

Kansas Research Report

ADULT BASIC SKILLS
AND THE KANSAS WORKFORCE

Institute for Public Policy and Business Research
The University of Kansas

KANSAS
inc.

ADULT BASIC SKILLS
AND THE KANSAS WORKFORCE

EXECUTIVE REPORT

by

INSTITUTE FOR PUBLIC POLICY AND BUSINESS RESEARCH
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ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Kansas Inc. is a public-private partnership created by the 1986 Kansas Legislature. The organization, through objective research and analysis, seeks to provide Kansas leaders and decision-makers with policy direction that can improve the economic competitiveness of Kansas. Kansas Inc. serves as advisor to the Governor and Legislature, analyzing the State's tax, regulatory, and economic development policies. It conducts research and recommends actions to produce a growing Kansas.

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This study was undertaken by Kansas Inc. in recognition of the importance of the Kansas workforce to the continued growth and vitality of the state. This importance will be even greater in the coming decade as we adjust to new economic challenges. □

CONTENTS

<i>INTRODUCTION</i>	1
<i>BACKGROUND: A NEW ECONOMIC CHALLENGE</i>	3
<i>BACKGROUND: THE CONCEPT OF ADULT BASIC SKILLS</i>	7
<i>BACKGROUND: THE ADULT BASIC EDUCATION SYSTEM</i>	13
<i>KANSAS ADULT BASIC SKILL TRAINING SYSTEM: SURVEY OF KANSAS PROGRAMS</i>	21
<i>ADULT BASIC SKILLS TRAINING AND THE WORKFORCE: A SURVEY OF KANSAS BUSINESSES</i>	31
<i>POLICY OPTIONS FOR CONSIDERATION</i>	39

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

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**Introduction:
The Challenge Facing Kansas**

Over its 130 year history, Kansas has made the education of its youth a top priority. While the mission of the Kansas public education system has focused on both college-bound and non-college youth, it has shifted over time, making non-college youth a lower priority for the system and providing them with generic skills which have become less applicable to the workplace. This system was workable in the past, as business relied on less complicated technology and processes and could easily choose from a large pool of applicants. Additionally, if an employee's skills were inadequate, s/he could be replaced or trained to complete a simple, repetitive task.

The traditional relationship between business and education can best be described as a sequential training system in which education first provides employees with a set of generic skills which are applicable to any job. Business then takes those employees and gives them specific training required to complete a particular task. Because the skills provided by education are generic and derived with no input from business, students are not guaranteed that they have acquired the right kinds of skills for the workplace.

The result of this system has been a workforce which may not have an appropriate or adequate inventory of basic skills which is necessary to acquire more advanced, job-related skills. Kansas must re-examine the relationship between business and education because: 1) rapid changes in technology demand that workers have a greater array of skills; 2) businesses will have to rely on groups

which have customarily had low basic academic skills; and 3) non-college youth must be told that there is a life after high school.

Kansas has begun to address the skill needs of its workforce by making skill training a high priority. However, training has focused on more advanced technical skills needed by employees to perform new tasks, operate new machinery, or understand new production methods. If an employee does not have adequate basic skills, s/he may not be able to understand or benefit from more advanced skill training.

Kansans without basic skills face a bleak future. Because of their low skills, they are forced into jobs with low wages and little chance for advancement or economic stability. Businesses also suffer—in terms of competitiveness—if their employees lack basic skills. Is this a problem in Kansas? The answer is yes: Kansas employers report a gap between the skills that new and current employees have and those needed to perform the job, especially such skills as goal setting and personal motivation, work habits, listening and communication, and problem solving.¹

These results suggest that Kansas must focus on the skill needs of the current workforce, including those with and without a high school diploma or GED, as well as those who will enter the workforce in the future. In order to address this issue, education and business should work in partnership to address the basic skill needs of the Kansas workforce. Competitive businesses are accustomed to working in partnerships which focus on meeting the needs of their customers, forming relationships with customers and suppliers, and incorporating the concept of continuous improvement into their design and production processes. Education should also be seen as a supplier to business, and as such, business and education need to evolve from the sequential training system

to a coordinated, integrated business/education partnership. To produce quality products, business must first have quality inputs, including workers.

This study was undertaken to determine whether or not the state's adult education system is positioned to meet the needs of Kansas' workforce and business community. Keeping this in mind, the major goals of the study were to: 1) describe the current programs offering adult basic academic skills instruction, including the state's Adult Basic Education system and independent community-based organizations, and 2) propose policy options.

To achieve these goals, six areas of research were undertaken:

1. An analysis of the technological and competitive changes in the world, U.S., and Kansas and their impact on the economic environment and labor supply, and, in turn, the implications for adult education;

2. A literature review of the issues regarding the concept of literacy and an estimation of the size and scope of the literacy problem;

3. A broad summary of the Adult Basic Education system in Kansas, comparing it to other states' efforts;

4. An inventory of adult education and literacy programs within the public school system and those available through supportive state and community agencies. This analysis included on-site visits, surveys, and an examination of statistics collected on organizations and agencies in the public sector and in community based organizations that deliver adult education and literacy services;

5. A survey of large Kansas businesses which assessed workforce deficiencies in basic skill areas and identified what firms were doing to improve basic skills; and

6. An assessment of other states' policies and current business programs targeting literacy and the basic educational needs of their workforce. Information was collected through on-site visits to key states and businesses, and a review of literature describing state policy and programs was conducted.

Based upon the results of the research, policy options are proposed. These policy options do not attempt to address specific areas of skill shortages or identify the exact number of adults needing basic skills instruction. Rather, the policy options focus upon improvements in the educational system that will enable the state to strategically and proactively address skill shortages in the workforce on a continuing basis. The policy options cover the following major areas: adult basic skills instruction, workplace literacy, and K-12 basic skills education.

The basic findings of this report demonstrate that basic skills education must become a key component of the Kansas strategy for economic development. Kansas' human capital must first be proficient in basic skills in order to benefit from more advanced training and work in positions beyond entry-level employment. To address this issue, the policy options target the basic skills of the present and future workforce by building partnerships between business and education, increasing the reach of the state's Adult Basic Education System, enhancing the basic skills of high school students, and reducing the state's dropout rate. Kansas faces a clear competitive challenge from other states and nations. The state must respond by addressing the skill needs—especially basic skills—of its workforce. □

Background: A New Economic Challenge

Kansas' human capital has historically been an economic comparative advantage for the state, and its strong commitment to education has led to the development of a well-educated workforce. However, new economic challenges are confronting Kansas, such as changes in the world economy, workplace technology, U.S. demographics, and changes in management style. Moreover, per capita personal income in Kansas has been growing at a slower rate over the past few years (Table 1).

The reasons for this relative decline in Kansas' per capita personal income growth are not entirely clear. One possible explanation is that the

majority of new jobs created over the past five years have been in lower paying sectors, such as government and services. This may be a reflection of an indirect or direct state approach to simply creating new jobs. As the Kansas strategy for economic development continues to evolve, the strategy must begin to consider not only the number of jobs created, but the quality of potential jobs as well. In other words, Kansas should embark on a high wage/high skills strategy which seeks to establish employment opportunities for Kansans in competitive, high growth firms.

A crucial component of this strategy will be to develop human capital capable of meeting the skill demands of high growth industry. Even though the state has historically had a well-prepared workforce, continual changes in the global and technological environment, workforce, and business environment have had an impact on the level of skills required in the workplace. Traditionally,

Table 1
Per Capita Personal Income: U.S., Kansas, and Surrounding States, 1984-1989

	1984	1985	1986	1987	1988	1989p
United States	\$13,114	\$13,896	\$14,597	\$15,471	\$16,491	\$17,567
Colorado	14,094	14,699	15,135	15,678	16,465	17,494
KANSAS	13,022	13,812	14,482	15,085	15,736	16,182
Iowa	12,022	12,619	13,290	14,014	14,680	15,524
Missouri	12,494	13,250	13,913	14,630	15,458	16,431
Nebraska	12,323	12,967	13,504	14,123	14,783	15,360
Oklahoma	11,692	12,139	12,286	12,569	13,355	14,151

p-preliminary data.

Source: U.S. Bureau of Economic Analysis, April 1990.

individuals without a high school diploma—and especially those with low basic skills—could find their place in the workforce in manufacturing or other jobs. Because the workplace has changed, workers who met the skill needs of yesterday's businesses may be out of place in the current work environment.

The World Economy

The economy of the State of Kansas does not exist in a vacuum; it is constantly interacting within national and global economic environments. Economic decisions made by other states or nations have enormous impact upon the state, and in turn, economic decisions made in Kansas also can have global effects. Interdependence will continue to increase, and other countries, such as Japan, have highly educated workforces which are capable of working with higher levels of technology and adapting to changes more quickly than American workers.

For example, when comparing the basic skills levels of the U.S. to other nations, the data show that over 85 percent of young people in England and over 90 percent in Japan, Sweden, and West Germany have at least the equivalent of eighth grade skill levels. In the U.S., however, only 80 percent function at this level. Considered further, additional data suggest that although many U.S. students are able to grasp basic mathematics skills, they cannot manage problem solving or other higher-order thinking skills. This skills discrepancy, especially in comparison to the youth in other nations, suggests difficulties for the U.S. when competing in a global economy.²

Changes, on both a national and global level, have also taken place in terms of:

Preparation and Investment in Workforce. In preparing its workforce, the U.S. invests very little in terms of expectations, skills, and training. When compared to workers in some newly industrializing countries, U.S. workers' educational performance is well below the average, and they are becoming unemployable at their current wage levels.³ Other industrialized nations also face high

wage rates,⁴ tight labor markets, tough government labor regulations, and strong unions. However, they have countered these problems and increased productivity by: a) setting high academic expectations for all young people; b) developing strong school-to-work transition programs; c) providing lifelong training/occupational opportunities to front-line workers (Figure 1); d) valuing the skills of front-line workers; and e) working in partnership—with government, business, and other groups as the key players—to create high performance work organizations.

Workplace Technology. Thousands of workers once performed simple and repetitive tasks, but in today's automated workplace, workers function in a more sophisticated environment, performing many jobs requiring higher skill levels. In the past, factory jobs did not require a great deal of mental activity, and workers were hired for their ability to manipulate and assemble parts; today, however, most of these manipulations and assembly can be performed by machinery. Therefore, it is not that workers have lost skills but that the traditionally required skills have evolved. In fact, it is estimated that by the year 2000, approximately 5 to 15 million manufacturing jobs will require different skills.⁵

Rapid Technological Improvements. The advancement of new technology continues and, according to the Commerce Department, approximately 90 percent of all present scientific knowledge has developed in the last 30 years; this pool of knowledge will probably double again by the end of the century.⁶ As an illustration, the rate of technological development is so great that the life cycles for electronics products and processes have already diminished to 3-5 years and will rarely exceed 5-10 years in most other industries.⁷ One result of this rapid rate of technological advancement is that any given worker's skills can be obsolete within 5-10 years; therefore, it is essential to sustain a continuous effort to re-train the workforce.

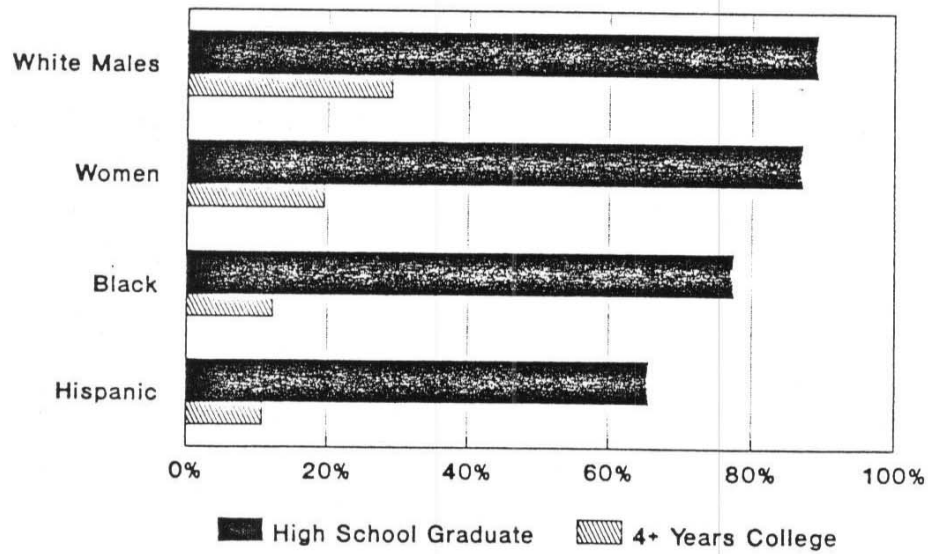
New Management Styles: The Third Wave. The workplace has undergone massive changes in the last few years, and this evolution can be

Figure 1
Public Expenditure on Labor Force Programs
as a Percentage of GDP



Source: Commission on the Skills of the American Workforce, Swedish Labor Board

Figure 2
Educational Attainment Rates:
Kansans 25-44 Years of Age



Source: U.S. Census, 1980

thought of in terms of a new order of production methods: the third wave. The first wave represented the beginning of the industrial revolution and the mechanization of production processes. In the second wave, Taylorism, or production-line assembly, refined simple mechanization and increased output and efficiency when creating single products. The next and most recent phase, the third wave, marks the death of Taylorism and the birth of new, flexible processes which do not use assembly-line techniques and are driven by customer demand for quality products. In this new wave of production management, Total Quality Management (TQM) relies on techniques such as Statistical Process Control, integrating all design and production processes, working more closely with suppliers and customers, and meeting customer demands for useful, well-made products. The consequences of this new production paradigm requires employees to have a greater inventory and array of skills, including basic academic skills, because the workplace itself has changed, evolving into a more complex and dynamic environment.

