exchange City include banking, city government, law enforcement, business management, advertising, printing, accounting, and food service.)

Exchange City is good, but you think of it as a field trip, a day of fun. Why couldn't they do it when you are older and make it more challenging? [S]

Educators indicated that they are teaching students employability skills, but concede that more time could be spent on these activities.

We don't have a class here that's mandated for kids where they learn how to fill out applications. In a couple of the English classes they will run through those things. So you're relying on the kids to figure that out for themselves. If they bring it to us, we will help them. [E]

There used to be a program that was funded through soft money that was called Careers. ...but when the money's not available, that's one of the first things to go. [E]

A few educators said they try to do more within their regular classes. One technical teacher said that in his advanced class, he bases one-third of his students' grades on soft skills, including attendance, to encourage students to treat their education as they would a job.

[I tell students,] ‘As a teacher it is unfair for me to grade you on a personal level, but I am grading you as an employer. You are going to be an employee.’ So I make it very clear that this is where that grade comes from. [E]

Although the administrators agreed about the importance of soft skills, there was some disagreement about how much is already happening in schools, how much more is needed, and whose responsibility it is.

You’re not going to get out of ninth grade civics in Lawrence without filling out a job application, without going through an interview process, without someone then critiquing you about what you wore, what you said. I think [employers] gravitate, and this is a criticism, to the lowest common denominator. I think we’re producing kids who can do those things. I don’t know whether they’re applying. We’re certainly doing that now. [A]

My instinct is that the portion that they really want to hire are not going to be employed at this point because kids have higher aspirations than what [employers are] asking for. [A]

Just showing up on time is not going to get you the kind of job I’m talking about. [A]

I’d like to see parents do [soft skills training] before they get to school. Part of it is a cultural aspect. [A]

One administrator talked about a new standardized testing program in his district that specifically tests for entry-level employability skills. All students in the district must pass the test in order to graduate.

If a kid pays attention, they can pass this thing, but they do have to pass it. Kaw Area Technical School uses it as an entrance requirement. Once they pass they are finished with it. ... We’re able to tell kids and parents, that, ‘We’re guaranteeing that if you graduate, you have the minimum level in math reading, [for entry level] employment.’ A pretty good percentage of freshmen pass it. [A]

Keeping Options Open

While in high school, students may believe they have ‘it all figured out’ and claim they do not need help. But once they graduate or leave high school, they quickly learn there is a lot they do not know. Educators and administrators know the importance of keeping an open mind about career opportunities, educational pursuits, and pathways to careers, but they struggle with getting this message through to students.

Activities such as job shadowing, participatory sixth grade field trips to Exchange City, and cooperative programs with businesses at the high school level are examples of tangible ways students gain insight into careers they might not otherwise consider. Yet one-time experiences such as Exchange City and one-day job shadowing may not offer students the type of exposure they want at the most effective time in their education. Still, educators and administrators said that the earlier and more varied the exposure to opportunities, the better.

Business leaders also advocated for increased awareness of local career opportunities. They mentioned several career opportunities in Lawrence that students are not pursuing due to an apparent lack of awareness. Such options include careers that do not require a college degree, but have strong earning and advancement potential. Other local opportunities allow employees to work at their company while earning a college degree and have advancement opportunities within the company once the degree is completed.

I think a lot of high school students think they have it planned out... You need to have an open mind. I think that [Lawrence Diploma Completion Program] shows you a little bit about that. I think that if the high schools could do that. ...They could show you there are other options and to keep an open mind. [S]

Kids have to be exposed early on. They have a pretty limited view of what's out there. But if you take them to a career fair type of thing, they'll see a lot of other things out there. You're not pushing them in a direction, you're just exposing them. They don't have a very good idea [of the options]. [A]

At some point kids need to see that there's something down there that leads them to go down this path. [A]

I think exposure is critical to making good decisions—information and exposure. [A]

[The student says,] 'I want to be a podiatrist.' [Students] don't have any idea what the level of commitment is, what's involved, and what the competition's going to be like. [A]

Preparation comes from experiencing. It doesn't necessarily come from information. It's the smorgasbord approach to opportunity. [A]

[We took a field trip to the East Hills Industrial Park] because [students] don't know anything about the jobs. [E]

We always stress that you need to diversify your education and your skills. [E]

*We're constantly opening the door and showing them things. [educator comment]
We try to expose them to a lot of different things and we use interest inventories. Then we look at the results and try to encourage them to pursue those interests by maybe taking a class. [E]*

Goal-Setting

While goal-setting is related to employability skills, it has additional implications. Students, educators, and administrators all discussed the importance of setting goals as a way of giving students direction as they plan their careers. Students, educators, and administrators also agree that this is one area that could be given more attention in the high school curriculum.

...Offer a class to where they teach you skills that you need in the real world—or help you to plan or make some kind of plan, setting goals, what kinds of steps you need to take to teach you how. [S]

I think it would be better for a lot of high school graduates to have someone actually teach them and explain to them the right way to fill out an application, the wrong way, and pretty much help them set up their future. Have them write down their goals and talk about it, things like that. I think young adults would be a lot better off, and [would] have a heads' up. [S]

Relating the Curriculum to the Future

Student complaints about the apparent irrelevance of their high school coursework are nothing new. Still, even educators and administrators agreed that there is room for improvement in relating coursework to real life applications. In fact, some educators and administrators said that what many students need in order to be successful and to apply themselves is to understand the purpose behind what they are being asked to do.

I learned the Civil War 4 times. I know every battle, every skirmish, every shot fired in that war. That's the same for WWI, II. It's really annoying. [S]

It's good to know your history and everything, but a lot of what you learn in high school...I have yet to go through life and have to do an algebra problem. [S]

You learn all the core skills, but you don't know anything about how it works in the real world. [S]

You're in class [thinking] 'What is this teaching me. I'm not going to need this when I graduate from high school.' But if they show you how you're going to need it, then it might be a little bit more interesting. [S]

They're just shoving information down our throats and asking us to regurgitate it. They're not telling us to think about it. [S]

The only jobs that require calculus, that I know, require at least 8 years of extended math beyond high school. So why are they teaching it in high school? I'm not saying 'Calculus is bad; they shouldn't be teaching it.' I'm saying maybe they should show us where it would be useful. [S]

My most valuable classes were my math classes because you see it everywhere and it's one of the hard classes. The other classes don't prepare you for college, except maybe English writing classes. [S]

[Students say] 'Why do I need Algebra I? All I'm going to be is a drywaller.' I try to explain, 'Well, you may have to figure area, and stuff like that.' And that just goes in one ear and out the other. And to a certain extent they are right. [E]

You can weave [employability] stuff into a program. This kid has to have some kind of vision. Kids work from the end back. 'This is what I want to be.' That's how they think. They can't see what the end of it is. You can't be vague. [A]

They have to see how it's connected with the career they're going to do some day. [A]

If we could [relate curriculum to career interests], these kids would never allow me to breathe because it ties into their interests. They would want more, more, more. ... We have to be focusing on what is going to be their next step out of high school. I do not want to set kids up for a fall and that's what we do sometimes. We set these kids up for disaster. We allow them to come late for school. We ok everything sometimes we aren't even allowed to flunk them. When they set out in to the real world, it doesn't work that way. [E]

Career Counseling and Job Placement

Most educators and administrators readily admit that their career counseling programs cover only the basics and job placement services are minimal. This is due to a number of factors, including high student-counselor ratios coupled with limited time and other demands.

We probably do less in terms of job stuff, I'd say pretty minimal... We do some career inventories, but as far as making a connection, it doesn't exist. We give them a diploma. The career education piece begins somewhat back in junior high and they get a little bit more in high school but I don't feel it's very significant. [A]

In our brand new high school, we developed a career counseling center and it's underdeveloped as well. And it's just the way high schools are set up. I don't know how much time you can spend on career counseling because of the vast array of ways kids can go. You just don't have a whole lot of time to do those types of things. [A]

It's something that, what I've read, is that if you don't have it imbedded in a course curriculum, it tends to get a lack of focus. And if it is in a course curriculum, there's all sorts of different directions it can go. [A]

We are not in the job placement business. I always try to say get a focus on something, get [post secondary] technical education, get a skill. At least if you go someplace and get trained, they'll help you with job placement. [E]

If we can help them [with job placement] we will. Businesses call in and we place jobs on the bulletin board. [E]

It's tough to identify kids who may not be going to college. It's tricky. It's like spring break coming up in two weeks. A lot of these kids feel like they ought to be going on these great vacations and they're embarrassed to say they're staying in Lawrence. It's almost like they're embarrassed—they may not want to tell their friends that they're not going on to higher ed. [E]

However, one administrator pointed to his program as an exception:

We have a proactive career education program and those kids are counseled specifically to what their plans are, each kid is. There are some kids that won't participate in the process. In fact, each kid has classes that are aimed toward that [finding employment post graduation]. Each kid has the opportunity. [A]

Two technical educators talked about programs they offer that can lead to post-graduation employment. In one program, students who take business courses or have an interest in business can be placed in after school jobs with businesses in areas such as banking and proofing. Seniors who have a flexible schedule can be placed in on-the-job opportunities with these same businesses and can earn credits.

Quite a few of them stay with that company. A lot of my kids, probably 80 to 85 percent, go on to college. A lot, if they stay in Lawrence, continue working for the employer. Most of the kids who have gone on to college are [studying] business. [E]

In another program, students can take a series of automotive courses that progress through the levels of automotive repair and culminate in a three hour per day course (Tech 3) that lasts a full year. Tech 3 is structured much like a job in an automotive shop. To be admitted into the program, students must apply for one of 30 available spaces. Last year there were 80 applicants.

We are looking for students who have the true desire to take this to a career. We expect them to bring their own tools and their own work gear. And we supply the equipment. It's a working environment. They have to work with the same equipment they would in a shop—the computers, the ticket writing, the documentation, the legalities of working in a shop environment, OSHA standards—all those things are applied. So once they leave our program they can step right into any shop and be quite comfortable and [students] have done that. We still let them know that even though they've had our experience they're still going to be an apprentice in that shop.

Out of those advanced students, I can safely say probably 90 percent go on to post secondary education. We have close ties with our advisory board. [With their help we] can place them in the field before graduation so they can make sure it's what they want.

We want to give them that exposure to their field of choice before graduation. If they find out that that field of choice...is not meeting their goals, they have time to stop, step back, and re-evaluate. We have counselors and people involved so that we can help them before they graduate.

The population that did not go off and experience a shop atmosphere before graduation, and also chose not to go on to post-secondary education, I would say very few or none of them are still in the field. They'll go and they'll attempt, [but] they just don't have the confidence that they need. The last one just left a real good job...and is a stock boy at Wal-Mart now. [E]

Transition to the Workforce

For most students, finding a job after high school was difficult. They faced obstacles such as competition from college students, a tight job market, and a lack of understanding about the process of finding a job. While some of their high school coursework included topics such as resumes, mock interviews, and a 9th grade one-day career shadowing experience, most felt ill-prepared to search for and secure a job.

