Assessment of the Technical Training Needs of the Lawrence Community

Report to the USD 497 Administrative Task Force on Technical Education

Executive Summary

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A copy of this report can be obtained by contacting: The USD 497 Administrative Task Force on Technical Education, c/o The Lawrence Chamber of Commerce, 734 Vermont, Ste. 101, Lawrence, Kansas 66044, (785) 865-4427. For an electronic copy, visit the Policy Research Institute research reports page, http://www.ku.edu/pri/resrep/resrep.shtml.

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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.

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	1 proper attitude toward	1 proper attitude toward	1 goal-setting and	
work and work habits	work and work habits	work and work habits	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	
computation skills	5. listening and oral	5. listening and	5. comprehension/	
	communication	communication	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/	10. interpersonal relations	10. comprehension/	10. basic computing skills	
management		understanding		
Second language skills (Spanish)				

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

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 is 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.