Demographic Shifts and Consequences. New entrants into Kansas' workforce—those between the ages of 15 and 24—reached a peak in 1980

when they represented 19 percent of the workforce. By the year 2000, this group will represent less than 14 percent of the Kansas population.⁸ A dramatic change in the composition of the workforce will also take place, and the majority of new entrants will be women, native minorities, and immigrants.⁹ The repercussions of these changes will be felt by businesses which will have: a) a smaller pool of labor, in absolute terms, to choose from, and b) a workforce dominated by groups which have traditionally lacked adequate basic skills and education levels (Figure 2). At the same time, future jobs will demand better skilled employees—because of increasingly complex technology—and increased education. In fact, future job requirements will probably exceed the qualifications of the labor pool. Projected education needs for the year 2000 indicate that the workforce will need, on average, 13.5 years of education;¹⁰ however, only 33 percent of Kansas women, 26 percent of Kansas Blacks, and 22 percent of Kansas Hispanics over the age of 20 have completed one or more years of education beyond high school.¹¹ If competent labor is going to fill tomorrow's jobs, it will be necessary to improve the educational attainment and basic skills of these groups. □

Background: The Concept of Adult Basic Skills

The wide array of challenges facing business go beyond competitive and economic changes. Two-thirds of U.S. employers stated that they had difficulty in finding entry-level applicants with sufficient academic skills.¹² This further complicates businesses' ability to remain competitive by instituting new processes or meeting customer product demands. While the impact of low basic skills is felt by society and business, it is difficult to assess the basic skills abilities of the Kansas population because there are no definitive skill measures. The evolution of the concept of adult basic skills has gone through several stages:

Traditional Definition of Literacy. Early approaches of measuring literacy seemed straightforward; the early U.S. Census simply asked adults whether they could read or write.¹³ Literacy has traditionally been treated as a fixed inventory of skills—reading and writing—that can be defined and measured by a single test. The fact that it has been difficult to establish accurate, universal, and lasting literacy measures has been based on the reality that there is no specific point on a scale which separates the "literate" from the "illiterate."¹⁴

Functional Literacy. Functional literacy became widely used after WWII and referred to individuals who were unable to understand written instructions necessary to accomplish specific tasks; in other words, they did not have the reading skills to "function" in society. Because definitions of functional literacy depend on the requirements which are thought to be necessary to comprehend a task, the definition has become more complex along with societal demands.¹⁵

Basic Workplace Skills. Traditional definitions of literacy do not have the scope to cover the skill requirements of the workplace. Therefore, seven distinct skill groups have been identified as those which are necessary to function effectively in the workplace: 1) the ability to understand new information and skills; 2) reading, writing, and computation competence; 3) listening and oral communication; 4) creative thinking and problem solving; 5) self-esteem, goal setting/motivation, and personal development; 6) interpersonal skills and teamwork; and 7) organizational effectiveness and leadership.¹⁶

Skill Measures

Because there are many different measures and definitions of what is considered "literate," it is not surprising that there are no clear numbers regarding the percentage of illiterate adults in Kansas. As surrogate measures for the workplace skills of the Kansas workforce, other measures are used as proficiency estimates:

Grade Levels. Traditional literacy definitions were based on grade level completed. Employers generally agree that entry-level workers should read at least at the eighth grade level, but many also stress that because of the increased complexity of instruction manuals and equipment that workers operate and maintain, workers are now required to have at least an 11th or 12th grade reading level.¹⁷ When job requirements are compared to education levels in Kansas, the results show that: 1) thirty percent of new jobs created between 1987 and 2000 will require a minimum of 4 years of college, but only 17 percent of Kansans had 4 or more years of college; 2) twenty-two percent of new jobs will require some college training, but only 17.1 percent of Kansans had 1 to 3 years of college; 3) thirty-five percent of new jobs will require only a high school

diploma, but 39.2 percent of Kansans—the majority of the workforce—completed only high school; 4) ten percent of new jobs will require one to three years of high school, but 12 percent of Kansas fell into this category; and 5) four percent of new jobs will require elementary education, but 13 percent of Kansas had that level of education (Table 2). The use of grade levels in determining literacy is flawed for one simple reason: the number of grades completed does not necessarily equal the actual level of skills of individual adults.¹⁸ However, school completion data are used because some tests of literacy have shown a correlation between school completion level and literacy levels. Kansas data, then, shows that the bulk of the workforce is not adequately prepared—in terms of education levels—to meet the future needs of Kansas businesses.

Table 2
Grades Completed
Kansans Aged 25 Years and Older, 1980

Years of School Completed	Number of Kansans	Percent of Total
Elementary		
0-4	18,553	1.3%
5-8	184,802	13.3%
High School		
1 to 3 yrs.	166,880	12.0%
4 yrs.	543,823	39.2%
College		
1 to 3 yrs.	237,617	17.1%
4 or more	236,427	17.0%
TOTAL	1,388,102	100%

Source: U.S. Bureau of the Census, 1980, *Census of Population*, PC80-1-C-18.

English Language Proficiency Survey (ELPS). ELPS was a national sample of adults (1982) which asked a series of questions related to

English comprehension. Table 3 presents the results from ELPS regarding estimated illiteracy rates for all 50 states. Overall, Kansas fared well on the ELPS survey: the state has an estimated illiteracy rate of 9 percent, ranking it ninth nationally.¹⁹

Dropout Rates. While grade levels are employed in measuring the skill abilities of the current workforce, dropout rates are used as an indicator of the basic skills of the future workforce. Most employers agree that current entry-level jobs require at least a high school education. For those students who drop out of high school, then, their ability to obtain and maintain employment may be difficult. In defining dropouts, the Kansas Department of Education includes any "pupil who leaves school for any reason, except death, before graduation or completion of a program of studies and without transferring to another school." This means that any students who drop out more than once are counted each time they drop out.²⁰

Overall, Kansas appears to be doing very well in maintaining a low dropout rate: the 1989-1990 school year average rate equalled 4.2 percent (Table 4). Nevertheless, the overall trends over the five year period may signal the beginning of a growing problem. For example, headcount, or number enrolled, for grades 9 through 12 has been declining steadily, while the number of dropouts has generally been increasing over the same period. The result of these two trends led to an increase in the overall dropout rate from 4.02 percent in 1985-1986 to 4.2 percent in 1989-1990. Even if these dropouts eventually return to high school before the age of 18 or return for their GED certificate after the age of 18, the Kansas economy still incurs some cost, in terms of lost earnings potential. Additionally, when the dropout rate is calculated on a per-year, per-grade basis, it does not reflect the dropout rate in each graduating class.

USD #457 in Garden City, Kansas, recognized that the present method for calculating dropouts provides limited information because it:

Table 3
English Language Proficiency Survey: Estimated Illiteracy Rates for the 50 States

State	Illiteracy Rate (%)	Rank	State	Illiteracy Rate (%)	Rank
Alabama	13	31	Montana	8	3
Alaska	7	2	Nebraska	9	9
Arizona	12	25	Nevada	9	9
Arkansas	15	40	New Hampshire	9	9
California	14	33	New Jersey	14	33
Colorado	8	3	New Mexico	14	33
Connecticut	12	25	New York	16	47
Delaware	11	17	North Carolina	14	33
Dist. of Columbia	16	47	North Dakota	12	25
Florida	15	40	Ohio	11	17
Georgia	14	33	Oklahoma	11	17
Hawaii	15	40	Oregon	8	3
Idaho	8	3	Pennsylvania	12	25
Illinois	14	33	Rhode Island	15	40
Indiana	11	17	South Carolina	15	40
Iowa	10	14	South Dakota	11	17
Kansas	9	9	Tennessee	15	40
Kentucky	15	40	Texas	16	47
Louisiana	16	47	Utah	6	1
Maine	11	17	Vermont	10	14
Maryland	12	25	Virginia	13	31
Massachusetts	11	17	Washington	8	3
Michigan	11	17	West Virginia	14	33
Minnesota	9	9	Wisconsin	10	14
Mississippi	16	47	Wyoming	7	2
Missouri	12	25			

Source: English Language Proficiency Survey, 1982.

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 4
Kansas High School Dropouts

	1985-86	1986-87	1987-88	1988-89	1989-90
Dropouts	4,926	4,689	5,105	5,225	4,795
% Chg.	—	-4.81%	8.87%	2.35%	-8.23%
Headcount	122,502	121,667	119,827	116,960	114,515
Drop Rate	4.02%	3.85%	4.26%	4.47%	4.20%

Source: *High School Dropouts*, Kansas State Department of Education, February 1991.

Table 5
Garden City Graduation Rate:
Results From Tracking the Class of 1990

Students	Number	Percent
Starting in 1986	396	100%
Less: Transfers ¹	38	9.6%
Dropouts		
Simple Drops ²	114	28.8%
GCAHS Drops ³	29	7.3%
TOTAL DROPS	143	36.1%
Graduating in 1990	215	54.3%

¹includes students who transferred out-of-district and their records were requested or hand-carried.

²includes students who dropped and two expulsions.

³includes students enrolled in Garden City Alternative High School who have not graduated or are inactive.

Source: Gillaspy, *Class of 1990: A Longitudinal Study*, March 1991, p 2.

Table 6
Garden City Class of 1990 Dropout Rates:
Traditional Calculation

Grade—Year	Head-count	Drop-outs	Dropout Rate
9th—1986/87	381	5	1.3%
10th—1987/88	353	27	7.6%
11th—1988/89	365	47	12.9%
12th—1989/90	311	30	9.6%
TOTAL	1410	109	7.7%
Average	353	27	7.6%

Source: Kansas Department of Education, 1991.

a) does not give a dropout rate by class or student body, and b) ignores students who complete a year of high school but fail to come back the next year and remain in the community.²¹ Therefore, it initiated a study of the Class of 1990 by tracking students who started the ninth grade in Garden City in September 1986. Because its focus was on those students originally enrolled in Garden City, it was a study of stable, not transient, teenagers in the community. The results found that of the 396 students starting in the ninth grade in 1986, 215 (or 54.3%) of them graduated locally in 1990 (Table 5). These results show a different picture than those calculated by the Kansas State Department of Education method (Table 6). In contrast, the average dropout rate over the four year period—for that class—is only 7.6 percent, according to the KSDOE method. The Garden City study illustrates the fact that perhaps a cumulative dropout rate, by class, should be calculated in conjunction with the traditional dropout/headcount method. Both methods have their merits—and drawbacks—but together they provide a better depiction of dropout trends.

Consequences of Low Basic Skills

It is reasonable to assume that someone who dropped out of school may not have obtained the basic skills needed to function in society and the workplace. Nevertheless, possession of a high school diploma or GED does not mean that an individual has mastered basic academic skills; therefore, such individuals may be unemployed, underemployed, or unable to be productive and effective in their present job. One concern is that educational attainment has not kept pace with the requirements of a more complex society and business environment. An individual who graduated from high school ten to twenty years ago may not have the current basic academic skills necessary for employment today. This lack of current basic skills does not signify a deficiency on the individual's part, it simply indicates that as our society and the workplace become more complex

and competitive, the levels of basic skills required also increase.

The effects of inadequate basic skills have a direct and indirect cost to society. In direct terms, individuals without basic skills have difficulty finding and keeping jobs, and they may suffer from low-self esteem and shame. Financially speaking, there appears to be a relationship between earnings and the number of years one spends in school. Although real earnings have decreased for young males, those with a college degree are much better off financially than high school graduates, and in turn, high school dropouts. Young black males, especially those without a high school degree, have suffered the greatest loss in real earnings in the thirteen year period.²²

Indirectly, business and society must also pay for the consequences of adults with low basic skills. Annual estimates of costs associated with inadequate basic skills by adults in the U.S. include: \$20 billion—prisons, welfare related to illiteracy, and industrial and military accidents; \$100 billion—lost GNP and productivity; \$224 billion—welfare payments, crime, job incompetence, lost taxes, and remedial education; and \$237 billion—unrealized earnings, as illiterate adults make up 50-70 percent of the unemployed in the U.S.²³ A 1982 survey of U.S. businesses found that: 65 percent reported that a lack of basic skills limited the job advancement of their high school graduate employees, while 73 percent reported that it limited non-graduates; 50 percent stated that managers and supervisors were unable to write paragraphs free from grammatical errors; and 50 percent reported that skilled and semi-skilled employees were unable to use decimals and fractions.²⁴

In Kansas, for example, correctional system inmates represent a disproportionate percentage of functionally illiterate individuals. According to a study by the National Institute of Corrections, fifty percent of adults in state and federal prisons cannot read at all and two-thirds have not completed high school.²⁵ In comparison, the Kansas Department of Corrections reports that 53

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 7
Education Levels of New Corrections Populations:
Kansas Male and Female Inmates, FY 1983—FY 1990

Education Level	Percent of Total Inmate Population							
	FY83	FY84	FY85	FY86	FY87	FY88	FY89	FY90
Grade 0-11	52	51	47	46	59	57	48	50
High School Grad.	17	21	17	19	22	22	25	25
GED	23	20	27	26	10	14	22	18
> High School	8	8	9	9	9	7	5	7

Source: Kansas Department of Corrections, FY 1990 Statistical Profile.

percent of male inmates (2,598 persons) and 37 percent of female inmates (92 persons) tested within grade levels 0-11 upon their arrival in prison during FY 1990 (Table 7). The state cost of providing basic academic skills programs at

Kansas Correctional Facilities is approximately \$3 million per year. The programs are not run directly by the state; instead, they are contracted out to educational providers. □

Background: The Adult Basic Education System

Adults who dropped out of the K-12 system can turn to the Adult Basic Education (ABE) system to improve their skills or work towards a high school equivalency certificate. The ABE system is a mix of basic skills, English as a Second Language (ESL), and Adult Secondary Education (ASE) programs operated and funded by the Federal government with financial support and administration through local education districts, community colleges, or state departments of education. In addition to the ABE system, other independent local organizations, such as volunteer literacy organizations, also provide basic academic skill instruction, especially for individuals needing help with very basic skills.