There are a lot of telemarketing jobs. I've done telemarketing before and it's just something I can't do. [S]

I think with the university, it makes it a little more difficult to have a career here. It's so populated with the KU students, especially right here. [S]

I know a lot of people who commute to Topeka or Kansas City because they can't find a job here. [S]

A lot of times you have to pick a job that nobody wants or knows about. I don't know anybody who would want a 911 dispatch job. And that's exactly why I want it. Well, I would like it – it operates computers...everything I like...But yeah, I picked a job that nobody else would want that I could potentially like in the future. [S]

To help figure out how to navigate the job market, the students often turn to family members or friends for guidance. Generally, they were unaware of local organizations that offered this type of assistance.

I was 16 when I got my first job and I didn't know anything about [the process]. I didn't know how to go about doing the interview process. I talked to my mom about it because my mom was the assistant manager at a couple of places. ...She sat down with me and said, 'Ok you're going to be an [applicant] interviewing for a job and I'm going to be the hiring manager. I'm not your mother anymore.' [S]

My mom went so far as looking at applications because I had people that weren't even calling me back for interviews. She looked to see what I was doing wrong at that first step. [S]

Students also said they had no knowledge of the career opportunities available in the Douglas County area. However, many indicated that they have an interest in learning about such opportunities.

After college, my goal is to stay here [in the area]. But I don't know about any of the career opportunities here. [S]

Students who graduated and were college-bound expressed some frustration with the assistance they received in the college application process. These students too seemed reluctant to ask for help from teachers or counselors even when they wanted or needed it.

I felt they [school] did a very poor job of helping me prepare for college. They had brochures in the office, but no one talked to me about it. My counselor didn't meet with me. [S]

No one would help me [with the college process]. I didn't know what I was doing. I was in the gifted program, but no one pushed me. The gifted office had a class specifically for applying to college, but I didn't find out about it until it was too late. It was never offered to me. I think it's the school's job to do that. [S]

Dropping Out & Finding Success

Although students chose to drop out of high school for a number of specific reasons, in most cases, their individual needs were not met by the traditional high school setting. Whether the school system somehow failed them, personal/family issues created seemingly insurmountable circumstances, or individual maturity made success too difficult, the high school structure simply did not work. The Lawrence Diploma Completion Program [LDCP] offered these students a second chance at success and an opportunity to earn their high school diploma from the high school they left. The paragraphs below tell the individual 'stories' of a few of these students and offer insight into what went wrong in the traditional high school setting as well as what makes the LDCP work so well for them.

I had a high school teacher tell me I wasn't going to be anything when I leave high school. I'm like, 'You're the teacher, you're not supposed to be saying stuff like that.' I told my principal and he said, 'Well, I don't believe she said that.' I'm like, 'Ok, what am I supposed to do about that?' Here [at LDCP] I know I'm not going to have to go through anything like that. ...I didn't get along with anybody...I tried the GED, it didn't work. Then this [LDCP] came up and it's a whole lot better. [S]

For me, it wasn't, 'Ok, I'm going to stop going to school.' It was more like, 'Ok, I need to go to school' and I went and then I didn't. It was kind of off and on. I knew I needed to go I just could not go 'cause I would, you know, sleep all day. And that was my fault. But this [LDCP] allowed me to ...finish it that way. It's kind of like I really wanted to do it, but I couldn't finish. ... Teachers are intimidating to me. I don't know why. ...If I talk to my [high school] history teacher, I'm afraid I'm going to ask a dumb question, or if I'm going to interrupt him...Here they don't meddle when I don't need it. They only help when I need help. I like this because at school I just sit there and not listen to the teacher. Here I do the work and if I need help, I can ask. [S]

I had a child, it was too much stress having a kid, going to class, "the drama of high school." ...So I dropped out because of that. I couldn't deal with the pressure of high school – being up all night with the baby, and then get up at six in the morning to go to school. I would go some days and some days I wouldn't make it. I did complete [that grade]. But I started [the next year] and I'd go one day out the week and thought, 'Man,

this is just not going to work.' I like the fact that no matter how long you stay away, you don't have any make up work. You're still on track. [S]

I was sort of in the same situation she was. They're not my kids, but I have [younger siblings] and I dropped out when I was 16 because my mom was trying to work a full-time job and pay the bills and everything. But she needed a babysitter because we didn't have any extra money to pay for one. And so it was me who took care of [sibling]. She worked a third-shift job. And she would leave at 3:30. I'd get home at 3:20. I'd have like 10-15 minutes to get home from school. And most of the time I had to walk. I had to be home by 3:30. I never had time to do my homework or anything. ...A lot of teachers that are in classrooms all day, they speak to you like you are first graders, like they need to explain every last detail or you're not going to understand it. [LDCP] helps me out a lot because it's more one-on-one. You're not sitting in a classroom until the bell rings. You can interact with more people and get help from more than one teacher. It just makes it a lot easier. [S]

For me the biggest thing was, it's my choice. Whereas when I was in high school, I felt like I was forced to go everyday but now I can say, ok, this is when I'm going to go...It's more adaptable and flexible to my needs. ...Teachers here are accessible and personable. ...The fact that you don't have to take tests is nice. Because for a lot of people, you've got the book smarts, you can do the work, but the moment you put that title of the test, you freak out and your mind goes blank. You can't do it...One of the biggest things, is high school students are close to adults. ...If high schools would talk to them like they are adults, not belittle them, that in itself, would help them gain confidence. ...You get an actual diploma from the school you would have graduated from. People say, 'Oh, you're getting your GED.' I'm actually getting my high school diploma. You hear 'diploma' and it actually raises you up in people's minds. [S]

For me, I like it a lot better because I had a hard time at school. None of my family, except for one has graduated from high school... I'll be the second one. I can come in here and help people out. I like it a lot. ...When [high school teachers] speak to you, they kind of make you feel like a little kid. They talk down to you. These teachers treat us like adults. [S]

Increasing Self-Confidence

Aside from the flexibility of the LDCP, these stories illustrate the importance students placed on feeling respected and valued by LDCP teachers. The product of this was an increase in self-confidence—these students are confident they will finish this program and are optimistic when discussing their career aspirations upon completing the program. Several students plan to pursue coursework at the junior college or technical college level in careers such as medical office assistant, computer technician, photography, or nursing. Others are developing career plans or already have a job they enjoy.

We asked students to tell us the most important lessons they had learned as a result of their experiences and we have highlighted these below:

If you put your mind to it, you can do it. [S]

I can do this, I can do this – positive reinforcement, reprogram your mind. [S]

You have to be very patient to complete not just this program, but anything in life. You might not get it the first time, but you just keep trying and eventually you'll get it. You have to be patient. [S]

I think if there's one thing this course has taught me, it's endurance. ...I think that will help me in my job. [S]

You've got to be a positive thinker. Because if you have negative thoughts, it's going to take you forever to do it. I started about a month ago, at first I thought I couldn't do it. I wasn't getting anything done. Then I finally said, 'wait a minute I can do this.' [S]

Summary and Conclusions

The needs of the business community, schools, and students are highly interrelated. The business community wants access to motivated workers possessing basic employability skills. Employers want to play a more active role in career education to increase awareness of local opportunities for good paying jobs and careers. Schools want to prepare students to be successful in the workforce, college, and other post-graduation pursuits. Schools are also interested in engaging the business community in order to create practical linkages between education and the workforce. Students want to understand how what they learn in the classroom transfers to the jobs and education they will pursue after they graduate. Students crave more in-depth information from the business community about career options and pathways, applying for jobs, and being a good employee. Each group—the business community, schools, and students—has a stake in the success of the other group. Working together may offer the best opportunity for successfully meeting the needs of all the stakeholders.

Part Four. What Is Needed for the Future

Best Practices in Workforce Training

by Charles E. Krider and Susan Twombly

Introduction

This section will examine how other communities comparable to Lawrence manage workforce training. We considered Norman, Oklahoma; Salina, Kansas; St Joseph, Missouri; and Lincoln, Nebraska. The purpose was to identify possible best practices in nearby communities that could be considered for adoption in Douglas County.

Best Practices in Workforce Training

Norman, Oklahoma

Background

Norman, Oklahoma is located 17 miles south of Oklahoma City on I35. In 1972 the State of Oklahoma enacted the Oklahoma CareerTech system that has led to the establishment of 29 Tech Centers in Oklahoma. Local school districts had the option of establishing a Tech Center if they would provide funding. In Norman, the Moore Norman Technology Center (MNTC) is a partnership of the Moore and Norman school districts. Its budget is about \$16 million per year with 78 percent of that from local sources. A 15 mill local property tax is levied that until this year had to be approved by the voters each year. In February 2005, this tax was made permanent by votes in Moore and Norman. The mill levy was passed with 70 percent support. This tax provides 58 percent of the Tech Center's total funding.

The MNTC has its own 75 acre campus with 5 buildings and 315,000 square feet of building space. There are 118 full-time employees. In addition, the MNTC also has a newer second campus on 65 acres that has a 79,000 square foot building and a 15,000 square foot business incubator.

The MNTC has the mission and capacity to serve the training needs of area businesses and is an excellent example of the competition facing Lawrence. Norman has a clear advantage in attracting and retaining businesses that require significant training of their workforces initially and on an on-going basis.

Training for High School Students

Students from the two high schools can attend technical classes at the MNTC. Almost 1,200 students attended classes last year. About 50 percent of these students go on to a college. Articulation agreements exist so students can earn college credit for many of the technical courses. High school students account for about 50 percent of MNTC's enrollments.

All high school students must meet the same academic standards for graduation and the technical programs are all electives. There are programs in such areas as machinery, autos, and heating/air conditioning. Students can be certified in these areas. The MNTC has funding for equipment and specialized staff needed by these programs.

Training for Companies/Adults

Three major types of programs are offered by the MNTC. First, there are adult education programs for adults to get a GED. Programs in reading and math are an important part of this effort. Second, MNTC offers customized training programs for area businesses. Customized training for businesses comprises about 50 percent of the hours taught. Third, the Center also does training for federal programs – persons at risk and low incomes – the old JTPA (Job Training Partnership Act) programs.

The training directed at companies includes a wide range of topics but training programs are customized for each company. Training programs are offered at the MNTC Campus or on-site at the company. The following list illustrates the kind of training available to companies:

- Organization development
- Computer technology
- Quality management systems
- Technical training
- Safety and environment
- Training for industry

The organization development programs include:

- Strategic/business planning
- Leadership/management development
- Supervisory training
- Employee effectiveness training
- Team development
- Customer service training
- Customer satisfaction surveys/consulting
- Meeting facilitation
- Process improvement
- Communication
- Problem solving
- Sales/marketing training

Under Quality Management specific course include:

- ISO 9000
- ISO 14000
- Six sigma champion/black belt

These examples indicate that training goes significantly beyond technical training for manufacturing firms and extends to the kinds of skill training that all companies need to be competitive.