Critics praise the result of the ABE system despite its lack of resources and attention from policy-makers and its image as the "neglected step-child" of the education system. Another obstacle facing the ABE system is the personal struggles that adults face if they need additional help in improving their basic academic skills. They may have not had many successes in life—especially in an educational setting—and many individuals secretly hide the fear and shame that someone might find out that they are "illiterate."²⁶

Federal History

The present adult education system was created under the Economic Opportunity Act of 1964 and represented the beginning of federal financial support for adult literacy education. Growth in the system has been impressive; enrollment has increased from under 500,000 in

1968 to over 3 million in 1986 (a six-fold increase), while funding from federal, state, and local sources has increased from \$40 million in 1968 to over \$400 million in 1986 (a tenfold increase).²⁷

The purpose of the federal ABE system is to: 1) improve adult educational opportunities; 2) enable adults to acquire basic academic skills necessary for literate functioning; 3) assist adults in completing secondary school; and 4) equip adults with skills to help them benefit from job training/retraining so that they may obtain and keep productive employment. Federal grants are given to designated state agencies, such as the Kansas State Department of Education, through a formula based on the number of adults who have not completed secondary school. The state, in turn, funds local programs based on need and other available resources. Local agencies which are eligible for subgrants include public or private non-profit educational agencies, organizations, and institutions.

ABE curriculum emphasizes instruction in computational skills and speaking, reading, and writing English for educationally disadvantaged adults. This includes adults who function at or below the fifth grade level, as well as those adults placed at the lowest or beginning level of a program. ABE targets adult groups such as the incarcerated, those with limited English skills, handicapped persons, immigrants, the chronically unemployed, the homeless, those institutionalized, and minorities.²⁸

The Kansas Adult Education System

State financial support for the ABE system in Kansas began in 1974 when the legislature responded to newly imposed federal matching requirements for adult education assistance funds. State assistance for ABE programs comes from

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

the State General Fund. In order to qualify for state and local support, a local board's ABE program must meet established criteria for the program, and the board is asked to provide a 10 percent match to federal and state funding. Adults age 16 and up who have not completed high school or an equivalent level of education and are not currently enrolled in school are eligible for ABE instruction.

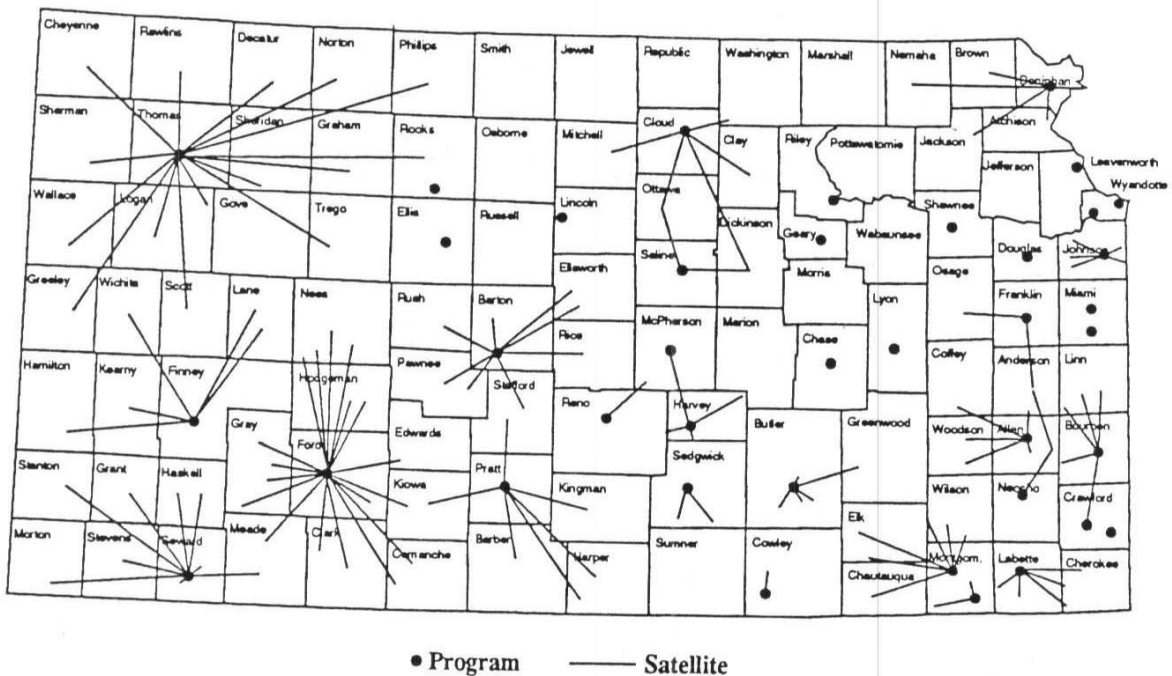
There are currently 37 ABE centers in Kansas: community colleges (represent 19 ABE centers); Unified School Districts (14); Area Vocational Technical Schools (1); private institutions (1); and institutional settings (2). In addition to the 37 centers in Kansas, there are approximately 68 satellites to these centers (Figure 3). Unfortunately, satellites often do not have the resources, in terms of staff and materials, to serve a large number of people. Additionally, hours of

instruction may be more limited at a satellite center. The result is restricted program accessibility for those areas served by a satellite.

Kansas ABE funding and enrollment are presented by center (Table 8) and for the state as a whole (Table 9). The key findings from the data demonstrates that: a) funding per pupil varies greatly by center and is significantly lower than K-12 funding; b) the state has increased its match of federal funds, in accordance with new federal regulations, but has been very careful not to exceed the match; and c) some of the centers rely heavily on local sources of revenue.

The state ABE system is not the sole source of basic skills instruction in Kansas. Other organizations, including the Kansas State Library, volunteer community-based organizations, and non-profit entities all provide and/or coordinate adult basic skills instruction. Each of the direct

Figure 3
Adult Basic Education Programs and Satellites, 1989



Background: The Adult Basic Education System

Table 8
Kansas Adult Basic Education Centers:
1989-1990 Enrollment and FY 1991 Funding Sources¹

Location	1989-90 Enrollment	Total Funding Per Pupil ²	Federal	State	Local
Wichita, Dunbar Adult Ctr.	\$1,050	\$387.59	\$ 99,642	\$ 25,930	\$ 281,400
Kansas City CC	784 ³	154.68	71,970	19,298	30,000
Coffeyville, Adult Ed. Ctr.	679	130.13	50,989	13,671	23,700
Johnson Co. CC	659	259.27	69,306	18,583	82,972
Topeka, USD 501 Admin. Ctr.	531	195.73	74,479	19,970	9,481
Cowley Co. CC	441	74.56	18,041	4,838	10,000
Garden City CC	402	226.57	48,166	12,915	30,000
Independence CC	376	149.76	31,787	8,523	16,000
Colby CC	300	232.18	49,407	13,248	7,000
Labette CC	286	170.29	30,713	8,235	9,755
Junction City, K.S. Hauge Ctr.	272	194.16	30,488	8,174	14,150
Newton, USD 373	265	300.55	28,548	7,655	43,444
El Dorado, Comm. Res. Ctr.	264	484.90	45,746	12,267	70,000
Dodge City Adult Res. Ctr.	256	278.80	34,990	9,382	27,000
Leavenworth, St. Mary College	237	202.34	34,365	9,215	4,375
Paola, Adult Ed. Ctr.	234	345.92	25,321	6,790	48,835
Salina, Little House	225	312.00	38,041	10,200	60,000
Highland CC	224	162.97	26,343	7,063	3,100
Seward Co. CC	215	222.01	26,600	7,132	14,000
Manhattan AVTS	202	615.86	48,321	12,956	63,126
Lawrence, USD 497	195	545.58	30,019	8,050	68,319
Hutchinson CC	192	235.29	32,374	8,680	4,121
Osawatomie State Hospital	184	136.71	25,155	—	—
Great Bend, Ctr. Adult Ed.	173 ³	788.39	22,264	5,970	108,159
Fort Scott CC	147 ³	290.46	16,795	4,503	21,400
Ottawa, Adult Ed. Ctr.	134	360.49	27,051	7,254	14,000
Allen Co. CC	118	211.34	17,874	4,793	2,271
Pittsburg, Adult Ed. Ctr.	112	267.23	20,966	5,622	3,342
Emporia High School	108	361.68	23,262	6,238	9,561
Cloud Co. CC	103	185.25	13,863	3,718	1,500
Leavenworth, KSP	88	181.82	16,000	—	—
Neosho Co. CC	82	375.99	14,116	3,785	12,930
Bonner Springs, Northwest School	56	81.71	9,136	2,449	1,162
Pratt CC	52	333.00	12,413	3,329	1,574
Hays, USD 489	21	683.19	5,805	1,556	6,986
Plainville, USD 270	13	152.08	1,559	418	—
Russell High School	7	171.43	947	253	—
TOTAL	9,687	\$260.78	\$1,172,862	\$302,663	\$1,103,663

¹Funding data is for programs only.

²Based on FY 1990 enrollment and FY 1991 funding.

³FY 1989 enrollment.

Source: Kansas State Department of Education, 1990.

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 9
Kansas Adult Basic Education:
Funding and Enrollment, FY 1987—FY 1991

	FY 1987	FY 1988	FY 1989	FY 1990	FY 1991
Enrollment*	7,797	8,353	10,697	10,274	NA
Federal Funds	\$351,823	\$998,919	\$1,107,142	\$1,288,997	\$1,470,428
per student	45.12	119.59	103.50	125.46	--
State Funds	40,457	126,500	126,500	186,000	326,435
per student	5.19	15.14	11.83	18.10	--
State Match, (%) of Federal	11.5%	12.7%	11.4%	14.4%	22.2%

*Enrollment includes students who attended 12 or more hours.
 Source: Kansas State Department of Education.

literacy providers has different capabilities and populations, or "customers":

Community Colleges. Of all the literacy providers in Kansas, community colleges presently have the best access to resources and adults, and all community colleges are part of the state's ABE system. The mission of the community colleges is to work with the local adult community; some of the community colleges are also accustomed to working directly with employers. Community colleges are also fortunate in that they can rely on two sources of funding—mill levies and remedial education reimbursement—that many of the other providers cannot.

Unified School Districts (USD). Some USDs are part of the ABE system, but generally school districts are more oriented toward their mission of strictly providing K-12 instruction. If school districts were to take on the added responsibility of adult basic skills instruction, many USDs would have to pull already scarce resources away from K-12 instruction. Furthermore, their focus on K-12 means that USDs are not particularly accustomed to working with adults and developing

curriculum based on adult life situations, such as the workplace.

Area Vocational Technical Schools (AVTS). AVTS do not play a key role in the state's ABE system: only one of the state's 16 AVTSs is an ABE center. Nevertheless, Kansas AVTSs have a real need for assistance—especially financial assistance—in providing basic skills education. Some AVTS are already providing their students with basic skills training because they are unable to function in the AVTS classroom. If an AVTS provides this type of instruction, they are not reimbursed by the state and must pull funding from other existing programs. AVTSs are capable of playing a much larger role in basic skills instruction.

Volunteer Literacy Organizations. Private community-based organizations represent a strong, grassroots commitment to raising adult literacy levels in Kansas. The heart of these organizations is dedicated volunteers who devote their time to working individually with people who cannot read or write. Because of their volunteer nature, they also operate with very few resources. Instruction

typically focuses on language skills, such as reading, for individuals functioning at very basic grade levels. Volunteer organizations usually do not work with businesses.

How An ABE Program Works

Students entering any of the state's ABE centers generally go through a similar process. An initial intake session gathers personal information about the individual, including work experience, education, perceptions of skills, potential career choices, and personal goals. The individual is then assessed using various tests such as TABE (for reading and math), Nelson-Denney (for reading), WRAT (for math), or the Kansas Competency test, especially for SRS clients. During the assessment, the students may also be asked whether or not they have had a current eye examination, and if they have, whether or not they need eye glasses.

After the test results are assessed, the students are shown their scores and told which basic skills need improvement. Based on these results, the students set an informal "contract" which outlines what skills they intend to work on and set up a specific instruction schedule. For some, this contract may be the first time they have considered a career options or setting personal goals.

Instruction usually starts with one-on-one or individualized instruction, but as the student becomes more proficient, instruction may include working alone on a workbook or computer. If several students have similar basic skills needs, they may be encouraged to work together as a group. After several months or years of instruction, students may be prepared—in terms of skills and self-esteem—to take the GED. The success of the Kansas ABE system in preparing adults can be seen in GED results: Kansas has a good success rate—of the 5,921 people who took the exam in 1989, 88.8 percent passed.

However, it may be difficult for some to continue instruction. Most ABE programs are open entry/open exit, so students can begin and continue instruction for as long as they desire.

Although there are no accurate statistics on completion data, it is not uncommon for students to simply stop showing up. The center may try to contact the student, but dropouts cannot be easily persuaded to return for reasons that may include: a) unable to find someone to take care of the children; b) unable to get a ride to the center; c) spouse is angry at the partner for seeking education; d) fear that someone may find out they lack basic skills; or e) a prior negative history with education. Additionally, some are accustomed to failure and have had little personal successes in life. Learning will force them to try to meet and conquer new challenges, such as getting a job. Because of a fragile self-esteem, however, they would rather not try at all, instead of trying and potentially failing.

General Education Development Testing

An important component of the adult education system is preparation for the General Education Development (GED) test. The purpose of the GED is to provide a certificate for employment opportunities or advanced instruction for individuals who have not completed their high school education. In order to take the GED in Kansas, an adult must a) be 18 years or older and/or their high school class has graduated; b) not have graduated from a U.S. or Canadian high school; c) not be enrolled in any high school; and d) be a Kansas resident. If an individual does not meet all of the criteria, s/he can apply to the Kansas State Department of Education for permission.

There are currently 39 GED testing centers in Kansas: 1) unified school districts (represent 10 centers); 2) community colleges (19); 3) four-year colleges (2); 4) private institutions (2); and 5) other public institutions (6). Two other centers, including Fort Leavenworth and the VA hospital, have special arrangements directly through the GED testing service. The format of the GED includes five multiple choice tests in the following areas: writing (including an essay test), social studies, science, interpreting literature and the

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 10
K-12 and Adult Basic Education Expenditures:
Per Pupil Expenditures, FY 1987

State	Total ABE		Total K-12		State	Total ABE		Total K-12	
	Spending Per Pupil	Rank	Spending Per Pupil	Rank		Spending Per Pupil	Rank	Spending Per Pupil	Rank
Alabama	\$102.08	39	\$2,573	49	Montana	\$155.22	22	\$4,194	16
Alaska	378.76	4	8,010	1	Nebraska	133.43	29	3,756	29
Arizona	79.42	45	3,544	35	Nevada	88.66	42	3,573	32
Arkansas	253.34	9	2,733	46	New Hampshire	140.44	27	3,933	21
California	156.25	21	3,728	30	New Jersey	553.38	2	5,953	3
Colorado	127.60	32	4,147	18	New Mexico	64.85	48	3,558	33
Connecticut	229.41	12	5,435	3	New York	162.25	20	6,497	2
Delaware	260.15	8	4,825	9	North Carolina	129.06	30	3,129	41
Dist. of Columbia	280.56	7	5,742	4	North Dakota	182.46	18	3,437	37
Florida	124.24	33	3,794	25	Ohio	129.02	31	3,671	31
Georgia	97.21	40	3,374	39	Oklahoma	81.98	44	3,099	42
Hawaii	55.55	50	3,787	26	Oregon	191.17	16	4,337	15
Idaho	54.84	51	2,585	48	Pennsylvania	148.24	25	4,616	11
Illinois	58.65	49	4,106	19	Rhode Island	150.80	23	4,985	8
Indiana	355.26	5	3,556	34	South Carolina	82.05	43	3,237	40
Iowa	103.40	38	3,808	24	South Dakota	110.17	36	3,097	43
Kansas	142.23	26	3,933	21	Tennessee	123.14	34	2,827	45
Kentucky	77.35	46	2,733	46	Texas	65.66	47	3,409	38
Louisiana	178.67	19	3,069	44	Utah	188.28	17	2,415	50
Maine	252.51	10	3,850	23	Vermont	401.36	3	4,399	13
Maryland	137.33	28	4,777	10	Virginia	193.41	15	3,780	28
Massachusetts	338.87	6	5,145	7	Washington	231.31	11	3,964	20
Michigan	582.93	1	4,353	14	West Virginia	121.49	35	3,784	27
Minnesota	204.96	13	4,180	17	Wisconsin	198.07	14	4,523	12
Mississippi	97.02	41	2,350	51	Wyoming	149.06	24	5,201	6
Missouri	110.04	37	3,472	36					

Source: *State Profiles for Program Year 1988*, Washington, DC: Clearinghouse on Adult Education and Literacy, U.S. Department of Education, July 1990.

arts, and mathematics. The test is relatively difficult; research has shown that 30 percent of those students with a high school degree cannot pass the test.

Comparison to Other State ABE Efforts

Kansas' ABE programs were compared to those in other states, in terms of per pupil expenditures and percentage of population served.

Although Kansas fared well in terms of per pupil ABE and K-12 funding (FY 1987), overall disparities are evident: the per pupil spending for ABE instruction is a fraction of K-12 spending in every state and state ABE expenditures vary considerably from state to state (Table 10).

Enrollment for each state's ABE programs were compared to the target population of individuals who are 16 years or older, without a high school diploma, and are not currently in

Table 11
Adult Basic Education Enrollment
as a Percentage of the State's Target Population

State	ABE Enrollment as a % of Target Pop.	Rank	State	ABE Enrollment as a % of Target Pop.	Rank
Alabama	5.3	22	Montana	3.4	37
Alaska	19.7	2	Nebraska	3.7	35
Arizona	6.2	15	Nevada	4.9	25
Arkansas	0.2	47	New Hampshire	5.3	21
California	NA	NA	New Jersey	3.0	41
Colorado	3.7	34	New Mexico	8.4	8
Connecticut	5.6	19	New York	3.3	38
Delaware	3.6	36	North Carolina	NA	NA
District of Columbia	11.0	5	North Dakota	4.0	30
Florida	15.1	4	Ohio	4.8	26
Georgia	4.3	29	Oklahoma	6.0	16
Hawaii	25.8	1	Oregon	7.6	11
Idaho	17.0	3	Pennsylvania	2.3	43
Illinois	4.4	28	Rhode Island	3.7	32
Indiana	NA	NA	South Carolina	9.4	7
Iowa	9.9	6	South Dakota	5.9	17
Kansas	3.1	40	Tennessee	0.5	46
Kentucky	2.0	45	Texas	5.7	18
Louisiana	NA	NA	Utah	5.1	24
Maine	5.1	23	Vermont	7.7	10
Maryland	6.5	14	Virginia	2.2	44
Massachusetts	4.6	27	Washington	6.8	13
Michigan	3.7	33	West Virginia	3.2	39
Minnesota	5.5	20	Wisconsin	8.0	9
Mississippi	3.8	31	Wyoming	7.4	12
Missouri	2.7	42			

Source: *State Profiles for Program Year 1988*, Washington, DC: Clearinghouse on Adult Education and Literacy, U.S. Department of Education, July 1990.

school (Table 11). Kansas served 3.1 percent of its target population in FY 1988—ranking it 40th overall—similar to the rates of Colorado, Missouri, and Nebraska. Oklahoma and Iowa served a greater proportion of their target populations: 6 and 10 percent, respectively.

Funding sources for Kansas ABE programs were compared to those of Colorado, Iowa, Missouri, Nebraska, and Oklahoma for FY 1990

(Table 12). Program funds were broken down by federal, state, and local sources of revenue. Of the six states, Iowa had the greatest amount of state support for ABE programs (\$9,406,496), while Colorado's match came entirely from local sources. Kansas ranked 4th in terms of state ABE support.

State support for ABE programs was also compared on a per student, per capita basis.

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 12
Adult Basic Education Funding:
Kansas and Surrounding States, FY 1990

	Kansas	Colorado	Iowa	Missouri	Nebraska	Oklahoma
Source of ABE Funds:						
Federal	\$1,288,997	\$1,343,000	\$1,179,130	\$2,795,716	\$792,158	\$1,872,419
State	186,000	0 ¹	9,406,496 ²	1,758,738	19,009	285,600
Local	1,149,207 ³	322,079	NA	NA ⁴	116,679	300,000
Total Sources	\$2,624,204	\$1,665,079	\$10,585,626	\$4,554,454	\$927,846	\$2,458,019
Total ABE Funding:						
Per Student	\$255.42	\$136.39	\$255.03	\$143.15	\$150.70	\$101.12
Per Capita	1.06	0.51	3.81	0.89	0.59	0.78
% of K-12 Budget	0.28%	0.16%	1.24%	0.42%	0.69%	0.30%
State ABE Funding:						
Per Student	18.10	—	226.62	55.28	3.09	11.75
Per Capita	0.08	—	3.39	0.34	0.01	0.09
% of K-12 Budget	0.02%	—	1.10%	0.16%	0.01%	0.03%
# ABE Students ⁵	10,274	12,208	41,507	31,815	6,157	24,307
State Population ⁶	2,477,574	3,294,394	2,776,755	5,117,073	1,578,385	3,145,385
State Aid—K-12	920,941,849	1,014,440,408	851,904,268	1,096,071,340	133,616,100	830,915,958

¹The state match in Colorado comes entirely from local sources.

²State/local match are combined, but the majority are state funds.

³The report of local funding in Kansas includes a rough estimate of in-kind contributions.

⁴The local funding in Missouri consists mostly of in-kind contributions.

⁵12 contact hours or more.

⁶U.S. Bureau of the Census, 1990.

Sources: State Departments of Education.

Because Colorado did not allocate any state funds towards ABE programs, no analysis could be done at this level. Iowa had the greatest funding per student (\$226.62), followed by Missouri (\$55.28). Nebraska had the lowest funding per student (\$3.09). When calculated on a per capita basis the pattern was similar: Iowa was the highest (\$3.39), followed by Missouri (\$0.34), and Nebraska was the lowest (\$0.01). Additionally, Iowa's ABE enrollment was four times greater Kansas'.

The results indicate that none of the six states has an ABE commitment comparable to their K-12 programs. It is clear, however, that Kansas lags behind three of the six states in its state funding. Because Kansas had the greatest local commitment for ABE programs, the total per capita, and per student figures were better than four of the other states. □

Kansas Adult Basic Skill Training System: Survey of Kansas Programs

Adult basic skill training in Kansas is provided by a mix of state and community-based organizations. On the state level, the Adult Basic Education (ABE) system is a group of centers with direct administrative ties to the Kansas Department of Education, and it consists of programs offered through 19 community colleges, 14 unified school districts (USD), one Area Vocational and Technical School (AVTS), one private university, and two state institutions. Other supportive state and community agencies also provide adult basic skill training, and this complimentary system includes community-based organizations, Kansas Public Library programs, the state prison, literacy programs, and AVTSs. Instruction offered by this mix of organizations includes: 1) Adult Basic Academic Skill Training; 2) General Education Development (GED) Testing; and 3) English as a Second Language (ESL).

To examine how the system works, which services are provided, and to determine how well the system meets the state's needs for a well-trained, adaptable workforce, a thorough analysis of the system was completed.

Procedures

A background review of the Adult Basic Education training system was performed through personal interviews and by review of data/statistics of ABE centers within the public school system, state higher education system, and community agencies. Additionally, a telephone survey of all programs providing adult basic skill training

obtained data from Area Vocational Technical Schools (AVTS), community-based organizations, community colleges, public library programs, the state prison and hospital, unified school districts (USDs), and entities serving legalized aliens under the State Legalized Impact Grant Programs (SLIAG) program. The survey consisted of four parts: a) background information about each center; b) program descriptions for instruction provided to adults who do not have a high school diploma or GED certificate; c) program descriptions of training for those who already had a high school diploma or GED but needed to improve their basic academic skills; and d) information about programs which received direct requests from business/industry for instruction in basic academic skills for their employees.

Results

Programs

Sixty-two adult basic academic skills programs were surveyed, including 5 Area Vocational Technical Schools (AVTS), 26 community-based organizations (CBO), 18 community colleges, 1 state hospital, 1 state prison, 3 State Legalized Impact Grant Programs (SLIAG), and 8 unified school districts (USD). The present mission of the ABE system focuses on adults without a high school diploma or GED: ABE programs are not reimbursed for providing basic skills instruction to individuals with a high school diploma or GED or any business/industry seeking basic academic skills instruction. Of the sixty-two programs in our survey, thirty-three were ABE centers.

Key points regarding programs included:

- Of those programs offering instruction to adults without a high school diploma or GED, 56 programs offered instruction in grade level 0-5.9, 52 in level 6-8.9, 48 in level 9-12, and 45 in ESL;

- Forty-four programs provided instruction to students with a diploma or GED;
- Fifteen programs, 11 of which were ABE centers, received requests from business/industry for basic skills instruction for their employees.

Funding

Survey participants were asked to indicate which of the following funding sources were utilized for their programs: 1) State Department of Education—the Department funds ABE programs, in conjunction with the federal government, to assist adults without a high school diploma or GED in learning basic and "living" skills; 2) Federal Government—funding, as authorized by the Adult Education Act, for ABE centers; 3) Local USDs—local school districts can levy up to a one-half mill levy to support adult basic education programs for a five year period; 4) City/County Government—local governments may contribute to local adult education or literacy efforts; 5) Student Fees—student fees may cover GED testing fees, materials, etc. ABE students cannot be charged fees, by law; 6) Social and Rehabilitational Services (SRS)—SRS clients may be assessed to determine their skill levels and then referred for additional education. SRS and JTPA both work through the existing Adult Basic Education system in upgrading the basic academic skills of their clients; 7) Job Training Partnership Act (JTPA)—state and federal program for remedial education, on-the-job training, customized training, classroom training, and coordination of projects with other social, training, and educational services; 8) Other—includes private donations, grants, and matching funds. Community colleges can also ask voters to approve up to a one-quarter mill levy for ABE centers.

Key points regarding funding included:

- The total distribution of funding sources for all of basic academic skills programs was primarily from federal, other sources, and the Kansas State Department of Education. Less common sources of funding were those from local Unified School Districts, Social and Rehabilitation

Services, Job Training Partnership Act, student fees, and city/county government.

- For instruction provided to individuals with a diploma or GED, the primary funding sources were federal, other sources, the Kansas State Department of Education, and local USDs. Less common was funding from student fees, JTPA, city/county government, and SRS.
- The greatest funding impact is from other funding sources, especially local ones.
- The state does not make a significant contribution to adult basic education programs, as compared to all other available monies, and community-based organizations which are not part of the ABE system do not receive much, if any state support.
- Because these data represent a variety of programs—not just ABE centers—and their funding sources, they tend to hide the fact that federal support for ABE programs is actually three times greater than Kansas' state support.

Enrollment and Accessibility

Adults in Kansas who need basic skills training should have relatively easy access to training programs. Therefore, the location of programs, hours of instruction, waiting periods for instruction, and FY 1990 enrollment were considered. The reach of the ABE system appears to cover most of the state, with a few important exceptions. Survey respondents were located in, and directly served, 39 counties. Fifty-one counties were served by programs located in adjacent counties, and 15 of the state's counties were not served by any of the programs participating in our survey. An urban county, for the purpose of our survey, was any county with population greater than 50,000.

Key findings regarding enrollment and accessibility included:

- The total number of adult basic academic skills students served in FY 1990 was approximately 21,172 persons, and the programs with the greatest share of students included: 1) community colleges—8,244 students (38.9% of the

total); 2) CBO—4,724 (22.3%); and 3) USD—4,138 (19.4%).