New and expanding companies have access to state dollars and training is done at the Center. The Center is very flexible and is willing to accommodate all reasonable requests for training. If they do not have a qualified instructor, they will find one. For example, employees at Yamanouchi Pharma Technologies, a Japanese company, wanted to learn Japanese. The Center found an instructor and is offering training. Spanish is also offered.

Another example of the Center's ability to meet business' needs is the recent experience of York, a major employer in the community. Last year they put in a new SAS computer system. The Tech Center provided training for the entire company, not just for employees in Norman. This example was offered to show the flexibility of the Tech Center and also the high regard it is held in by employers. Also, while Dell is located nearby it is not in the Tech Center's district. Nonetheless, it wanted the Center to do training for Dell employees.

Other examples of training are 6 Sigma, and asbestos abatement training in Spanish.

Cooperation with Economic Development

The Center is very important for economic development and cooperates fully with the City's economic development group, the Norman Economic Development Coalition. When recruiting new companies the Coalition can offer companies customized training at the Center at no cost. The State will pay the costs of training and firm must only pay the salaries of the employees in training.

While the Tech Center takes the initiative to contact employers it also participates in the Coalition's retention program. When the Coalition's Executive Director makes calls on companies, he is accompanied by representatives of the Tech Center, the state commerce department, the Chamber of Commerce, the manufacturing alliance, and the assistant City Manager. This kind of team allows for issues to be addressed on the spot. If the Company has an interest in training, the initial contact is made and the Center follows up at a later date. The Center has a Business Services division that works with companies.

Each company in Norman is visited by this team at least once every four years.

Conclusion

There is no doubt that having the Tech Center located in Norman makes a great difference for economic development. It is an integral part of the team for economic development and companies know that if they locate in Norman they will have close access to training for employees at all levels of an organization (with the exception of top management training). It is a well respected part of the community.

Our conclusion is that proximity matters. Having the Tech Center located in Norman has made it very accessible to area companies. The state requirement that the 15 mill levy tax be approved by voters each year provided a strong incentive for the Tech Center to work with companies as well as the two school districts.

The Moore Norman Technology Center is clearly a best practice and is a good model for Lawrence to consider.

Salina, Kansas

Background

The Salina Area Chamber of Commerce plays a major role in the city's workforce training program. It assumes the role of convener or broker and matches companies with training needs to the appropriate training provider.

Training for High School Students

Technical education in Salina is offered through the Salina Area Tech (SAT). SAT is under Salina's USD 305 and has its own campus at the airport next to Kansas State University. It offers technical training for high school students as well as post secondary students. Some of its programs for high school students include:

- . Applied Electronic Technology
- Auto Body Technology
- Construction Trades
- Diesel Technology
- Automotive Technology
- Health Occupations (CNA)
- Health Occupations II (Rehab A/CMA)
- Machine Shop Technology
- Commercial and Advertising Art
- Landscape Design and Greenhouse Management
- HVAC
- Computer Aided Drafting
- Welding Technology

The District passed a \$90 million bond issue to improve schools and the Tech programs benefited as a participant of the bond issue.

The District has a School to Work program that is administered in cooperation with the Salina Area of Commerce. Students have several options to learn about work including job shadowing and internships.

One innovative program acquaints students with careers in health care. Students take a course at the high schools on health care; a service provider, such as the hospital, provides some training to students; and the Chamber places the students with an appropriate health service provider. At the hospital the students do clinicals, which are similar to internships but for shorter periods of time. Students could be placed in a medical office or a pharmacy. This is part of the School to Careers program. After completing the program students can continue their medical careers at a community college or university.

Training for Companies/Adults

Salina Area Tech (SAT) also offers technical training for post secondary students. Many of the programs available to high school students are also available to adults through SAT's continuing education program. Its full array of programs provides adults with significant opportunities to improve their skills.

In addition, the Kansas State University at Salina College of Technology and Aviation, which is strong in Engineering Technology and Aviation, offers post-secondary programs in technology in Salina. The focus is on the application of techniques to real world problems. The definition used by KSCT is:

Engineering technology emphasizes the application of existing scientific and engineering techniques to a variety of real-world problems. "Application" is the key word in this definition, in that engineering technology differs from engineering in its emphasis on practical applications rather than on theory and design. Engineering technicians and technologists work in the job spectrum between the engineer and the skilled craftsman, with responsibilities closest to those of the engineer.

Its programs are in:

- Engineering Technology
- Aviation
- Arts, Science, and Business

The Salina Area Chamber of Commerce acts as a broker for companies that desire customized training for their employees. A company can call the Chamber and ask for assistance in finding any kind of training for employees. If a company knows where to obtain training, they can also make arrangements on their own. But they may also ask the Chamber for assistance in finding the right program. The advantage of the Chamber is that staff members maintain contacts to available training. Usually, the Chamber staff will first contact Salina Area Tech and then if necessary will contact Kansas State College of Technology. If management training is needed the Chamber staff may contact Kansas State University. Referrals can also be made to private schools.

On a few occasions the Chamber has hired persons to provide training for a company.

The Chamber uses a newsletter to keep members up-to-date on training opportunities.

Another service of the Chamber is initial assessments of employees or applicants. Companies can also use the Chamber offices for temporary office space to the hire or train employees.

Cooperation with Economic Development

The Chamber's training staff also participates in the Chamber's business retention program. A two person team, including one person knowledgeable of training availability in the area, will call on companies. If a company has an interest in training its employees the Chamber staff can begin its broker role quickly.

Conclusion

Salina has an advantage in providing technical training to students and companies thanks to the presence of the Salina Area Tech, technical programs at the two high schools and the Kansas State University - Salina College of Technology and Aviation.

The Chamber has played a useful role in the training system by acting as an honest broker between companies and training providers. Its staff has knowledge of what training is available in the community and will work with a company to fill gaps in the training system by offering some training itself.

St. Joseph, Missouri

Background

Two primary purveyors of technical training exist in St. Joseph: The Hillyard Technical Center and Missouri Western State College. The Hillyard Technical Center is part of the St. Joseph School District and offers technical/vocational education for high school students and for displaced/returning adults. Missouri Western State College offers customized, short-term training for industries through the Western Institute.

The Hillyard Technical Center

Background

The Hillyard Technical Center was founded in 1937 as an outgrowth of an area vocational technology center. It serves and is sponsored by the St. Joseph and 14 other school districts. It currently serves approximately 800 students in the secondary school program and 178 adults in the adult full-time program. In addition it serves between 1,200-1,500 students in its evening, part-time programs.

Programs

Students attend their regular high school for half-day and attend the Hillyard Center for the other half for one to two years (usually the junior and senior years). The afternoon programs involve internships and job shadowing. On the high school side, the Center offers an array of programs in health services fields, such as certified nurse assistant programs, and technical programs such as welding; housing construction; agriculture; computer technology; heating and air conditioning; and manufacturing skills. On the adult side, the Center serves mainly displaced workers in programs such as radiology technology, surgical technology, certified nurse assistant, and LPN programs.

Funding

The Center is funded by local school districts, and a variety of local and federal funding sources. For example, the Center receives federal Title IV money to serve the retraining needs of the adult

population. Funds from the Missouri Workforce Investment Board can also be used providing certain accountability measures can be met.

Relationship among Businesses/Chamber of Commerce

The Hillyard Center, the St. Joseph Area Chamber of Commerce, and the St. Joseph business community seem to be very well integrated. The Chamber has a person that serves a facilitating role, bringing together the educational and business communities. For example, the Chamber has brought companies and the education sector together to discuss opportunities and training needs. Business representatives and schools work together to develop appropriate curricula. Because businesses have a say in developing technical curricula, there is a significant amount of community interaction and buy-in according to the director of the adult division of the Hillyard Technical Center. She claims that this interaction results in local business hiring Hillyard graduates. The Hillyard instructors also have good relations with local companies as many of them are or have been employed by them.

Articulation

Hillyard's programs are also articulated with those of four year colleges in Missouri and Southeastern Nebraska. Approximately 65 percent of Hillyard graduates from the day program go on to college.

Missouri Western State College

Short-term Training

The Western Institute (formerly the Division of Continuing Education) of Missouri Western State College provides continuing professional education and customized training for local companies. In its approach to continuing professional education, the Western Institute is not that different from that of KU Continuing Education. It provides certification and recertification programs for many health care programs. The unit routinely does evaluations to determine community needs. The Institute's faculty members come from various institutions and sources, not just Missouri Western State College.

The Institute participates in the Missouri Customized Training program. This is an official state program that provides partial state funding to help companies keep Missouri companies in the state. The Institute helps companies develop proposals to secure funding to facilitate worker productivity. Whenever applicable, the Institute helps with the training. Through this program, the Institute serves companies within a 50 mile radius.

The Chamber, Hillyard, and Western Institute work closely together to enhance and encourage economic development in the St. Joseph area.

Conclusion

The Western Institute, the Hillyard Technical Center, and local companies have banded together in a manufacturing consortium to offer training. One of the barriers to training in the area is that some companies are not large enough to use the consortium.

The Institute meets with businesses through the formal manufacturing consortium 4 times per year and also at Chamber of Commerce meetings and attends business meetings throughout the area. The Institute identifies firms locating in the area and meets with them before they arrive to identify needs.

No significant barriers were identified aside from that of growing need and limited funding.

Lincoln, Nebraska

Technical training in Lincoln is done through the community college system. The Department of Labor offers retraining using the Unemployment Insurance Trust Fund. Employers apply for these funds and provide a 50 percent match.

The local director of the Department of Labor suggested that the local school districts do not do a very good job of providing technical training. He indicated that there are no vocational technical schools in the Lincoln area.

The Chamber of Commerce is not particularly involved in education related to work force development.

Overall Conclusion

The lack of an area technical school in Lawrence means that high school students do not have access to the array of technical education programs that are available to students in communities such as Norman, Oklahoma; St. Joseph, Missouri; and Salina, Kansas. Technical training is weak in Douglas County compared to the communities reviewed. Obviously, creation of an area technical school would respond to some of the workforce training needs of Douglas County. This should remain a long term goal for the County.

It would be very useful for representatives of the Chamber of Commerce to visit the Moore Norman Technical Center. This would provide essential information on the type of tech center that should be considered for Lawrence.

But even without an area technical school there is more that could be done to provide students with access to more competitive technical education programs. One area that may offer the most opportunity is to form cooperative alliances with industries as has been done in Lecompton for commercial construction. Cooperation among schools to offer more expensive programs on a cooperative basis could also be considered. Cooperation between Lawrence and Eudora schools on automotive training is an example that seems to be effective. Eudora also has established an effective cooperative program in print/graphic design that it could not offer on its own.

One other best practice that could be adapted to Douglas County is the workforce training broker function that is used in Salina. A central clearinghouse for workforce training could serve area businesses well by providing them with information on where technical training is available and assisting with the initial contacts. Post secondary training is available outside of Douglas County that could be used by firms in this county. However, not much is likely to happen unless the County is more proactive in matching firms with the appropriate training program.

The Chamber of Commerce in St. Joseph, Missouri seems to offer a model of collaborative working relationships among local companies, the Hillyard Center and the Western Institute. The Chamber is the hub of this connection and promotes specific workforce initiatives in response to local needs.