- Thirteen percent of all students (2,672) students commuted to another county for instruction. Those programs serving the greatest number of out-of-county residents included: 1) community colleges—1,298 and 2) CBO—771 students.
- Programs serving the greatest proportion of students without a diploma or GED included community colleges and USDs, and for those students with a diploma or GED, AVTSS served the greatest proportion. The fact that community colleges and USDs serve the greatest proportion of students without a high school diploma or GED demonstrates the strength of the ABE system.
- Most students were located in urban areas, making up 58 percent of the total, 56 percent of those without a diploma or GED, and 81.2 percent of students with a diploma or GED.
- This rural/urban disparity in enrollment may be due, in part, to a lack of accessibility in rural areas to basic academic skills programs. All of the counties not served by our sample—Clark, Cloud, Elk, Greeley, Hamilton, Hodgeman, Jewell, Logan, Mitchell, Ottawa, Pawnee, Republic, Sheridan, Smith, and Wallace—are considered rural counties. Although one of the counties (Cloud County) does have a community college, the data suggest that the other counties may be presently ignored by basic academic skills programs.
- Waiting periods for instruction were greatest in rural areas and were 2.5 to 4 times longer than those in urban portions of the state. Students seeking ESL instruction in rural areas faced the longest waiting periods; however, most programs surveyed did *not* have any waiting period for instruction.
- Ninety-three percent of the programs had open entry and exit, which means that students can enroll and continue instruction for as long as they desire. Over sixty percent of the programs offered instruction during the morning and afternoon, Monday through Friday, and evenings. Only fifteen percent offered Saturday instruction.

Relationships Between Kansas Businesses and Programs

Fifteen of the 62 programs surveyed received requests from business/industry to provide basic academic skills instruction for their employees. During FY 1990, the programs reported a total of 198 requests. Forty percent of those receiving requests (or 6 programs) stated that they were able to meet all business/industry requests, and almost three-fourths of the programs met 80 percent or more of the requests. Only one of the programs—a community based organization—did not serve any business/industry requests.

Area businesses generally played no role—with the exception of AVTSS—in establishing curriculum, competency recommendations, or selecting instructional materials. This was especially true for instruction provided to individuals with and without a diploma or GED. AVTSS were the sole exception, and they reported relying on the input of businesses through advisory councils. Businesses did play a more influential role in establishing curriculum as a result of their requests for instruction for their employees. In that case, they most often offered business input through general advice or advisory councils.

Key findings regarding business and program relationships included:

- Business/industry most often requested instruction for their employees which focused on the most basic skills: grade level 0-5.9 skills. Secondary (or grade level 9-12) instruction and other skills—including money management and job-specific skills—were also requested. Very few programs reported requests for ESL instruction, and no program indicated that it had provided training within grade levels 6-8.9 or post-secondary instruction.
- Instruction usually took place at the program site and during times which were most convenient for the student and instructor. However, one-third of the programs indicated that they had provided instruction at the business site, and one-fourth stated that instruction had taken place during work hours.

Table 13
Definitions of Skills Taught to Adults Without a High School Diploma or GED

Computation (Math) Skills

Basic Calculations—basic calculations using addition, subtraction, multiplication, division, and measurements;

Probability and Statistics—percentages, ratios, and elementary probability and statistics;

Algebra and Geometry—elementary algebra and geometry;

Tables and Diagrams—ability to read and understand graphs, charts, tables, and diagrams.

Language Skills

Writing—writing standard English sentences correctly, and organizing and translating thoughts into coherent written form;

Simple Reading—recognition and understanding of enough written words to read simple instructions;

Complex Reading—recognition and understanding of enough written words to read complex instructions;

Listening and Verbal Comprehension—listening and verbal comprehension skills, such as following instructions or directions given verbally and asking questions when clarification is needed.

Other Skills

Teamwork—teamwork and interpersonal skills, such as engaging critically and constructively in the exchange of ideas and communicating effectively with others;

Problem Solving—problem solving/analytical skills, such as recognizing and defining problems and problem solving strategies;

Attitudes—personal attitudes and responsibilities, such as showing respect for others, pride in one's work and demonstrating honesty, integrity, punctuality, and attendance;

Adaptability and Flexibility—adaptability and flexibility, including a positive attitude toward learning and being open to change.

- Only twenty-two percent of the programs providing business/industry instruction stated that 80-95% of students continued instruction until they functioned at a level required by their employer. In fact, eleven percent of the programs stated that none of their students completed instruction, and one-third of the programs stated that only half of their students were able to complete instruction.

Basic Academic Skills Taught to Students

Survey participants were asked to indicate which skills were taught at each educational/grade level to adults without a high school diploma or GED (Tables 13 and 14). Survey respondents were asked to classify their instruction in each skill area as: 1) direct—instruction occurs and skills are likely to be acquired; 2) indirect—explicit instruction may not occur but skills are likely to be acquired as a result of training in

Table 14
Definitions of Skills Taught to Adults With a High School Diploma or GED
or as a Result of Business/Industry Requests

Computation (Math) Skills

Includes: a) solving problems with emphases on multiplication, division, measurements, percentages, ratios, elementary probability and statistics, basic algebra and geometry; and b) use of graphs, charts, tables, word problems, and calculators.

Language Skills

Writing—organizing and translating thoughts into coherent written form, writing a report based on information gathered from more than one source, and correctly filling out forms.

Reading—recognizing and understanding enough written words to comprehend complex instructions and use of a dictionary.

Listening/Verbal Comprehension—following directions given verbally and asking questions when clarification is needed.

Other Skills

Teamwork/Interpersonal—engaging critically and constructively in the exchange of ideas and communicating effectively with others.

Problem Solving/Analytical—recognizing and defining problems, utilizing problem solving strategies, and distinguishing between fact and opinion.

Personal Attitudes and Responsibilities—showing respect for others, having pride in one's work, demonstrating honesty and integrity, exhibiting punctuality and attendance, showing initiative, dressing appropriately for work, maintaining self-control, and having ability to work productively with minimum supervision.

Adaptability/Flexibility—having a positive attitude toward learning and being open to change.

Personal Computer Skills—care and use of disks, starting and rebooting, understanding applications, and printing.

other skills; and 3) none—explicit instruction does not occur and the skills are not likely to be acquired.

Key findings concerning the skills taught by programs included:

- For adults without diploma or GED, language skills—including writing, simple and complex reading, and listening/verbal comprehension—were taught more frequently than math or other

skills. CBOs especially tended to focus on language-oriented skills. Furthermore, as the skills became more complex, they were more likely to be taught in the higher educational levels (Table 15).

- For adults with a diploma or GED, language skills—including reading and listening/verbal comprehension—were most prevalently provided. CBOs focused more heavily on

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 15
Basic Academic Skills Taught Directly/Indirectly
to Individuals Without a High School Diploma or GED
in Each Educational Level

Skill Area	Educational Functioning Level			
	0-5.9	6-8.9	9-12	ESL
Computation (Math) Skills				
Basic Calc.	78.6%	82.7%	85.4%	53.3%
Probab/Stats.	48.2%	78.8%	85.4%	42.2%
Algebra/Geom.	33.9%	57.7%	87.5%	37.8%
Tables/Diagr.	66.1%	82.7%	85.4%	66.7%
Language Skills				
Writing	82.1%	84.6%	85.4%	80.0%
Simple Read.	87.5%	84.6%	85.4%	84.4%
Complex Read.	66.1%	76.9%	85.4%	73.3%
List/Verb.Comp.	82.1%	82.7%	90.0%	82.2%
Other Skills				
Teamwk.	64.3%	75.0%	79.2%	77.7%
Prob.Sol.	64.3%	75.0%	85.4%	66.7%
Attitudes	82.1%	82.7%	83.3%	82.2%
Adapt/Flex.	76.8%	78.8%	83.3%	77.7%

Source: 1991 Survey of Adult Basic Skills Programs in Kansas, IPPBR/KU.

Table 16
Basic Academic Skills Taught Directly/Indirectly
to Individuals With a High School Diploma or GED
Total Sample

Skill	Percent Taught		Total
	Directly	Indirectly	
Computation/Math Skill	77.2%	2.3%	79.5%
Language Skills	Writing	75%	79.5%
	Reading	70.5%	84.1%
	Listen./verbal	52.3%	84.1%
Other Skills	Teamwk/interper.	27.3%	72.8%
	Prob.solv./analy.	61.4%	81.9%
	Attitudes	40.9%	84.1%
	Adapt./flexib.	36.4%	79.6%
	Computer	47.7%	52.2%

Source: 1991 Survey of Basic Skills Programs in Kansas, IPPBR/KU.

Table 17
Basic Academic Skills Taught Directly/Indirectly to Business/Industry
Total Sample

Skill	Percent Reporting That Skills are Taught		Total
	Directly	Indirectly	
Computation/Math Skill	60.0%	20.0%	80.0%
Language Skills	Writing	73.3%	80.0%
	Reading	60.0%	80.0%
	Listen./verbal	53.3%	86.6%
Other Skills	Teamwk/interper.	20.0%	86.7%
	Prob.solv./analy.	40.0%	80.0%
	Attitudes	33.3%	80.0%
	Adapt./flexib.	13.3%	80.0%
	Computer	33.3%	53.3%

Source: 1991 Survey of Basic Skills Programs in Kansas, IPPBR/KU.

language-oriented skills, while AVTSS tended to highlight math and other skills (Table 16).

- For instruction provided as a result of business/industry requests, listening/verbal comprehension and teamwork were most frequently taught. Once again, CBOs offered a less complete array of skills instruction when compared to the other categories, focusing instead on language skills (Table 17).

Support Services Provided by Programs

Over ninety percent of all programs were found to provide support services in conjunction with the basic academic skills instruction given to individuals without a diploma or GED or as a result of business/industry requests. Nevertheless, only sixty percent of programs providing instruction to individuals with a diploma or GED were offered support services.

Key finding regarding support services included:

- Overall, counseling was the most commonly offered support service across all three student groups.

- For adults without a diploma or GED, the most common set of support services included instruction tailored to adult life situations, followed by counseling and instruction combined with job-related skills.
- For adults with a diploma or GED, the most commonly provided services included counseling, referrals, tutoring, and other specialized programs.
- For instruction provided as a result of business/industry requests, counseling, vocational assessment, and instruction tailored to adult life situations were most frequently offered, while businesses provided instruction tailored to job-related requirements, paid time off, work releases, class fees, and teaching materials.
- Programs which met business/industry requests for instruction indicated that businesses most commonly offered their employees the following support services: tailoring instruction to business requirements, offering work release, paid time off, reimbursing class fees, and providing teaching materials.

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Evaluation of Basic Skills Program

Eighty-nine percent of those programs offering instruction to adults without a diploma or GED stated that their programs were evaluated; furthermore, over seventy percent of the programs reported that they relied on an internal self-evaluation. The second most prevalent source of evaluations, however, differed by student category 1) students without diploma or GED—the Kansas State Department of Education; 2) students with a diploma or GED—other evaluators, such as United Way, Literary Volunteers of America, or students; and 3) business/industry requests—employers.

The criteria used in evaluating basic academic skills programs differed by the source of the evaluation and student category, but overall, the most commonly reported criteria were enrollment, attendance, and student progress.

Barriers to Providing Instruction

All sixty-two programs were asked to indicate the top barriers to providing basic academic skills instruction. Barriers to instruction included items which prevented students from seeking instruction and/or programs from offering basic skills training.

Table 18
Primary Barriers to Providing Basic Academic Skills Instruction to
Individuals Without a High School Diploma or GED
Total Sample

Barrier	Educational Functioning Level			
	0-5.9	6-8.9	9-12	ESL
Child care	13.0%	14.3%	17.4%	23.8%
Transportation	13.0%	12.2%	10.9%	26.4%
Neg. history w.ed.	57.4%	55.1%	20.0%	21.4%
Wage sub/wk.rel.	1.9%	4.1%	6.5%	4.8%
Insuff.staff	5.6%	2.0%	4.3%	7.1%
Staff training	—	—	—	2.4%
Indiv.instruct.	—	—	—	2.4%
Instruc.integr.	—	—	—	2.4%
Computers/software	—	2.0%	2.2%	2.4%
Teaching materials	—	—	—	—
Student materials	—	—	—	—
Program location	1.9%	2.0%	2.2%	4.8%
Time instruc.avail.	3.7%	2.0%	2.2%	—
Other*	—	4.1%	4.3%	2.4%

*"Other" includes insufficient facilities, student's financial difficulties, students cannot make time commitment (due to job), and lack of knowledge about programs.

Source: 1991 Survey of Adult Basic Skills Programs in Kansas, IPPBR/KU.

Key findings regarding barriers to providing instruction included:

- Overall, the most frequently top ranked (or primary) barrier was a student's prior negative history or experience with education.
- The second most prevalent primary barrier for students without a diploma or GED included prior negative experience with education, especially for students functioning in the lower grade levels. Child care was also an important barrier and was more frequently mentioned as the grade levels increased. Top ESL barriers differed from the traditional grade levels, focusing on transportation and child care (Table 18).

- For students with a diploma or GED, prior negative history with education was the most prevalent primary instruction barrier. However, lack of a wage subsidy or work release was the second most common primary barrier to instruction for this group of students (Table 19).
- For programs receiving basic skills instruction requests from business/industry, negative history with education, followed by lack of wage subsidy/work release and students' fear of being discriminated against were most common primary barriers (Table 20).
- For programs NOT receiving basic skills instruction requests from business/industry—lack of wage subsidy or work release was the dominant primary barrier to instruction.

Table 19
Barriers to Providing Basic Academic Skills Instruction to Individuals With High School Diploma or GED: Total Sample

Barrier	Items Ranked	
	1	2
Child care	9.5%	12.5%
Transportation	7.1%	22.5%
Neg.history w/ed.	35.7%	27.5%
Wage sub/wk.rel.	21.4%	2.5%
Insuff.staff	7.1%	7.5%
Staff train.	2.4%	2.5%
Indiv.instruct.	—	5.0%
Instruct.integr.	—	5.0%
Computers/software	4.8%	5.0%
Student materials	—	2.5%
Program location	2.4%	2.5%
Time instruc.avail.	2.4%	—
Other*	7.1%	5.0%

*"Other" includes student's financial situation (lack of money), student's fear of seeking instruction, lack of handicapped-accessible facilities, and patient's schedule

Source: 1991 Survey of Adult Basic Skills Programs in Kansas, IPPBR/KU.

Summary

- Although the state's 35 ABE centers theoretically cover all 105 counties through satellite operations, the survey results showed that 15 counties are not served by any basic skills programs, public or private. While some of those counties may be served by the two ABE centers that did not participate in the survey, the majority of the 15 counties are located in rural portions of the state and these are the most likely to be neglected.
- Ninety percent of basic skills programs target instruction toward adults without a high school diploma or GED, while only 70 percent offer instruction to adults with a high school diploma or GED. Furthermore, only 24 percent of the basic skills programs are contacted by business/industry to provide instruction for their employees. This may be due, in part, to the fact that the mission of the ABE system does not include instruction to adults with a diploma or GED nor responding to businesses' requests for instruction.
- Language skills are the most frequently taught, including writing, simple and complex reading, and listening/verbal comprehension. In conjunction with business/industry requests, listening/

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 20
Barriers to Providing Basic Academic Skills
Instruction to Business/Industry

Barrier	No Bus. Requests		Bus. Requests	
	1st	2nd	1st	2nd
Child care	7.1%	—	6.7%	—
Transportation	—	25.0%	—	14.3%
Neg.history w.ed.	14.3%	8.3%	40.0%	—
Wage sub/wk.rel.	28.6%	—	20.0%	21.4%
Insuff.staff	—	33.3%	—	35.7%
Indiv.instruct.	7.1%	8.3%	—	7.1%
Instruc.integr.	7.1%	16.7%	—	—
Computers/software	—	—	—	7.1%
Teaching materials	—	—	—	—
Student materials	—	—	—	—
Program location	7.1%	—	6.7%	—
Time instruc.avail.	14.3%	—	6.7%	7.1%
Other*	14.3%	8.3%	20.0%	—

*"Other" includes students' fear of bias, discrimination, language/cultural differences, as well as fear of being singled out, and business did not perceive a need or show interest.

Source: 1991 Survey of Adult Basic Skills Programs in Kansas, IPPBR/KU.

verbal comprehension and teamwork were most commonly taught. Kansas basic academic skills programs, then, appear to be providing the types of skills that Kansas employers report are currently lacking in their employees.

- For the most part, businesses do not play a role in helping basic skills programs develop curriculum or select materials. Additionally, because only 24 percent of the programs reported requests from businesses for instruction, these results suggest that businesses are not likely to turn to basic skills programs if their employees' skills need improvement.
- Adults are hesitant to seek instruction because of a prior negative history with education and a fear that others will discover that they lack

basic skills. Lack of transportation, child care, and time off from work are also significant barriers preventing adults from seeking basic skills instruction.

- A vast majority of programs offer support services, especially counseling, instruction tailored to adult life situations, vocational assessment, and instruction tailored to job-specific skills. However, there appears to be a small gap between the needs of adults—particularly for child care and transportation—and the current services offered by programs. In order to reach a greater percentage of students in the future, basic academic skills programs must be able to offer these support services. □

Adult Basic Skills Training and the Workforce: A Survey of Kansas Businesses

As part of its 1989 study, *Work Force Training: The Challenge for Kansas*, the Institute for Public Policy and Business Research (IPPBR) at the University of Kansas conducted a large systematic telephone survey of over 600 Kansas businesses. One of the several purposes of that survey was to determine the skill deficiencies of the Kansas workforce. Sixty percent or more of Kansas businesses indicated that newly hired employees needed skill improvements in:

- goal setting and personal motivation skills (79%);
- proper attitudes toward work and work habits (77%);
- organizational effectiveness and leadership skills (75%);
- listening and oral communication skills (72%);
- teamwork skills (70%);
- problem solving skills (70%);
- adaptability/flexibility (66%);
- comprehension and understanding skills (60%);
- interpersonal relations skills (60%); and
- writing skills (60%).

In contrast, the reading skills of current employees were considered inadequate by only 43 percent of Kansas businesses.

The study reported in this section was considerably smaller in scope than the 1989 business survey. The major purpose of the current business survey was to identify the extent to which Kansas businesses themselves conduct basic skills training for their employees, and to specify in some detail the content of this training.

Procedures

The survey was restricted to medium size (50 to 250 employees) and large (over 250 employees) Kansas businesses. Using a computer database furnished by the State Department of Human Resources, a stratified random sample of Kansas business was selected. Preliminary calls to firms in the sample explained the purpose of the survey and asked for their participation. If the firm agreed to participate in the telephone survey, a letter was sent which outlined the types of information the survey would ask for. Some businesses could not be reached by telephone and instead filled out a copy of the survey mailed to them. The survey had several sections which focused on: 1) background information about the firm; 2) firms which did not have employees who were in basic skills training and questions relating to the reasons and consequences of not providing training; and 3) firms which had employees in a basic skill training program and questions relating to the skills taught and the nature of training.

Results

Background Information

Of the 184 firms participating in the business survey, 52 were large manufacturing, 49 were large non-manufacturing, 32 were medium size manufacturing, and 51 were medium size non-manufacturing. Additionally, 41 (22%) of the 184 firms utilized in the current survey were non-profit firms, all of which are also in the non-manufacturing category.

Thirty-two percent (or 59 out of 184) of the firms surveyed reported that their employees received basic skills training (Table 21). When compared by type of firm, 31 percent (31 firms) of non-manufacturing and 33 percent (28 firms) of

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 21
Number of Firms Whose Employees Receive Basic Skills Training

	Non-Profit Firms		For-Profit Firms		Total Sample	
	"NO"	"YES"	"NO"	"YES"	"NO"	"YES"
Total Sample	34 83%	7 17%	91 64%	52 36%	125 68%	59 32%
Non-Manufacturing	34 83%	7 17%	35 59%	24 41%	69 69%	31 31%
Manufacturing	0 0%	0 0%	56 67%	28 33%	56 67%	28 33%
Medium	12 71%	5 29%	46 70%	20 30%	58 70%	25 30%
Large	22 92%	2 8%	45 58%	32 42%	67 66%	34 34%

Source: 1991 Survey of Basic Skills Training Programs of Kansas Businesses, IPPBR/KU.

manufacturing firms reported that their employees received basic skills training. The results were similar when compared by size: 30 percent (25 firms) of medium sized and 34 percent (34 firms) of large firms reported basic skills training programs. On the other hand, the vast majority of firms offering training (52 out of the 59) were for-profit enterprises. The data suggest, then, that firm size and type do not have a differential impact on whether or not the employees of a firm are likely to receive basic skills training. However, employees of for-profit firms appear more likely to receive basic skills training than employees in non-profit firms.

Other key findings included:

- Only 7 (12%) of the firms indicated that their employees received training from an outside agency, including vocational technical schools, community colleges, and an adult basic education center.

- Of the firms reporting that their employees received basic skills training, 52 (88%) indicated that this training is provided at the workplace, and this percentage did not vary significantly by organization size, type, or profit status.
- Thirteen percent of the employers had outside consultants provide the training, while eighty-seven percent of the employers responded that they designed and administered the in-house training themselves through a training manager or supervisor (as reported by 40 percent of those businesses); personnel or human resource manager (34%); department heads (13%); president/CEO, (2%); or someone other than the above mentioned individuals (11%).

Employees Receiving Basic Skills Training

All fifty-two employers whose employees receive basic skills training in the workplace were

Table 22
Number of Firms Whose Employees Receive Basic Skills Training
At the Workplace by Major Categorical Variables

	Non-Profit Firms		For-Profit Firms		Total Sample	
	"NO"	"YES"	"NO"	"YES"	"NO"	"YES"
Total Sample	0 0%	7 100%	7 14%	45 86%	7 12%	52 88%
Non-Manufacturing	0 0%	7 100%	1 4%	23 96%	1 3%	30 97%
Manufacturing	0 0%	0 0%	6 21%	22 79%	6 21%	22 79%
Medium	0 0%	5 100%	4 20%	16 80%	4 16%	21 84%
Large	0 0%	2 100%	3 9%	29 91%	3 9%	31 91%

Source: 1991 Survey of Basic Skills Training Programs of Kansas Businesses, IPPBR/KU.

asked to indicate which of their employees received basic skills training.

Key findings regarding the types of employees which received basic skills training included:

- Seventy-five percent of employers reported that clerical employees received basic skills training in the workplace (Table 22). Employers also reported that technical employees (71 percent of employers), non-technical, blue collar workers (65%), and sales/marketing (52%) employees received training.
- On average, the number of employees receiving basic skills instruction in the workplace was: non-technical blue collar personnel—287; technical employees—48; clerical employees—31; and sales/marketing personnel—105.

Content of Basic Skills Training

Employers whose employees receive basic skills training in the workplace were asked if their

employees received training in each of nine separate basic skills areas: reading; writing; math; basic adaptability/flexibility; personal attitudes and responsibilities; problem solving and analytical; listening and verbal comprehension; teamwork and interpersonal; and basic personal computer. Of the nine basic skills areas, four were provided by 50 percent or more of the employers: teamwork and interpersonal (75 percent); listening and verbal (60 percent); basic personal computer (52 percent); and problem solving and analytical (50 percent). The other skill areas were less commonly provided: personal attitudes and responsibilities (39 percent); math (33 percent); writing (31 percent); basic adaptability/flexibility (31 percent); and reading (17 percent) (Table 23).

Employers were asked to describe the types of skills taught within each of the nine areas. Those which were most commonly taught included:

ADULT BASIC SKILLS AND THE KANSAS WORKFORCE

Table 23
Number and Percent of Organizations Indicating That Their Employees
Receive Basic Skills Training in Specific Areas

"NO"	"YES"	Area of Training
13 (25%)	39 (75%)	Teamwork and interpersonal skills.
21 (40%)	31 (60%)	Listening and verbal comprehensive skills.
25 (48%)	27 (52%)	Basic personal computer skills.
26 (50%)	26 (50%)	Problem solving and analytical skills.
32 (61%)	20 (39%)	Personal attitudes and responsibilities.
35 (67%)	17 (33%)	Math skills.
36 (69%)	16 (31%)	Writing skills.
36 (16%)	16 (31%)	Basic adaptability/flexibility skills.
43 (83%)	9 (17%)	Reading skills.

Source: 1991 Survey of Adult Basic Skills Programs in Kansas, IPPBR/KU.

Teamwork and interpersonal skills—cooperating with others to get the job done and communicating effectively with all members of the work team (as reported by 97 percent of the firms);

Listening/verbal comprehension—paying attention to the person who is speaking and asking questions to clarify understanding (97 percent);

Personal computer training—understanding that the results given by a computer are only as good as the entries made by the operator (100 percent);

Problem solving/analytical skills—selecting the best solution for a problem (100 percent);

Personal attitudes and responsibilities—meeting company's requirements for attendance and punctuality (100 percent);

Mathematics—basic calculations using addition, subtraction, multiplication, and division (100 percent);

Writing—organize and translate thoughts into coherent written form and correctly filling out forms that are normally used by the organization (88 percent);

Adaptability/flexibility—demonstrating a positive attitude toward learning and growth, being open to change, and coming up with new ideas for getting a job done (44 percent);

Reading—recognition of signs and symbols which are used in the workplace (89 percent).

Responding to Skills Gap

Over one-third (34.3%) of the medium size and large firms in Kansas report at least a moderate gap between their job skill requirements and the basic skill levels of their employees, and 50 percent of those firms stated that their employees are currently receiving basic skills training. These results suggest that there is a positive relationship between the firms' perceived severity of the skills gap and the likelihood of the firms' employees receiving basic skills training.

Adult Basic Skills Training and the Workforce: A Survey of Kansas Businesses

The 52 employers whose employees receive basic skills training in the workplace were asked if they perceived a gap between the skills of their employees and the skills that are required by the employees jobs in each of the nine skill areas (Table 24).

Key findings regarding skills gaps include:

- Of those employers who perceived a skills gap and provided training, teamwork/interpersonal skills and problem solving/analytical skills were most commonly offered, as indicated by 57.7 percent and 48.1 percent of employers, respectively.
- Employers who perceived a gap but did not respond by offering training reported that read-

ing and writing skills were the most prevalent concern, as stated by 46.2 percent and 44.2 percent of the businesses, respectively.

Employers' Contribution to Basic Skills Training

Employers who provided basic skills training were asked to indicate the hours of instruction, whether or not employees were paid for time during training, and the amount of money that the firm spent on basic skills training.

Key findings regarding employers' contribution to training included:

- Fifty-eight percent of the employers reported that basic skills training took place during both

Table 24
Comparison of Perceived Basic Skills Deficiencies With Areas of Actual Training in Organizations Providing Basic Skills Training for Employees

Basic Skills Area	Do Not Perceive Gap		Perceive Gap	
	Training Not Given	Training Given	Training Not Given	Training Given
Teamwork and Interpersonal Skills	6 (11.5%)	9 (17.3%)	7 (9.3%)	30 (57.7%)
Listening & Verbal Compreh. Skills	13 (25.0%)	9 (17.3%)	8 (15.4%)	22 (42.3%)
Personal Computer Skills	13 (25.0%)	9 (17.3%)	12 (23.1%)	18 (34.6%)
Problem Solving/ Analytical Skills	9 (17.3%)	1 (1.9%)	17 (32.7%)	25 (48.1%)
Personal Attitudes & Responsibilities Skills	16 (30.8%)	4 (7.7%)	16 (30.8%)	16 (30.8%)
Math Skills	22 (42.3%)	2 (3.8%)	13 (25.0%)	15 (28.8%)
Writing Skills	13 (25.0%)	4 (7.7%)	23 (44.2%)	12 (23.1%)
Adaptability/ Flexibility Skills	23 (44.2%)	6 (11.5%)	13 (25.0%)	10 (19.2%)
Reading Skills	19 (36.5%)	1 (1.9%)	24 (46.2%)	8 (15.4%)

Source: 1991 Survey of Basic Skills Training Programs of Kansas Businesses, IPPBR/KU.

the employee's working hours and outside of normal working hours, while thirty-six percent indicated that the training occurred exclusively during the employee's normal working hours. Only 6 percent stated that training took place solely after work hours.