Appendix A Survey Instrument

Douglas County Workforce Training Needs Survey of Firms 2004-2005 Draft 3, 11/19/04

Hello. My name is _____. I'm calling from the Survey Research Center at the University of Kansas. We are conducting a survey of firms in Douglas County to assess workforce-training needs. Could I speak to the manager or executive in your business that would be most knowledgeable about the training level of your employees and the training needs of your employees? Who would that be?

N1 Individual's Name _____

N2 Title: _____

Thank you.

(once potential respondent is on phone)

Hello. My name is _____. I'm calling from the Survey Research Center at the University of Kansas. We are conducting a survey of firms in Douglas County to assess workforce-training needs. The USD 497 Administrative Task Force and the Lawrence Chamber of Commerce are sponsoring the survey and the results will be used to assess whether area educational resources are meeting the workforce training needs of firms in Douglas County. We would like to establish an appointment with you to take this important, but voluntary survey. All participants in this survey will remain anonymous and all responses will be completely confidential and will only be used in aggregate level analysis. The survey will take about 15 minutes to complete.

A1. Would you be willing to take this important survey?

Yes

No (thank and end phone call)

If so, would you be willing to take the survey now or would you prefer that we set up an appointment to complete the survey at a later date?

(note: any questions about the survey, its content, or use of the survey data should be directed to Dr. Charles Krider or Dr. Donald Haider-Markel).

Recent and Current Situation

1. I'm going to read you a list of employee positions. Please tell me all of the types of employees your firm employees (mark all that apply).

Clerical

Sales

Data processing personnel

Information Technology

Mechanics/machinists

Electronic/electrical technicians

Technicians

Draftsmen

Chemical process/lab technicians

Engineers

Officials and Managers—administrative and managerial

Construction

Operative (semiskilled)

Heavy equipment operators

Service workers

Craft Worker (skilled)

General labor (unskilled)

Maintenance

Other please describe (250

char.): _____

2. What materials do you require job applicants to submit before they can be hired?

- Standard application
- Resume
- Results of performance test (e.g. skills test administered on site)
- Proof of training, education
- Transcripts

3. In the past 5 years, about what percentage of your new employees lived in Douglas County when you hired them? _____% (enter only round number from 0 to 100)

4. In the past 5 years, about what percentage of your new employees came straight out of high school? _____% (enter only round number from 0 to 100)

4a. (if more than 0) About what percentage of these employees has specialized vocation or technical training in their High Schools? _____% (enter only round number from 0 to 100)

4b. (if more than 0) How satisfied are you with the technical or vocational skills of these employees?
Very dissatisfied,
dissatisfied,
satisfied,
very satisfied

4c. (if more than 0) About what percentage of **all employees you hired straight from High School** had to receive training from you to do the jobs they were hired for, beyond a basic training for the job that virtually any employee in any position would receive? _____% (enter only round number from 0 to 100)

5. In the past 5 years, about what percentage of your new employees had received technical or vocational training at an area community college or technical school? _____% (enter only round number from 0 to 100)

6. At which community colleges or technical schools were your employees trained? (mark all that apply)
Johnson County
Kansas College of Technology
Other

7. How satisfied are you with the technical or vocational skills of community college or technical school trained employees?
Very dissatisfied,
dissatisfied,
satisfied,
very satisfied

8. In the past 5 years, about what percentage of your employees were educated at a State University or private College? _____% (enter only round number from 0 to 100)

9. At which regional Colleges and Universities were your employees trained? (mark all that apply)

- Kansas State
- University of Kansas
- Emporia State
- Hays State
- Pittsburg State University
- Washburn University
- Baker University
- Other

10. How satisfied are you with the skills of employees from regional Colleges and Universities?

- Very dissatisfied,
- dissatisfied,
- satisfied,
- very satisfied

11. Overall, how would you describe the gap between the qualifications of newly hired skilled workers and the needs of your business?

- No gap,
- slight gap,
- moderate gap,
- severe gap

12. How strongly would you disagree or agree with the following statement: “The employees we hire for their specialized education do not have the knowledge to apply that education in a real-world application.”

- Strongly disagree
- Disagree
- Agree
- Strongly Agree

13. How difficult is it to find skilled employees for your firm from Douglas County?

- Fairly easy,
- Somewhat difficult,
- Moderately difficult,
- Extremely difficult
- Don't know

14. How difficult is it to find skilled employees for your firm from Kansas? Rather easy, somewhat difficult, moderately difficult, extremely difficult

- Fairly easy,
- Somewhat difficult,
- Moderately difficult,
- Extremely difficult
- Don't know

15. Considering your employees that come straight out of High School, in which of the following skill areas do employees hired by your firm need improvement in order to perform their jobs satisfactorily? (mark all that apply)

- | | |
|---|--|
| reading skills | machine operation |
| writing skills | skilled trades/craft |
| computation skills | general labor |
| listening and oral communication skills | teamwork |
| problem solving skills | goal-setting and personal motivation |
| comprehension/understanding skills | supervisory and management |
| interpersonal relations | adaptability/flexibility |
| basic office skills | proper attitudes toward work and work habits |
| basic computing skills | second language skills (Spanish) |
| electrical | other please describe (250 char.)_____ |
| technical | |
| mechanical | |

16. Considering your employees that come from Community College or Tech Schools in which of the following skill areas do employees hired by your firm need improvement in order to perform their jobs satisfactorily? (mark all that apply)

- | | |
|---|--|
| reading skills | machine operation |
| writing skills | skilled trades/craft |
| computation skills | general labor |
| listening and oral communication skills | teamwork |
| problem solving skills | goal-setting and personal motivation |
| comprehension/understanding skills | supervisory and management |
| interpersonal relations | adaptability/flexibility |
| basic office skills | proper attitudes toward work and work habits |
| basic computing skills | second language skills (Spanish) |
| electrical | other please describe (250 char.)_____ |
| technical | |
| mechanical | |

17. Considering your employees that come from Colleges and Universities in which of the following skill areas do employees hired by your firm need improvement in order to perform their jobs satisfactorily? (mark all that apply)

- | | |
|---|--|
| reading skills | machine operation |
| writing skills | skilled trades/craft |
| computation skills | general labor |
| listening and oral communication skills | teamwork |
| problem solving skills | goal-setting and personal motivation |
| comprehension/understanding skills | supervisory and management |
| interpersonal relations | adaptability/flexibility |
| basic office skills | proper attitudes toward work and work habits |
| basic computing skills | second language skills (Spanish) |
| electrical | other please describe (250 char.)_____ |
| technical | |
| mechanical | |

18. How does your firm address training shortcomings of new employees?

- Training the employee on the job/on-site with other employees
- Training the employee on the job/on-site with a commercial trainer
- Sending the employee to a commercial trainer offsite
- Sending the employee to a regional training program
- Other please describe: _____

19. When making this decision, what factors do you consider? (mark all that apply)

- Cost
- Proximity
- Ease (such as having on-site training)
- Quality of program
- Having enough employees that need training
- Other please describe: _____

20. Which two factors are most important? (mark no more than two)

- Cost
- Proximity
- Ease (such as having on-site training)
- Quality of program
- Having enough employees that need training
- Other please describe: _____

21. In the last 5 years has your organization utilized regional training programs to **upgrade** the skills of its employees?

- Yes,
- No (skip to...)
- don't know

22. How have you located training programs in the region? Please Describe

(better if we had categories)

23. Where have you obtained technical or vocational training for your present employees and state your level of satisfaction or dissatisfaction with each?

(note: Examples might include specific Community colleges, Tech schools, State Universities, Private vendors (suppliers of equipment or systems), Professional association seminars, Consultants/other commercial trainers, etc.)

23a. Name: _____ (100 Characters)

- Very dissatisfied,
- dissatisfied,
- satisfied,
- very satisfied
- don't know

23b. Name: _____ (100 Characters)

- Very dissatisfied,
- dissatisfied,
- satisfied,
- very satisfied

23c. Name: _____ (100 Characters)

Very dissatisfied,
dissatisfied,
satisfied,
very satisfied

23e. Name: _____ (100 Characters)

Very dissatisfied,
dissatisfied,
satisfied,
very satisfied

23d. Name: _____ (100 Characters)

Very dissatisfied,
dissatisfied,
satisfied,
very satisfied

24. In the past 5 years has your company every used customized training programs?

Yes,
No

25. (if yes) Approx how many times? _____ (number)

26. How did you learn about the training?

From the vendor
The training institution
A business associate
Corporate headquarters
State officials
Local officials
Advertising from professional associations/commercial trainers
Other

27. Who provided the customized training?

27a. Name: _____ (100 Characters).

How would you rate the quality of customized training from this source?

Very poor,
needs improvement,
adequate,
good
don't know

27b. Name: _____ (100 Characters).

How would you rate the quality of customized training from this source?

Very poor,
needs improvement,
adequate,
good
don't know

27c. Name: _____ (100 Characters).

How would you rate the quality of customized training from this source?

- Very poor,
- needs improvement,
- adequate,
- good
- don't know

28. To what extent do you disagree or agree with the following statement: "Customized training is more cost effective than other forms of training."

- Strongly disagree
- disagree,
- agree,
- strongly agree
- don't know

29. Why hasn't your organization utilized technical or vocational training programs to upgrade the skills of its employees? (mark all that apply)

- Employees haven't needed training
- Can't find the type of training needed
- The training is too expensive
- We've developed in-house training programs
- We do on-the-job training
- Other

30. Over the last 5 years, how often has someone from a community college or area technical school formally called upon your firm about providing customized training?

- Never,
- once in 3 years,
- once per year,
- twice or more per year
- don't know

31. How would you rate the geographic accessibility of vocational and technical training in Douglas County and surrounding counties?

- Very poor,
- needs improvement,
- adequate,
- good
- don't know

32. How would you rate the content of programs and courses offered by the vocational and technical system in Douglas County and surrounding counties?

- Very poor,
- needs improvement,
- adequate,
- good
- don't know

33. How would you rate the vocational and technical training instructors in Douglas County and surrounding counties?

- Very poor,
- needs improvement,
- adequate,
- good
- don't know

34. How would you rate the scheduling convenience of courses and training for employees seeking new skills training or retraining at vocational and technical schools in Douglas County and surrounding counties?

- Very poor,
- needs improvement,
- adequate,
- good
- don't know

35. To what degree would each of the following increase the likelihood of your firm obtaining training services locally?

Not at all, slightly, moderately, substantially

35a. Assistance with assessment of training needs

35b. More information about available training programs in Kansas

35c. State assistance in reducing the cost of training

35d. Greater flexibility in the scheduling of training programs that fit my company's needs

35e. Greater relevance of training offered to my firms' needs

35f. More up-to-date equipment

35g. More highly qualified instructors

36. What degree of interest does your firm have in working with area **High Schools** to develop programs to prepare students to enter the workforce in the following areas?

No interest, slight, moderate, substantial

36a. Serve on advisory boards for specific programs

36b. Contribute equipment

36c. Assist in developing new training programs to meet skill needs of your firm

36d. Donate staff time

37. What degree of interest does your firm have in working with area **High Schools** to educate students about career opportunities in your firm and the skills needed to capitalize on those opportunities?

- No interest,
- Slight interest,
- Moderate interest
- Substantial interest

How strongly do you disagree or agree with the following statements?

38. “The gap between our needs and employee skills has harmed our firm’s profitability”

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don’t know

39. “The gap between our needs and employee skills has prevented us from expanding our current operations”

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don’t know

40. “The gap between our needs and employee skills has prevented us from developing new services or products”

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don’t know

41. “The gap between our needs and employee skills has led us to expand our operations in locations outside of Douglas County.”

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don’t know

42. “The gap between our needs and employee skills has led us to consider outsourcing some of our operations.”

- Strongly disagree
- Disagree
- Agree
- Strongly agree
- Don’t know

Planning for the Future

We are just about done. I have a few questions about the future of your firm in Douglas County

43. If a clearinghouse with information on regional training programs were developed in Douglas County, how likely is it that your firm would use this service?

- Very unlikely
- Somewhat unlikely
- Somewhat likely
- Very likely

44. Over the next 5 years, how important will it be for your firm to have access to retraining programs for your employees?

- Not important,
- of minor importance,
- important,
- very important
- don't know

45. Over the next 5 years, how much will technology changes in your industry and your firm increase the level of technical or vocational skills required by your employees?

- Not at all,
- To a small degree,
- to a moderate degree,
- to a substantial degree,
- don't know

46. What skills will your present employees NEED TO ACQUIRE in order to adapt to technological changes anticipated over the next 5 years? (mark all that apply)

- | | |
|---|--|
| reading skills | machine operation |
| writing skills | skilled trades/craft |
| computation skills | general labor |
| listening and oral communication skills | teamwork |
| problem solving skills | goal-setting and personal motivation |
| comprehension/understanding skills | supervisory and management |
| interpersonal relations | adaptability/flexibility |
| basic office skills | proper attitudes toward work and work habits |
| basic computing skills | second language skills (Spanish) |
| electrical | other please describe (250 char.) _____ |
| technical | |
| mechanical | |

47. On an annual basis, about how many new employees does your firm hire in Douglas county?
_____ number

48. On an annual basis, about what percent of your workforce has to be replaced for any reason?
_____percent (0-100)

49. In the past 5 years has your firm's sales/revenue:

- grown rapidly,
- grown slowly,
- remained fairly stable,
- declined slowly,
- declined rapidly
- Don't know/refused

50. If you had your choice, what kinds of training programs would you like to see established in Douglas County or nearby counties?

_____ (250 characters)

51. And where would you prefer this program be housed?

- High School
- Vocational School
- Community College
- College or University
- Other: Please describe _____ (250 characters)

52. Do you have any comments you would like to add about problems with the regional workforce or your firm's need for employee training?

_____ (250 characters)

additional _____ (250 characters)

That's all the questions I have for you. Thank you for your time in completing this important survey. Have a great day.

Interviewer id. _____

Date: (e.g. 12/15/04) _____

Estimated length of survey (in minutes) _____

Appendix B Derivation of Sampling Weights

Derivation of Sampling Weights for Lawrence Workforce Training Needs Survey

Joshua L. Rosenbloom
17 February 2005

The Issue

The sample of establishments that responded to the survey is not identical in terms of industry or size distribution to the universe of firms of interest. If the decision of companies to respond to the survey was entirely random then we could simply treat the sample of responses as a representation of the broader population of companies. However, it is possible that willingness to respond to the survey and training needs may differ systematically by company size or industry. As a result, estimates based on the sample alone may either over or understate the importance of certain types of skill or training needs.

Comparison of the Sample with the Universe of Firms

Companies in the sample were grouped by 2-digit NAICS codes into industry categories. In some cases several 2-digit NAICS categories were combined to reduce the complexity of the sample. Each industry category was then subdivided into a number of different employment size classes.

Table B-1 reports the number of establishments in each industry-size class cell in the universe of potential respondents (top panel) and in the sample (bottom panel). Overall, slightly more than 1 in 3 companies participated in the survey. Comparison of the two panels indicates that response rates varied somewhat by size class, and rather more by industry. Construction was underrepresented, for example, while manufacturing, educational and health care services, and transportation and warehousing were overrepresented.

Table B-2 provides a similar comparison of responses in terms of the number of employees rather than establishments. The conclusions emerging from this table broadly parallel those emerging from Table B-1.

Construction of Sample Weights

By assuming that companies in each industry-size class cell accurately represent the population of companies in the corresponding cell it is possible to use the survey data to construct estimates that better reflect the training needs of the population of employers in Lawrence than the unadjusted sample.

Every industry is represented in the sample, but not all size-classes are represented within each industry, so the sample was constructed in two steps. The procedure used was the same for establishments and employment, which is illustrated in terms of establishments.

- Within each industry group I summed the number of establishments by size class in the population and in the sample. Define the ratio of these two numbers within size class j in industry i to be p_{ij} (p_{ij} = number establishments in the population in industry i size class j /number of establishments in the sample in size class j). In manufacturing for establishments with 6 to 9 employees there are 12 companies in the total population and 7 in the sample. Thus $p_{ij} = 1.71$, indicating that each of the 7 sample firms represents 1.71 firms in the population. If all size classes were represented in the sample for each industry calculating these ratios would be sufficient. But some size classes are not present for some industries.
- To account for this it is necessary to inflate the p_{ij} weights to reflect the missing size classes. Within each industry I summed the number of establishments in the population across all size classes and across size classes represented in the sample. Define the ratio of these two numbers to be r_i . For example, in agriculture, mining and utilities there is one company with 20-49 employees in the population, but none in the sample. In this industry there are 9 companies in the population and 8 in size-class cells represented in the sample. Thus $r_i = 1.125$ for this industry.
- To obtain the final weights I calculated the product $r_i * p_{ij}$ for each industry-size class cell, then I assigned these weights to individual companies in the sample.

Table B-1: Number of Establishments in the Population and the Sample, by Industry and Size-Class

NAICS	Description	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100 to 499	500 +	Row Total	Row Percent
Population Establishments										
11,21, 22	Agriculture, Mining, Utilities	3	1	4	1				9	1.6
23	Construction	28	50	42	15	2	1		138	24.2
31, 32, 33	Manufacturing	5	12	11	9	5	10	1	53	9.3
42	Wholesale trade	9	13	11	7	1			41	7.2
44, 45	Retail trade	1	5	4	2		1		13	2.3
48, 49	Transportation and Warehousing	2	5	7	5	5	1		25	4.4
51, 52, 53,55, 56	Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support	31	64	47	40	10	4	2	198	34.7
61, 62	Educational services, Health care services	1	6	3	5	5	4	1	25	4.4
71	Arts, entertainment, recreation	1	3	2	4	2			12	2.1
72	Accommodation and Food Service		2	4	5	1	1		13	2.3
81	Other Services (except public admin.)	8	19	12	3	1	1		44	7.7
	Column Total	89	180	147	96	32	23	4	571	
	Column Percent	15.6	31.5	25.7	16.8	5.6	4.0	0.7		
Sample Establishments										
11,21, 22	Agriculture, Mining, Utilities	2	1	1	0				4	2.0
23	Construction	9	9	12	7	0	0		37	18.6
31, 32, 33	Manufacturing	2	7	5	4	2	4	1	25	12.6
42	Wholesale trade	2	4	3	3	0			12	6.0
44, 45	Retail trade	0	0	2	2		1		5	2.5
48, 49	Transportation and Warehousing	1	3	5	3	1	0		13	6.5
51, 52, 53,55, 56	Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support	9	25	21	10	2	1	1	69	34.7
61, 62	Educational services, Health care services	0	0	3	2	3	3	0	11	5.5
71	Arts, entertainment, recreation	0	2	2	1	0			5	2.5
72	Accommodation and Food Service		0	1	2	0	0		3	1.5
81	Other Services (except public admin.)	1	10	3	1	0	0		15	7.5
	Column Total	26	61	58	35	8	9	2	199	
	Column Percent	13.1	30.7	29.1	17.6	4.0	4.5	1.0		

Table B-2: Number of Employees in the Population and the Sample, by Industry and Size-Class

NAICS	Description	0 to 5	6 to 9	10 to 19	20 to 49	50 to 99	100 to 499	500 +	Row Total	Row Percent
Population Employment										
11,21, 22	Agriculture, Mining, Utilities	15	6	60	37				118	0.7
23	Construction	140	364	528	445	141	127		1,745	9.8
31, 32, 33	Manufacturing	25	90	157	273	371	2,608	786	4,310	24.1
42	Wholesale trade	45	88	155	233	83			604	3.4
44, 45	Retail trade	5	38	53	58		122		276	1.5
48, 49	Transportation and Warehousing	10	31	104	148	338	173		804	4.5
51, 52, 53,55, 56	Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support	155	463	638	1,233	672	1,124	1,757	6,042	33.8
61, 62	Educational services, Health care services	5	43	37	147	402	921	1,101	2,656	14.9
71	Arts, entertainment, recreation	5	23	29	121	123			301	1.7
72	Accommodation and Food Service		15	57	122	55	214		463	2.6
81	Other Services (except public admin.)	40	136	151	67	56	100		550	3.1
	Column Total	445	1,297	1,969	2,884	2,241	5,389	3,644	17,869	
	Column Percent	2.5	7.3	11.0	16.1	12.5	30.2	20.4		
Sample Employment										
11,21, 22	Agriculture, Mining, Utilities	10	6	13	0				29	0.4
23	Construction	45	64	152	216	0	0		477	7.0
31, 32, 33	Manufacturing	10	51	73	141	155	895	786	2,111	30.8
42	Wholesale trade	10	27	42	90	0			169	2.5
44, 45	Retail trade	0	0	28	58		122		208	3.0
48, 49	Transportation and Warehousing	5	18	74	69	58	0		224	3.3
51, 52, 53,55, 56	Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support	45	184	276	265	157	158	1,240	2,325	33.9
61, 62	Educational services, Health care services	0	0	37	58	260	692	0	1,047	15.3
71	Arts, entertainment, recreation	0	15	29	38	0			82	1.2
72	Accommodation and Food Service		0	13	45	0	0		58	0.8
81	Other Services (except public admin.)	5	73	33	21	0	0		132	1.9
	Column Total	130	438	770	1,001	630	1,867	2,026	6,862	
	Column Percent	1.9	6.4	11.2	14.6	9.2	27.2	29.5		

Appendix C
Basic and Manufacturing Industry Tables

**Basic and Manufacturing Industry Responses
Survey Results¹**

**Table C-1
Participation by Firm Size
Basic and Manufacturing Industry (BMI) Responses**

Employees	Universe of Firms		BMI Completes	
	Number of Firms	Percent	Number of Firms	Percent
5 Employees	89	15.6	5	12.2
6 to 9	180	31.5	10	24.4
10 to 19	147	25.7	9	22.0
20 to 49	96	16.8	7	17.1
50 to 99	32	5.6	3	7.3
100 to 499	23	4.0	5	12.2
over 500	4	0.7	2	4.9
N=	571		41	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05,
Policy Research Institute, The University of Kansas, February 2005.