- Seventy-nine percent of employers paid their workers their full wage for time spent in training, while only fifteen percent of firms partially paid their employees for time in training. A mere six percent did not pay their employees for this time.
- Businesses spent, on average, \$94,177 on basic skills training for their employees, with the minimum and maximum reported amounts totaling \$500 and \$600,000, respectively. Higher expenditures were attributed to the costs of starting new programs and the wages earned by employees during training.

Businesses' Reasons For Not Providing Basic Skills Training

Of the 184 employers that were surveyed, 125 indicated that their employees do not receive basic skills training. Each of these organizations was asked to respond to a series of questions designed to determine why they were not providing basic skills training for their employees.

As shown in Table 25, thirty-four percent of the employers responded that they did not have the time to conduct the training. Twenty-six percent indicated that the reason basic skills training is not provided is because it is too expensive. Seventeen percent of the organizations responded that they did not know how to provide training in the needed areas. Sixty-eight percent of the employers provided other reasons for not providing basic skills training.

Summary

- Over one-third of medium size and large firms in Kansas perceive *at least a moderate gap* between the basic skills of their employees and the skills that are required by their jobs. Of

Table 25
Reasons Why Organizations Do Not Provide Basic Skills Training

Do not have the time to do the training.	34%
Training is too expensive.	26%
Don't know how to provide training in the needed areas.	17%
Other*	68%

*"Other" includes 45 different reasons, most of which focus on the resources of the firm and attitudes of management toward basic skills training.

Source: 1991 Survey of Adult Basic Skills Training Programs of Kansas Businesses, IPPBR/KU.

these organizations, 50 percent report that their employees are currently receiving basic skills training, relative to 33 percent of all Kansas firms so reporting.

- For those firms which report that their employees are receiving basic skills training, this training is provided by the firm in 87 percent of the cases.
- Basic skills training is being provided to four broad categories of employees—primarily clerical, technical, non-technical blue collar, and to a lesser extent sales/marketing employees. In terms of sheer numbers of employees affected, clearly more non-technical blue collar employees receive this training than any other group.
- The areas in which basic skills training is given reflect closely the skills identified in the 1989 survey as in greatest need of improvement. They include: teamwork and interpersonal skills; listening and verbal comprehension skills; very basic personal computer skills; problem solving/analytical skills; personal attitudes and responsibilities skills; math skills;

writing skills; adaptability/flexibility skills; and to a lesser extent, reading skills.

- The majority of firms providing basic skills training to their employees conduct this training both during the employees' normal working hours and outside of normal working hours. However, 36 percent of the firms report

conducting all basic skills training during the employees' normal working hours.

- Almost 80 percent of the firms providing basic skills training to their employees report that their employees are paid for the time they spend in training.

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Policy Options for Consideration

As a result of the research, surveys, and interviews conducted in conjunction with this study, several policy options have been drafted for consideration by policy-makers, state agencies, the business community, basic skills providers, and interested Kansans. The policy options presented in this section encompass adult basic skills instruction and workplace literacy. Although the survey did not specifically address K-12 instruction, other states' efforts and related literature suggest that it is important to consider methods of reducing or eliminating the flow of future adults who lack basic workplace skills. Therefore, policy options for K-12 are also offered, based upon this information.

ADULT BASIC SKILLS INSTRUCTION

A. The Adult Basic Education System

GOAL: Expand the reach of Kansas' Adult Basic Education (ABE) system and improve accessibility to basic skills instruction.

Policy Options:

1. Establish local ABE/business advisory councils on a local or regional basis to expand the focus of the programs' curriculum and materials to include workplace-oriented instruction.

Rationale: The results of our survey of basic skills providers in Kansas indicated that over two-thirds of basic skills programs operate with no input from business regarding competency recom-

mendations or materials. When training was a result of requests from business, however, only one-third received no business input. In order to increase business involvement in basic skills instruction, ABE/business advisory councils should be created to provide a formalized, systematic way for business to have input regarding the basic workplace skills curriculum of ABE programs, including such skills as learning to learn; reading, writing, and computation competence; listening and oral communication; creative thinking and problem solving; personal management; group effectiveness; and organizational effectiveness.

The key purpose of the advisory councils is to provide businesses with a mechanism for input into curriculum. Business' role will be strictly advisory. The councils would offer the ABE centers an understanding of the array and level of basic skills needed in the workplace. The councils may consist of a coalition of businesses, independent volunteer organizations, and the ABE centers and could either be established within each ABE center (for larger cities) or in clusters of ABE centers (for smaller communities). This is to be determined locally but should include as large an area as feasible. In the case of ABE centers located at community colleges, AVTSSs, or other institutions with advisory boards, the ABE/business advisory partnership should be a subset or committee of the larger advisory board. The purpose of this structure is to coordinate the activities of the ABE center with the overall programs offered by the supporting institution.

2. Establish effective, measurable outcomes for ABE programs through the Kansas State Department of Education.

Rationale: Over three-fourths of surveyed programs stated that they evaluate their instruction

through internal self-evaluation. Other evaluators, such as the State Department of Education, were also mentioned, but most of the evaluators relied on methods which examine the inputs—such as enrollment or attendance figures—instead of the outcomes of the system. Nonetheless, students who complete the ABE program and take their GED must have sufficient skills to enter the workforce or seek further skill training. ABE programs need to begin evaluating the outcome of their instruction on a systematic basis by assessing their students, in terms of basic skills, to ensure that they are ultimately ready to enter the workforce.

3. Double total ABE enrollment by the year 2000.

Rationale: In comparing the Kansas ABE program to those of other states, the results indicate that Kansas has, overall, a smaller program which is not as adequately funded as other states. ABE instruction, however, is a critical first step in upgrading and improving the skills of the workforce. Adults who have inadequate basic skills are unable to acquire more advanced technical skills. This is a problem for Kansas: the Kansas workforce faces an increasing skills gap. When comparing the number of jobs requiring less than a high school diploma and the number of adults with that level of education, the data show that future jobs will require more education and that Kansans may not have the education requirements to fill those jobs. If the state ignores this issue and chooses to embark on a low skills/low wage strategy, Kansas will compete with developing nations, such as Mexico, in attracting businesses requiring low skills. Subsequently, the state's standard of living will suffer.

Of the states neighboring Kansas, Iowa has the most impressive ABE enrollment, reaching approximately 41,500 persons annually, compared to 10,200 in Kansas. Kansas must begin to increase its ABE enrollment if it wishes to remain competitive against other states, like Iowa, or other countries in attracting and retaining businesses

needing employees with technical skills to produce quality products.

4. Increase access to ABE instruction through enhancement of satellites or creation of new ABE centers.

Rationale: The Kansas State Department of Education should undertake an analysis to determine which areas of the state are presently underserved by the ABE system. The study should focus on the ability of the present satellites to be easily accessible—in terms of location, hours, array of instruction, and support services—and include specific recommendations based on the findings for improvements within the system.

The results of our study indicated that approximately 15 counties were not served by any of the survey participants. Although a few of those counties may be served by the ABE center located at Cloud County Community College, the majority of the counties were located in rural areas which are presently "satellite" locations of other ABE centers. All Kansans must be guaranteed easy access—in terms of location and hours of instruction—to ABE programs if they choose to seek basic workplace skills instruction.

5. Ensure that basic skills instruction is available to all Area Vocational Technical Schools' students through cooperative arrangements with other local education providers or an Academic Skills center.

Rationale: Of the state's 17 Area Vocational Technical Schools, only one is an ABE center. If students attend one of the other AVTSS and need basic skills instruction before they can enter skill training, the school is not reimbursed for remedial or basic skills instruction. Some have established Academic Skills Centers for their students who need help with basic skills, but those programs operate with few resources and may cut into other programs.

AVTSs should be encouraged to enter into cooperative agreements with other local basic skills providers, such as community colleges or other ABE centers, to provide basic skills instruction for AVTS students. For example, if an AVTS is located in the same county or city as a community college, then the college could provide basic skills instruction for AVTS students on-site or on the college campus. The community college, in turn, would be reimbursed for instruction through the state as it is for its own students. For those AVTSs which do not have nearby basic skills providers, the state should assist the AVTS in creating and funding basic skills instruction through an on-site Academic Skills Center.

6. Expand the support services of ABE centers.

Rationale: ABE centers should provide support services and financial support should come from local sources, such as the United Way and existing SRS programs. Centers that develop a strategy for offering support services to their students should be provided base level funding from the state to cover a portion of such services. By setting base level state funding, centers are encouraged to work with other local organizations who could provide them with financial or administrative assistance in developing and maintaining support services. However, reliance on SRS or any other single source may limit the student base. In the case of SRS, not all ABE students are SRS clients and are not eligible for those benefits.

The survey results indicated that there was a slight gap between the number of individuals needing support services (child care and transportation) and programs which offered those services. Even though the gap is slight at the present time, if basic skills programs expect to serve a greater proportion of the target population, they must provide the support services that their students need.

7. Increase state support for ABE programs to meet the average of other states' funding levels, adjusted for population.

Rationale: The bulk of non-federal support for Kansas ABE programs comes from local sources, and in FY 1990 total state ABE support totalled \$186,000. Local ABE support for the same period was \$1,149,207. The state has met federal match requirements but has been diligent not to exceed them. Other states—including those surrounding Kansas—have, for the most part, greater state contributions to ABE programs. In fact, the average state ABE expenditure for Kansas and its neighbors (Colorado, Iowa, Missouri, Nebraska, and Oklahoma) equalled \$1,942,640 in FY 1990. Iowa had the greatest state contribution—\$9,406,496—and the greatest enrollment. Greater funding for ABE programs would permit: a) doubling enrollment; b) expanding the accessibility of instruction; c) offering more support services; and d) improving equipment and hiring additional staff.

B. Volunteer Literacy Organizations

GOAL: Provide financial assistance to existing and newly created volunteer literacy efforts.

Policy Options:

- 1. Develop a pilot program within the Kansas State Department of Education to receive applications and provide base grants to volunteer organizations statewide—up to \$7,500, with a required match of \$7,500 shared by local business and governments—to cover start-up costs or acquire additional resources.**

Rationale: Volunteer literacy organizations generally operate with few resources and are limited in the services which they can provide to the community. Very often the success of these

organizations depends on the volunteers who staff them; over half of community based organizations rely on volunteer teachers to provide instruction. In order to leverage the contribution of volunteers, the state should undertake a 3 year pilot project to provide grants to 40 independent literacy organizations annually for acquisition of essential resources, such as teacher/student materials, computers, or other operating materials. By requiring a local business and/or local government match, the organization is demonstrating that it has local support for its activities. Programs which receive funding in the first or second year of the project may reapply for additional funding in the following year(s). At the end of the program, the State Department of Education should evaluate the overall effectiveness of the project to determine its impact.

C. State Social Services and Correctional Facilities

GOAL: Reduce the state's future cost of providing social services and correctional facilities by improving access to basic workplace skills instruction for individuals receiving state social support or serving time in correctional facilities.

Policy Options:

1. **Continue current efforts within the Department of Corrections to provide basic skills education to inmates.**

Rationale: Over 50 percent of all entrants to the state's correctional facilities do not have a high school diploma or GED, and this is similar to other inmate populations around the country as well. The current correctional education system seeks to break the cycle of recidivism by giving inmates comprehensive education, including basic skills instruction. The state contracts its educational services out to private providers, but most follow the same pattern of: 1) immediate assessment of new inmates, 2) an educational "contract"

for new inmates which requires them to attend school, and 3) periodic review and assessment of inmates' educational progress, especially during parole hearings. This system appears to be effective in encouraging inmates to learn basic skills.

2. **Conduct a feasibility study through the Department of Corrections to determine the potential and cost of providing basic skills instruction to inmates in county/local corrections facilities.**

Rationale: Because the current corrections education program affects inmates only in state facilities, the Department of Corrections should evaluate the feasibility of expanding the model to include county and local facilities. The study should examine the potential for establishing working relationships with volunteer organizations or local ABE centers in providing one-on-one tutoring or instruction in small groups. One critical point that the study may examine is the average length of time that inmates spend in local or county prisons in order to determine the potential effectiveness of providing basic skills instruction in these facilities.

3. **Create a common assessment or student evaluation based on workforce competencies for all state workforce programs.**

Rationale: Just as all state workforce training programs should establish one common intake form, all participating agencies should develop and agree upon a common assessment tool for adults entering the system. One example of a common assessment tool could be the Kansas Competency Test, based on the Comprehensive Adult Student Assessment System (CASAS). This test evaluates reading and math skills, and the questions are structured in a workplace context. The purpose of the common assessment is to: 1) determine an adult's skills deficiencies when entering the system; 2) transfer the results to any other state workforce program; 3) eliminate student frustration; and 4) increase access to instruction and training.

4. Create a common intake form for the Kansas Department of Education, Department of Human Resources, and Social Rehabilitation Services workforce programs.

Rationale: Individuals entering any state workforce program should enter the system through one intake form. The Kansas Department of Education, Department of Human Resources, Social Rehabilitation Services, and other applicable agencies should work together to create a universal intake form which can be filled out the first time an adult enters the state's workforce training system. As the individual comes in contact with other state workforce programs, the other participating agencies should be able to simply refer to the already completed form. The purpose of this common form is increase accessibility to training programs by acquiring all necessary information from the beginning, spending less time on additional administrative responsibilities and more on providing assistance and instruction.

WORKPLACE LITERACY

Policy Options:

1. Establish a workplace literacy program at each ABE center or AVTS and interested independent literacy organizations, with start-up funding from the state and oversight through the Kansas State Department of Education.