¹ Table numbers correspond to the table numbers in the text.

Table C-3
Types of Employees Found in Firms Surveyed
Basic and Manufacturing Industry (BMI) Responses

Types of Employees	Unweighted*			BMI Responses		
	Number	Percent	Rank	Number	Percent	Rank
Clerical	162	81.4	1	35	85.4	1
Officials and Managers	160	80.4	2	34	82.9	2
General Labor (unskilled)	99	49.7	4	25	61.0	3
Sales	109	54.8	3	22	53.7	4
Information Technology	56	28.1	11	20	48.8	5
Operative (semi-skilled)	71	35.7	7	20	48.8	6
Maintenance	79	39.7	6	19	46.3	7
Mechanics/Machinists	55	27.6	12	19	46.3	8
Craft Worker (skilled)	57	28.6	10	18	43.9	9
Data Processing Personnel	79	39.7	5	18	43.9	10
Technicians	66	33.2	9	18	43.9	11
Electronic/Electrical Technicians	43	21.6	14	15	36.6	12
Engineers	30	15.1	15	14	34.1	13
Draftsmen	29	14.6	17	10	24.4	14
Service Workers	70	35.2	8	10	24.4	15
Construction	53	26.6	13	7	17.1	16
Heavy Equipment Operators	30	15.1	16	7	17.1	17
Chemical Process/Lab Technicians	8	4.0	19	5	12.2	18
Other ^a	20	10.1	18	4	9.8	19
N=	199			41		

* Data sorted by BMI Number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other: Designers, includes graphic (5), drivers (5), architects (3), and health care workers (3) were mentioned by more than one firm. Mentioned by only one firm were: consultant, investigator, scientist, funeral director, embalmer, technical writer, livestock worker, and therapist.

Table C-4
Anticipated Employee Hirings and Business Growth
Basic and Manufacturing Industry (BMI) Responses

New Employees Hired <i>Annually</i>:	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
None	33	17.9	9	22.5
1 to 2	57	31.0	11	27.5
3 to 5	43	23.4	8	20.0
6 to 10	18	9.8	4	10.0
11 to 25	13	7.1	2	5.0
26 to 50	13	7.1	4	10.0
51 to 99	3	1.6	1	2.5
100 or More	4	2.2	1	2.5
N=	184		40	

Percent of Workforce Replaced <i>Annually</i>:	Total		BMI Responses	
	Number	Percent	Number	Percent
0%	29	15.8	8	20.5
1 to 10%	65	35.5	16	41.0
11 to 25%	42	23.0	9	23.1
26 to 50%	34	18.6	4	10.3
51 to 75%	9	4.9	2	5.1
76 to 100%	4	2.2	0	0.0
N=	183		39	

In the last 5 years, Firms' Sales or Revenue have:	Total		BMI Responses	
	Number	Percent	Number	Percent
Grown rapidly	37	18.6	9	22.5
Grown slowly	62	31.2	10	25.0
Remained fairly stable	65	32.7	13	32.5
Declined slowly	14	7.0	5	12.5
Declined rapidly	1	0.5	0	0.0
Don't know	8	4.0	3	7.5
N=	187		40	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

* Industry Groups: Construction (NAICS 23); Information/Managerial=Information, Finance and insurance, Real estate, rental and leasing, Management, Administrative and support (NAICS 51, 52, 53, 55, 56); Manufacturing (NAICS 31, 32, 33); and Other=Agriculture, Mining, Utilities (NAICS 11, 21, 22), Wholesale trade (NAICS 42), Retail trade (NAICS 44, 45), Transportation and Warehousing (NAICS 48, 49), Educational services, Health care services (NAICS 61, 62), Arts, entertainment, recreation (NAICS 71), Accommodation and food service (NAICS 72), and Other services, except public admin. (NAICS 81).

Table C-6
Douglas County Residents When Hired
Basic and Manufacturing Industry (BMI) Responses

*In the past 5 years, what percentage of **new employees lived in Douglas County** when hired?*

Percentage	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
0%	5	2.6	0	0.0
1 to 25%	11	5.7	4	10.5
26 to 50%	20	10.4	3	7.9
51 to 75%	17	8.9	3	7.9
76 to 99%	90	46.9	20	52.6
100%	49	25.5	7	18.4
N=	192		38	
Mean=	79.04%		76.79%	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table C-7
New Employee Characteristics
High School Educated
Basic and Manufacturing Industry (BMI) Responses

In the **past 5 years**, percentage of new employees **came straight out** of high school:

Percentage	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
0%	109	57.4	23	60.5
1 to 10%	37	19.5	8	21.1
11 to 25%	22	11.6	4	10.5
26 to 50%	10	5.3	0	0.0
51 to 75%	5	2.6	1	2.6
76 to 99%	7	3.7	2	5.3
100%	0	0.0	0	0.0
N=	190		38	
Mean=	10.57%		9.53%	
Range: 0 - 95%				

Satisfaction with the technical or vocational **skills** of high school educated employees:

Satisfaction	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Very dissatisfied	0	0.0	0	0.0
Dissatisfied	7	14.3	1	5.0
Satisfied	32	65.3	15	75.0
Very satisfied	10	20.4	4	20.0
N=	49		20	

Percentage of high school educated employees had **specialized vocation** or **technical training in their high schools**:

Percentage	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
0%	39	52.7	5	41.7
1 to 10%	9	12.2	2	16.7
11 to 25%	8	10.8	1	8.3
26 to 50%	12	16.2	3	25.0
51 to 75%	0	-	0	0.0
76 to 99%	0	-	0	0.0
100%	6	8.1	1	8.3
N=	74		12	
Mean=	18.61%		21.67%	

Percentage of high school educated employees that **needed more training** to do the job:

Percentage	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
0%	19	29.2	7	53.8
1 to 10%	7	10.8	0	0.0
11 to 25%	2	3.1	1	7.7
26 to 50%	3	4.6	0	0.0
51 to 75%	1	1.5	0	0.0
76 to 99%	2	3.1	0	0.0
100%	31	47.7	5	38.5
N=	65		13	
Mean=	55.09%		40.00%	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table C-8
New Employee Characteristics
Community College or Technical School Educated
Basic and Manufacturing Industry (BMI) Responses

In the past 5 years, percentage of new employees trained at an area community college or technical school:

Percentage	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
0%	86	46.0	17	44.7
1 to 10%	42	22.5	6	15.8
11 to 25%	29	15.5	8	21.1
26 to 50%	18	9.6	5	13.2
51 to 75%	4	2.1	1	2.6
76 to 99%	2	1.1	0	0.0
100%	6	3.2	1	2.6
N=	187		38	
Mean=	14.40%		14.74%	

Satisfaction with the technical or vocational skills of community college or technical school trained employees:

Satisfaction	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Very dissatisfied	1	1.0	0	0.0
Dissatisfied	7	7.2	1	5.0
Satisfied	67	69.1	15	75.0
Very satisfied	22	22.7	4	20.0
N=	97		20	

Community college or technical school where trained:

School	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Johnson County	63	31.7	13	33.3
Kansas College of Technology	10	5.0	4	10.3
Other ^a	52	26.1	9	23.1
N=	199		39	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

^a Other: Kansas technical school (20), which includes Topeka Kaw Valley (9) and Beloit, North Central (8); Kansas community college (12), which includes KCKS (4) and Neosho County (4); Private technical school in KC area (8); Out of state technical school (6); Pittsburg State (5); Out of state community college (2); Private technical school (2); and Don't know/not sure (7).

Table C-9
New Employee Characteristics
State University or Private College Educated
Basic and Manufacturing Industry (BMI) Responses

In the past 5 years, percentage of new employees educated at a state university or private college :

Percentage	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
0%	40	21.1	6	15.4
1 to 10%	30	15.8	8	20.5
11 to 25%	19	10.0	6	15.4
26 to 50%	36	18.9	6	15.4
51 to 75%	20	10.5	3	7.7
76 to 99%	25	13.2	6	15.4
100%	20	10.5	4	10.3
N=	190		39	
Mean=	40.25%			

Satisfaction with the skills of employees from regional colleges and universities:

Satisfaction	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Very dissatisfied	2	1.3	0	0.0
Dissatisfied	4	2.5	0	0.0
Satisfied	73	45.9	15	42.9
Very satisfied	64	40.3	16	45.7
Don't know	16	10.1	4	11.4
N=	159		35	

State university or private college where trained:

University or College	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
University of Kansas	128	64.3	33	80.5
Kansas State University	59	29.6	12	29.3
Baker University	43	21.6	8	19.5
Washburn University	39	19.6	8	19.5
Emporia State	28	14.1	5	12.2
Pittsburg State	26	13.1	7	17.1
Fort Hays State	22	11.1	2	4.9
Other ^a	31	15.6	6	14.6
N=	199		41	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

^a Other: Out of state public university (17); Out of state private college (10); Kansas public university (2); and Kansas private college (1).

Table C-10
Gap between Skills and Needs
Qualifications of Newly Hired
Basic and Manufacturing Industry (BMI) Responses

Gap between newly hired skilled workers and the needs of business:

Gap	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
No gap	21	11.1	2	5.1
Slight	59	31.2	13	33.3
Moderate	72	38.1	16	41.0
Severe	25	13.2	5	12.8
Don't know	12	6.3	3	7.7
N=	189		39	

*"The employees we hire for their specialized education do **not** have the knowledge to apply that education in a real-world situation."*

Disagree/Agree	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Strongly disagree	14	7.2	1	2.5
Disagree	77	39.7	22	55.0
Agree	72	37.1	15	37.5
Strongly agree	13	6.7	2	5.0
Don't know	18	9.3	0	0.0
N=	194		40	

*Difficulty with finding skilled employees from **Douglas County**:*

Level of Difficulty	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Fairly easy	42	21.8	11	28.2
Somewhat difficult	55	28.5	11	28.2
Moderately difficult	57	29.5	10	25.6
Extremely difficult	36	18.7	6	15.4
Don't know	3	1.6	1	2.6
N=	193		39	

*Difficulty with finding skilled employees from **Kansas**:*

Level of Difficulty	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Fairly easy	62	32.5	14	35.9
Somewhat difficult	47	24.6	10	25.6
Moderately difficult	51	26.7	10	25.6
Extremely difficult	21	11.0	3	7.7
Don't know	10	5.2	2	5.1
N=	191		39	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table C-11
Skill Areas of Employees that Need Improvement
High School Educated
Basic and Manufacturing Industry (BMI) Responses

Considering your employees that came straight out of *high school*, in which of the following skill areas do employees hired by your firm *need improvement* in order to perform their jobs *satisfactorily*?

Skill Areas	Unweighted			BMI Responses*		
	Number	Percent	Rank	Number	Percent	Rank
goal-setting and personal motivation	55	27.6	2	11	26.8	1
problem solving skills	51	25.6	3	11	26.8	1
proper attitude toward work and work habits	56	28.1	1	11	26.8	1
listening and oral communication skills	45	22.6	4	10	24.4	4
adaptability/flexibility	39	19.6	7	9	22.0	5
computation skills	42	21.1	5	9	22.0	5
interpersonal relations	29	14.6	12	9	22.0	5
teamwork	40	20.1	6	9	22.0	5
comprehension/ understanding skills	37	18.6	8	7	17.1	9
writing skills	32	16.1	11	7	17.1	9
basic computing skills	22	11.1	17	6	14.6	11
supervisory and management	33	16.6	10	6	14.6	11
reading skills	25	12.6	14	5	12.2	13
second language skills (Spanish)	27	13.6	13	5	12.2	13
mechanical	24	12.1	16	4	9.8	15
skilled trade/craft	34	17.1	9	4	9.8	15
technical	25	12.6	14	4	9.8	15
basic office skills	21	10.6	19	3	7.3	18
general labor	20	10.1	20	3	7.3	18
electrical	17	8.5	21	2	4.9	20
machine operation	22	11.1	17	2	4.9	20
other ^a	3	1.5	22	0	0.0	22
N=	199			41		

* This table is sorted by the BMI number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: confidence, adult choices, life skills, such as parenting.

Table C-12
Skill Areas of Employees that Need Improvement
Community College or Technical School Educated
Basic and Manufacturing Industry (BMI) Responses

Considering your employees that come from *community colleges* or *technical schools* in which of the following skill areas do employees hired by your firm *need improvement* in order to perform their jobs *satisfactorily* ?

Skill Areas	Unweighted			BMI Responses*		
	Number	Percent	Rank	Number	Percent	Rank
goal-setting and personal motivation	49	24.6	1	13	31.7	1
problem solving skills	36	18.1	6	11	26.8	2
proper attitude toward work and work habits	47	23.6	2	10	24.4	3
writing skills	40	20.1	4	10	24.4	3
adaptability/flexibility	30	15.1	8	9	22.0	5
supervisory and management interpersonal relations	43	21.6	3	9	22.0	5
listening and oral communication skills	29	14.6	9	8	19.5	7
comprehension/ understanding skills	39	19.6	5	8	19.5	7
computation skills	27	13.6	10	7	17.1	9
teamwork	25	12.6	11	7	17.1	9
reading skills	33	16.6	7	7	17.1	9
second language skills (Spanish)	16	8.0	19	6	14.6	12
machine operation	24	12.1	12	6	14.6	12
basic computing skills	16	8.0	19	5	12.2	14
mechanical	19	9.5	17	4	9.8	15
basic office skills	22	11.1	14	4	9.8	15
electrical	21	10.6	15	3	7.3	17
general labor	19	9.5	17	3	7.3	17
skilled trade/craft	12	6.0	20	3	7.3	17
technical	21	10.6	15	2	4.9	20
other ^a	24	12.1	12	2	4.9	20
N=	3	1.5	21	0	0.0	22
	199			41		

* This table is sorted by the BMI number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: basic geography, customer service skills.

Table C-13
Skill Areas of Employees that Need Improvement
State University or Private College Educated
Basic and Manufacturing Industry (BMI) Responses

Considering your employees that come from *colleges* and *universities*, in which of the following skill areas do employees hired by your firm *need improvement* in order to perform their jobs *satisfactorily* ?

Skill Areas	Unweighted			BMI Responses*		
	Number	Percent	Rank	Number	Percent	Rank
goal-setting and personal motivation	62	31.2	2	19	46.3	1
proper attitude toward work and work habits	67	33.7	1	17	41.5	2
problem solving skills	52	26.1	5	15	36.6	3
listening and oral communication skills	53	26.6	4	13	31.7	4
supervisory and management interpersonal relations	55	27.6	3	13	31.7	4
teamwork	50	25.1	6	12	29.3	6
adaptability/flexibility	40	20.1	9	12	29.3	6
writing skills	46	23.1	8	11	26.8	8
computation skills	48	24.1	7	10	24.4	9
basic computing skills	25	12.6	13	9	22.0	10
comprehension/ understanding skills	20	10.1	17	7	17.1	11
reading skills	33	16.6	10	7	17.1	11
second language skills (Spanish)	17	8.5	19	7	17.1	11
electrical	32	16.1	11	7	17.1	11
basic office skills	23	11.6	14	6	14.6	15
machine operation	23	11.6	14	5	12.2	16
mechanical	16	8.0	20	5	12.2	16
technical	21	10.6	16	5	12.2	16
skilled trade/craft	27	13.6	12	5	12.2	16
general labor	19	9.5	18	3	7.3	20
other ^a	10	5.0	21	1	2.4	21
other ^a	4	2.0	22	1	2.4	21
N=	199			41		

* This table is sorted by the BMI number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: common sense, critical thinking, customer service skills, database work, marketing, geography, and small business orientation.

Table C-21
Gap between Skills and Needs: Opinions on
Impact on Profitability, Expansion, Development, Future Plans
Basic and Manufacturing Industry (BMI) Responses

The gap between our needs and employee skills has:

Harmed our firm's profitability:

Disagree/Agree	Unweighted		BMI Response	
	Number	Percent	Number	Percent
Strongly disagree	26	13.8	6	15.0
Disagree	90	47.6	20	50.0
Agree	49	25.9	9	22.5
Strongly agree	13	6.9	0	0.0
Don't know	11	5.8	2	5.0
N=	189		40	

Prevented us from expanding current operations:

Disagree/Agree	Unweighted		BMI Response	
	Number	Percent	Number	Percent
Strongly disagree	39	20.7	7	17.5
Disagree	95	50.5	24	60.0
Agree	42	22.3	3	7.5
Strongly agree	7	3.7	4	10.0
Don't know	5	2.7	2	5.0
N=	188		40	

Prevented us from developing new products/services:

Disagree/Agree	Unweighted		BMI Response	
	Number	Percent	Number	Percent
Strongly disagree	33	17.5	7	17.5
Disagree	109	57.7	24	60.0
Agree	34	18.0	6	15.0
Strongly agree	9	4.8	3	7.5
Don't know	4	2.1	0	0.0
N=	189		40	

Led us to expand outside Douglas County:

Disagree/Agree	Unweighted		BMI Response	
	Number	Percent	Number	Percent
Strongly disagree	37	19.6	11	27.5
Disagree	105	55.6	21	52.5
Agree	30	15.9	6	15.0
Strongly agree	4	2.1	0	0.0
Don't know	13	6.9	2	5.0
N=	189		40	

Led us to consider outsourcing:

Disagree/Agree	Unweighted		BMI Response	
	Number	Percent	Number	Percent
Strongly disagree	37	19.8	7	17.9
Disagree	91	48.7	18	46.2
Agree	45	24.1	11	28.2
Strongly agree	9	4.8	2	5.1
Don't know	5	2.7	1	2.6
N=	187		39	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table C-22
Future of Firm in Douglas County
Need for Training Assistance/Programs
Basic and Manufacturing Industry (BMI) Responses

Likelihood that firm would utilize a clearinghouse on regional training programs:

Likelihood of Using Service	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Very unlikely	33	17.6	8	20.0
Somewhat unlikely	39	20.7	5	12.5
Somewhat likely	85	45.2	23	57.5
Very likely	27	14.4	4	10.0
Don't know	4	2.1	0	0.0
N=	188		40	

Over the next 5 years, importance for firm to have access to retraining programs:

Importance of Retraining	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Not important	45	24.2	8	20.0
Of minor importance	46	24.7	16	40.0
Important	57	30.6	11	27.5
Very important	33	17.7	4	10.0
Don't know	5	2.7	1	2.5
N=	186		40	

Over the next 5 years, technology changes will increase the level of skills required by employees:

Impact of Technology on Skill Level of Employees	Unweighted		BMI Responses	
	Number	Percent	Number	Percent
Not at all	23	12.2	3	7.5
To a small degree	56	29.8	15	37.5
To a moderate degree	55	29.3	10	25.0
To a substantial degree	51	27.1	12	30.0
Don't know	3	1.6	0	0.0
N=	188		40	

Source: Douglas County Workforce Training Needs Survey of Firms 2004-05, Policy Research Institute, The University of Kansas, February 2005.

Table C-23
Skills Present Employees Need to Acquire
to Adapt to Technological Changes Anticipated
Basic and Manufacturing Industry (BMI) Responses

Skills present employees need to acquire to adapt to technological changes anticipated over the next 5 years:

Skill Areas	Unweighted			BMI Responses*		
	Number	Percent	Rank	Number	Percent	Rank
goal-setting and personal motivation	117	58.8	1	29	70.7	1
adaptability/flexibility	108	54.3	4	27	65.9	2
problem solving skills	109	54.8	3	26	63.4	3
proper attitude toward work and work habits	114	57.3	2	26	63.4	3
comprehension/ understanding skills	106	53.3	5	24	58.5	5
supervisory and management listening and oral communication skills	104	52.3	7	21	51.2	7
teamwork	102	51.3	8	21	51.2	7
basic computing skills	87	43.7	9	20	48.8	9
technical	66	33.2	13	20	48.8	9
interpersonal relations	85	42.7	10	19	46.3	11
computation skills	80	40.2	11	17	41.5	12
machine operation	49	24.6	19	15	36.6	13
writing skills	70	35.2	12	15	36.6	13
electrical	45	22.6	21	13	31.7	15
mechanical	53	26.6	17	13	31.7	15
reading skills	57	28.6	16	12	29.3	17
basic office skills	58	29.1	15	11	26.8	18
second language skills (Spanish)	61	30.7	14	11	26.8	18
general labor	47	23.6	20	9	22.0	20
skilled trade/craft	53	26.6	17	8	19.5	21
other ^a	4	2.0	22	0	0.0	22
N=	199			41		

* This table is sorted by the BMI number.

Source: Douglas County Workforce Training Needs Survey of Firms 2004-2005, Policy Research Institute, The University of Kansas, February 2005.

^a Other includes: common sense, life skills, not sure at this point.

Appendix D Comments about Workforce Training

52. Do you have any comments you would like to add about problems with the regional workforce or your firm's need for employee Training?

Twenty-two respondents had no comment and 132 cases were missing for a total of 45 comments.

Comments:

1. Affordable computer and software training.
2. All we want is someone with a good work ethic and dependable.
3. The biggest difficulty is finding people who are willing to work and have a proper work ethic.
4. The biggest problem is [lack of] basic standards such as work responsibility, general work habits and attitudes need to be better. Better attitude toward construction industry, the way a career in construction is viewed needs to be improved.
5. Computation skills in math without use of computers and calculators are terrible.
6. Customer service skills are pretty underdeveloped.
7. Difficult to find employees with proper work ethic.
8. Formed a new business a year ago, in the last quarter put an emphasis on continuing education.
9. High school programs for practical business applications.
10. Housing cost is one of the biggest concerns. Also, the current shortage of architectural engineers.
11. I think the workforce needs training in good work habits; that goes a long way.
12. I think we've felt that the high schools do not promote technical schools as an option for the kids.
13. Increase expectations for primarily the ones coming out of college.
14. It gets worse every year. There is a great need for motivation.
15. Kids need to be taught to be more responsible.