Rationale: Adult Basic Education centers and independent literacy organizations are known for their expertise in providing instruction to adults needing to improve their basic workplace skills. Although the system is presently under funded, basic skills programs should be expanded to include meeting businesses' requests for workplace literacy programs.

ABE centers or community based organizations may not be accustomed to tailoring their

programs to meet the specific needs of a customer—mainly businesses—and they may not be equipped or staffed to either market or provide their services. To assist programs which currently do not offer workplace literacy programs, the state should distribute small, one-time grants to establish such a program. Local governments and business should provide a match which is equal to the state's contribution. Centers can then develop programs, with assistance from the Workplace Literacy Partnership, in developing assessment tools and strategies for tailoring basic skills training programs for employees of firms.

Once the center has a basic workplace skills program in place, then it can actively seek businesses which need instruction for their employees. An important part of each center's program should be the ability to market their services to the business community, assess the needs of employees and tailor a program to them, and offer instruction on the business site and during times which are convenient to the employee. Businesses should support workplace literacy training for their employees by working with the center in providing on-site, on-the-clock basic skills training programs.

It is crucial that businesses endorse basic skills training programs for their employees by making them available at the business site and during hours which the employee is on-the-clock or in a partial employee/employer time arrangement. One of the primary barriers to providing basic skills instruction, especially when meeting business/industry requests, was the lack of a wage subsidy or time off from work for instruction. To ensure that their employees are receiving and completing basic skills instruction, employers should undertake these measures to support their employees.

2. Create a pilot program to develop workplace basic skills training for clusters of firms within similar industry groups.

Rationale: Kansas businesses are generally very small and have difficulty in providing

training for their employees. Ironically, small businesses typically need better trained workers because each employee must be able to perform several different tasks or functions within the firm. Just as businesses are entering a third wave in production, states are beginning to tailor their economic development strategies to take into account a third wave: development of clusters. A key cluster within the state would be groups of business and industry with similar products or processes, such as agricultural value-added businesses, the plastics industry, or aviation machine shops.

Therefore, by working with clusters of small business with similar products, skills needs, etc., the workplace literacy providers could offer basic workplace skills instruction to businesses which could normally not take part in training because they did not have the critical mass, on their own, to take part in such training. The state should encourage this new wave in training by sponsoring pilot programs around the state to work with business clusters in providing basic workplace skills instruction for their employees.

3. **Establish a statewide private/public Workplace Literacy Partnership to serve as a central clearinghouse for workplace literacy information, develop a strategic approach to creating workplace literacy programs in Kansas, and coordinate creation/development of workplace literacy providers.**

Rationale: The results to the survey of businesses indicated that of those businesses reporting a moderate to severe employee skills gap, fifty percent reported that their employees were currently receiving basic skills training. Eighty-seven percent of employers offering basic skills training provide it themselves. Additionally, very few businesses contacted the state's ABE system to request basic workplace skills instruction and only 33.3 percent of the state's ABE centers reported such requests. These two points,

when brought together, do not suggest that businesses are not interested in training their employees. Instead, these results imply that businesses are taking on the responsibility of training because they may not be aware of other available training sources. The state has in place a training system (KIT/KIR) to meet the needs of employers with workers functioning at higher skills levels, and it should expand its training base to take into account employers with workers who lack adequate basic workplace skills. The Workplace Literacy Partnership would bridge the gap between functionally illiterate adults and more advanced training programs.

In essence, the overall mission of the partnership could focus on: a) building a long-run state workplace literacy strategy by bringing various representatives of business and the public sector together, and b) providing hands-on assistance to workplace literacy providers. One option for the partnership could be to combine and retain the current efforts of other existing private and public organizations. The partnership could strive to meet the following objectives: 1) coordinating and/or providing regular training/workshops/conferences on workplace literacy for businesses, literacy programs, and public entities; 2) encouraging the financial support of businesses, state, and federal entities for specific workplace literacy programs or activities; 3) coordinating the efforts of ABE centers and independent community-based organizations in providing comprehensive workplace literacy programs throughout all areas of the state; 4) coordinating and/or supporting the efforts of other literacy organizations in promoting a general awareness, moral support, and encouragement for those who lack basic workplace skills; 5) assisting programs in establishing proactive marketing and business outreach mechanisms for their workplace literacy programs; and 6) assisting businesses in similar business sectors in working together (in clusters) to obtain training and financial incentives for upgrading the basic workplace skills of their current employees.

K-12 BASIC SKILLS EDUCATION

A. Basic Workplace Skills Competencies

GOAL: All Kansas students should acquire the basic workplace skills necessary to function in the workplace and society prior to leaving high school.

Policy Options:

1. Establish statewide certified basic skills competencies for high school graduates and monitor, through periodic testing in grades K-12, the development of students' basic workplace skills.

Rationale: It has been assumed for many years that if someone has a high school diploma, s/he has acquired at least a basic set of skills necessary to function in the workplace and society. Because some students "slip through the system" without becoming adequately prepared for the current workplace, the State Department of Education should take the lead in establishing a specific set of skills which students should learn before graduation. Because a single test administered before graduation may not detect skills deficiencies during the first few years of school, the state should determine: 1) skills to be tested; and 2) in what grade(s) students should be tested.

One of the tests should be administered during a student's senior year in high school, although the test does not have to be a graduation requirement. The purpose of the testing will be: 1) show each student where s/he needs to improve his/her basic skills in order to become work ready; 2) pinpoint, for each district, what skills their students lack and need additional instruction in; and 3) compare, on statewide, district-by-district basis the results of the tests and the relative rank of each district.

In addition to administering the test, the State Department of Education and school districts should work together to set acceptable "passing"

score levels for the test. By the year 2000, passing the competency test should become a requirement for graduation from high school in Kansas.

2. Summarize and rank the basic skills competencies test results of high school seniors by school district and issue them in an annual report from the Kansas Department of Education.

Rationale: School districts should be held accountable for the basic skills attainment of their students. By issuing the results in an annual report to the public, Kansans will be able to see the performance of their districts over time. There are presently very few measures of district performance other than dropout rates. This report would show the districts' customers—students, parents, and businesses—how effective the districts have been in educating their students. If the test results indicate that some districts have a relatively high proportion of students who are graduating with inadequate basic skills, then the district should have the ability to address the problem.

It must be recognized that all students do not enter the system from the same economic/social backgrounds and may not be prepared for school. School districts cannot be held accountable for these inequalities. However, base-line information would be helpful if it were available to demonstrate the progress of school districts in teaching basic skills to their graduating seniors. The results would not indicate scores for advanced skills, such as calculus, but an array of basic skills that all adults need to either further their education or seek employment.

3. Establish a "warranty" for high school diplomas to guarantee high school graduates and employers that graduates possess basic workplace skills.

Rationale: Students who are not able to find or retain employment because they do not have adequate basic workplace skills should have an

opportunity to return to the school district and receive free instruction. Additionally, employers who hire recent high school graduates who lack basic academic skills should be able to send their employees, free of charge, to the district to upgrade the employees' basic skills levels. The warranty ensures that students will have the chance to gain the skills necessary to find and keep a job, even if training takes place after high school. It also persuades the district to make sure that students leave school prepared for the workplace.

In conjunction with the results of the basic skills competencies test scores, students who lack basic workplace skills after graduation must have an opportunity to enter a post-graduate program to bring their skills to a level sufficient for the workplace. A student who goes to a community college or four year school after graduation may have a chance to improve his/her basic skills, but both college and non-college youth must be guaranteed that their school district will back their diploma with additional instruction—at its expense—if necessary.

4. Create an education/business advisory partnership in clusters of Unified School Districts to assist them in developing and identifying a specific inventory of basic skills curriculum—including abstract skills such as learning to learn and adapting to change—which are necessary for employment.

Rationale: The purpose of the education/business partnership is to establish a formalized, systematic way for groups of businesses to provide input regarding the basic workplace skills curriculum of school districts. The role of business will be strictly advisory and serve to steer the development and evolution of skill requirements in the curriculum.

There are two underlying objectives for these education/business partnerships. The first objective is to gear education towards a customer-based focus. The educational needs of today's and

tomorrow's students are continually changing and doing so at an increasing rate. Education cannot prepare young people for the workplace of tomorrow unless it understands the needs of its students and business. Just as Kansas businesses have begun to think about their products and services in customer-focused terms, education should also consider the needs and requirements of one of their customers: business. Second, Kansas businesses must have access to well trained workers if they are to remain competitive and productive. Kansas businesses are faced with a new array of competitors located in other states and other nations. Traditional business practices, processes, and products are no longer useful or competitive. One of the most difficult challenges facing Kansas businesses is competing with the well-trained workforces of other countries. While Kansas has historically had a well-educated workforce relative to the nation, outside forces require us to more fully examine our human capital.

5. Develop a teacher/business internship program in every school district to expose teachers to the business world.

Rationale: In addition to their academic preparation for the classroom, current and future teachers must understand the business environment. Businesses should help teachers realize the importance of certain skills to the workplace and how academic information is applied to the business environment. Teacher/business internships will provide educators with an opportunity to gain first-hand knowledge about the workplace so that they will 1) have a general understanding of the business environment; 2) be exposed to the types of technology and processes used in the workplace; 3) gain greater knowledge about the types of skills required to be productive; and 4) perceive the need to help their students prepare for the world of work. Teachers can then take this knowledge back with them into the classroom, utilizing it as examples in teaching and articulating the importance of education.

There are many creative ways in which the internship programs could be structured. One example of a teacher/business internship program is the teacher summer hire program through which teachers are sponsored by businesses to work during the summer months for a particular firm. Teachers could also participate in one-day seminars or visits to business sites.

6. Establish a student workplace program in every school district to prepare students for work after high school.

Rationale: Historically, a college education was assumed to be the only way to develop the skills of tomorrow's leaders in business and society. For some students, however, there are many opportunities to develop skills outside of the traditional college classroom. Our education system is not geared towards preparing those students—the non-college students—for additional training in technical areas or an entry-level job. Education must convey to students, through a systematic basis, that there is life after high school and it involves the world of work. Some students may complete their high school education with no real work experience or exposure to the workplace. A few may have held jobs in retail or fast-food operations, but they may not be truly aware of the opportunities and requirements of life-long careers. A student workplace program should give students a brief glimpse of the business environment. One example of a workplace program is "shadow days," where students spend a day or afternoon following a business person through his/her typical daily schedule and tasks. Another example of a potential program would be one which allows high school students to spend part of their school day in the business environment, actually working in an internship capacity. Students could work for a firm for a short period of time, such as four weeks, or they may receive more in-depth knowledge through an internship lasting one or two semesters. Finally, business

persons could be invited into the classroom to give guest lectures or teach for a semester.

All high school students need to have a positive, clear vision about their lives after high school. For some, a college education will be the answer. But for those who will not go on to college, their high school education needs to prepare them for a career or additional technical training.

B. Retention of K-12 Students

GOAL: Reduce the flow of adults who lack basic workplace skills by addressing the state's high school dropout rates.

Policy Options:

1. Lower the state dropout rate by 50 percent by the year 2000.

Rationale: The state's dropout rate has been increasing over the last few years. While the total numbers of dropouts have been decreasing, they have done so at a rate which is less than the decrease in total enrollment. The state, in conjunction with school districts, should work to cut the dropout rate in half in a ten year period. This is not an overall goal just for the state. All school districts should cut their dropout rates in half for all students in all grades, including minority groups. The state's 1989-1990 school year dropout rate was 4.2 percent and equals the total number of dropouts divided by the total number enrolled. Other measures, including the Current Population Survey (CPS), calculate the dropout rate by graduating class. Both measures should be cut in half by the year 2000.

Cutting the dropout rate is an investment in our future. Dropouts usually have not acquired sufficient basic workplace skills to function in the workplace or society, and they represent a present and future cost to society, through lost earnings potential, cost of remedial instruction, and possible social costs, such as welfare or incarceration.

2. **Develop innovative programs in clusters of school districts to address the unique needs of at-risk students.**

Rationale: Students may drop out of school for several reasons, including economic, school related, or personal ones. If the state and school districts are going to address the dropout problem successfully, strategies to eliminate dropouts will be more effective if they are tailored to combat the reasons for dropping out. One option may include creating alternative settings for instruction which are not located in the traditional school setting. Other options may include offering support services in conjunction with instruction, such as child care for young parents.

3. **Develop means of keeping in contact with students who drop out.**

Rationale: Districts should develop a plan or strategy to keep in contact with students who drop out of school in order to encourage young people to return to school or pursue the GED. Schools should also give students leaving school information about local literacy programs or the closest ABE center.

4. **Calculate the state dropout rate from the seventh through the twelfth grade.**

Rationale: The current method of calculating dropouts includes students in the ninth through twelfth grades of high school. Although all students under the age of 16 must remain in school, it is important to begin calculating the dropout

rate at the seventh grade in order to identify students who are at-risk of dropping out. By calculating the rate in earlier grades, school districts and the state can intervene earlier and provide assistance to those who have the potential of dropping out permanently when they turn 16 years old.

5. **Calculate the state dropout rate by two methods: a) a method which takes into account the number of dropouts per class or year of graduation and b) the traditional dropout/headcount method.**

Rationale: The current method of calculating dropouts, as used by the Kansas Department of Education, divides the total number of dropouts into the number enrolled for each grade. Another method would calculate the dropout rate by graduating class. In other words, a student who is in the 9th grade in the Fall of 1990 should graduate in the Spring of 1994. If that student were to leave school, the district would attempt to determine the reason—moved out of state, moved to another district/school, or dropped out—and count those that dropped out as dropouts from the Class of 1994. Students who could not be tracked would not be counted toward the dropout rate. The reason for calculating dropouts by this method is that it more accurately portrays dropout trends through a *cumulative* measure, rather than a simple grade-by-grade count. Results from the Garden City dropout study demonstrate that the cumulative method is feasible and offers an additional perspective on the dropout issue. □

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