16. Local assistance with international students concerning visa applications.
17. Lose many employees to Johnson County [where] pay [is] \$9/hour [or] more. More education equals more motivation. Also, training around 10-15 years ago was not good at all; has gotten a bit better.
18. More so than their skill level, the problem I see with employees is their reliability. We need reliable employees.
19. Most of the good people have jobs.
20. Mostly college kids that don't view it as a career; that hurts their motivation.
21. Not much available in Lawrence.
22. Of all the applications we receive it's amazing how many are poorly completed.
23. Our company is specialize, no degree in [omitted to protect confidentiality] so we look for intelligent high school grads, what they lack is a deeper understanding of what they are doing.
24. Out of 300 interviews for an entry level position, we didn't find anyone experienced or educated enough.
25. Plenty of people.
26. Population in the workforce is shrinking. (need of work)
27. Quality of community colleges and tech schools in Douglas County is below quality of education in Johnson County schools.
28. Remember we have a lot of in-house in Kansas City.
29. Soft skills are more important in our case; such as respect, multi tasking, ability to work with others, etc.
30. The firm does not feel connected with training programs directly. Their employees have to provide it by themselves and that's it.
31. The only comment that I'd make is that I believe in the high schools they need to be educated more in life skills, that's an area we see a huge problem with. Includes things like work attendance, habits, etc. I believe if they started in the high school we wouldn't have to teach them.
32. The problem is that the turnover in a college environment is high.

33. There's way too much emphasis in college training.
34. They are a small company with specific needs so that is why the answers my skew to one way.
35. They need better math skills.
36. Thinks that the education system K-12 was broken by not having high enough advancement requirements.
37. This firm does offer CNA courses twice a year. Has slots for 10 students and often has a waiting list of 30. She believes theirs is the least expensive course in the area. Would like to see more CNA courses offers.
38. This is an extremely small business.
39. Too long.
40. Understanding loyalty and expectations.
41. We already specialized and we do not fit into the box that well.
42. We don't have good enough technicians in the mechanical business.
43. We gave tremendous need for skilled workers. There's a big gap between the college educated white collars and the McDonalds crowd. Douglas County has suffered for lack of dedicated and skilled employees.
44. Work ethic needs to be reintroduced. Honest, respectful, timely.
45. Would like to see potential employees become more aware of the needs of the employer.

Appendix E
Letter to Douglas County Area Public School Administrators



To: Area Superintendents and High School Principals
From: Bruce Passman, Executive Director of Student Services, USD 497
Co-Chair of the Lawrence Chamber of Commerce/USD497 Task Force on
Career Technical Education

Date: February 10, 2005

RE: Policy Research Institute Study

As you may be aware, a career technical education task force was formed through a partnership between Lawrence Public Schools and the Lawrence Chamber of Commerce. The overall charge to this task force is to study and generate recommendations regarding career/technical education needs for Douglas County students and for business and industry in our area.

To assist us with this project, the Policy Research Institute (PRI) of the University of Kansas was commissioned to conduct an extensive evaluation within our area. The evaluation includes surveys, interviews, and focus groups with a representative sample from business and industry as well as from leaders and faculty members from the public schools. We would greatly appreciate your commitment to participate in the evaluation process. Your perspectives and those of your staff members will be critical in determining gaps and needs in career technical education opportunities for our students and for the workforce.

Susan Mercer and Genna Hurd are the principal investigators from PRI who will facilitate the public education component of the evaluation. They will be contacting you in the very near future in order to schedule a focus group for school leaders (Superintendents and High School Principals) and for career technical education faculty and counselors. The focus group sessions will last no longer than two hours. Please let your counselors and teachers working in that area know that they may be contacted by either Genna or Susan.

We are anxious to complete the study and to begin planning for career technical education needs that may be identified. At the next meeting we will share the results with the Task Force of which superintendents are members.

Thank you in advance for your help with this important and timely project.

Appendix F Focus Group Protocols

Administrator Focus Group Protocol

1. About what percent of your students are college bound, what percent will attend technical school, and what percent will not further their education? (Of the ones who attend college or technical school, about what percent will finish?)
2. Tell us about the technical programs your school offers.
3. Tell us about courses or programs offered that teach life or soft skills? (Does this include all students?)
4. If a student is not planning to attend some type of post-secondary education, is he/she assisted with job placement? (If so, how and how successful is this? If not, why not? Where are grads sent for work placement assistance?)
5. Is there pressure from parents not to place students because they want their kids to attend college? Is this a problem?
6. What role *should* schools have in preparing students for the workforce?
7. What does your school do to help prepare students for the workforce? (Programs, activities, business partnerships, shadowing, mentoring, guest speakers, etc.)
8. What (if any) specific programs at your school assist students with the transition from school to work? (What role do counselors play in this transition?)
9. Within your school, what gaps do you see in preparing students to enter the workforce?
10. What existing programs would you like to enhance to better prepare students for the workforce? What new programs would you like to see developed? What are the barriers to making these changes?
11. In what ways are Douglas County businesses involved in this process? How well is this relationship working?
12. What kind of direct contact do teachers have with businesses?
13. What opportunities are there for your students to learn about career opportunities in the Douglas County area?
14. What role *should* the business community have in helping prepare students for the workforce? What are the barriers?
15. Is there anything we didn't discuss today that you believe is important for us to know?

High School Technical Educator and Counselor Protocol

1. About what percent of your students are college bound, what percent will attend technical school, and what percent will not further their education? (Of the ones who attend college or technical school, about what percent will finish?)
2. Tell us about the technical programs your school offers. (About what percentage of your students are involved in these programs in some way?)
3. Tell us about courses or programs offered that teach life or soft skills? (Does this include all students?)
4. If a student is not planning to attend some type of post-secondary education, is he/she assisted with job placement? (If so, how and how successful is this? If not, why not? Where are grads sent for work placement assistance?)
5. Is there pressure from parents not to place students because they want their kids to attend college? Is this a problem?
6. What role *should* schools have in preparing students for the workforce?
7. What does your school do to help prepare students for the workforce? (Programs, activities, business partnerships, shadowing, mentoring, guest speakers, etc.)
8. What (if any) specific programs at your school assist students with the transition from school to work? (What role do counselors play in this transition?)
9. Within your school, what gaps do you see in preparing students to enter the workforce?
10. What existing programs would you like to enhance to better prepare students for the workforce? What new programs would you like to see developed? What are the barriers to making these changes?
11. In what ways are Douglas County businesses involved in this process? How well is this relationship working?
12. What kind of direct contact do teachers have with businesses?
13. What opportunities are there for your students to learn about career opportunities in the Douglas County area?
14. What role *should* the business community have in helping prepare students for the workforce? What are the barriers?
15. Is there anything we didn't discuss today that you believe is important for us to know?

Former Student Focus Group Protocol

1. How old were you when you got your first job? How did you go about getting it? (i.e. who helped you, what did you do, how did you hear about it?)
2. How difficult was it for you to find a job after leaving high school? (If it was difficult, what made it so? If it was easy, why was it easy?)
3. What was the one thing that helped you most in your job search?
4. Upon graduation (or when you left school), how prepared were you to enter the workforce?
5. What were some of the problems you encountered as you started looking for work?
6. How did you learn about job openings?
7. What opportunities for careers do you know about in the Lawrence or Douglas County area?
8. How did you learn about career opportunities in the Lawrence and Douglas County area?
9. Do you know what it takes (skills, training) to get into those careers?
10. How did you learn about the training requirements for those careers?
11. How do you know where to go to get that training?
12. What's the most important training you've had and how did you get it?
13. How much did you learn about career opportunities and training while you were in high school?
14. In what way(s) did high school help prepare you for the workforce? (Specific programs? Resume development or mock interviews? Etc.)
15. What else could schools do to help prepare students to enter the workforce?
16. What role could the community take in helping students prepare for the workforce?
17. If you could design the perfect program that would help you prepare for the workforce or for a career, what would it look like? Take a few minutes to think about this and jot down some ideas. (Consider: What would be the key pieces? Who would be involved? (Would it involve the high school? The community? A business or businesses? Some other group?) What would it look like? How would it be structured? Where would it be located?)
18. Is there anything we didn't discuss today that you believe is important for us to know?

Appendix G Business Focus Group Summary

Two focus group sessions with Douglas County employers were held on November 4, 2004 at the Lawrence Chamber of Commerce. Participants included 10 members of the business community; six in the morning session and four in the afternoon session. (Three additional confirmed participants did not attend.) Each session lasted approximately two hours.

Workforce Recruitment

Frequent Sources/Approaches to Hiring

- Prefer referrals from current employees
- Some look to competitors for employees
- Lawrence Workforce Center; Kansas Job Link
- Display signs in business windows
- Use company website
- Temp agencies

Less Frequent Sources/Approaches to Hiring

- Recruiters
- Job Fairs
- Newspaper ads
- Trade publications

Hiring Process

Described as a “pretty frustrating process”

- Applications incomplete, messy, etc.
- Unreasonable expectations for pay and work (time off, schedules, benefits, etc.)
- Poor self-presentation (attire, interview skills)
- Turnover rate high
- Training costs high

Want trainable employees with basic skills

- Fit organization culture
- Good work ethic – willing to work
- General computer skills (basic)
- Careers are possible in local industry
- Attention to quality

Some prefer high school grads to college grads

- College students have high(er) expectations that are often unrealistic
- College students also lack practical experience

Training

Jobs too specialized for outside training

- regardless of source of employee, must be trained

Few used outside programs

- Exceptions: new equipment (utilize equipment manufacturer training services)
- Johnson County Community College – specialized for company; worked well

Void in manager training

Especially transition from employee to manager/supervisor
Maintenance, electrical, industrial maintenance technology
No need or expectation for local community/technical college

Missed Opportunities

Tech sales – opened satellite office elsewhere
Rethinking future product lines and equipment purchases – cheaper equipment with lower skill levels required to operate
Concern about lack of large labor pool to handle expansion (up to three times current size)
Considering outsourcing because of high turnover and small labor pool

Role for High Schools

Basic job/life skills training
 Basic reasoning/logic/problem solving
 First impressions matter
 Getting along/teamwork
 Applying for a job/interviewing/resumes
Make sure students understand how important a diploma or GED is
Parents have a role too...
Need programs for non-college bound
 Vo-tech/"craft" training
 Give insight about career opportunities that are available through local companies that are good paying positions
Program for juniors/seniors to visit East Hills Business Park; offered fall 2003; students toured facilities, talked to human resources; learned about opportunities and expectations; valuable opportunity to show students what a job at their business is really like

Lawrence Workforce Center

Looked at very favorably
Good resource on many levels
Potential for cooperative program with high school students
Basic job readiness training
Recruitment resource