The role of school-to-work transition in the broader context of K-12 systemic reform was examined by way of a case study of Jefferson County, Kentucky, before and after passage of the Kentucky Education Reform Act (KERA) in 1990. The systemic approaches toward school-to-work transition as part of educational reform that were developed and implemented in the Jefferson County Public Schools were examined from the standpoints of the role of the state, district, and community infrastructures and the following external building blocks--federal policy and programs and national business and foundation support. Models of career/technical education restructuring and magnet career academies were developed, and specific examples of successful approaches and strategies for incorporating work force education as an element of systemic reform were identified. It was concluded that school-to-work transition should be part of a more comprehensive and strategic approach to educating students and that transition activities should be a regular part of the education process for all students. (Appended is a discussion of the relationship between systemic school reform in Jefferson County and the KERA.) (MN)
SCHOOL-TO-WORK TRANSITION AND ITS ROLE IN THE SYSTEMIC REFORM OF EDUCATION

THE EXPERIENCE OF JEFFERSON COUNTY, KENTUCKY, AND THE KENTUCKY EDUCATION REFORM ACT

BEST COPY AVAILABLE:

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.
This paper was written for the Academy for Educational Development's National Institute for Work and Learning's Study of School-to-Work Transition Education Reform which is part of the Studies of Education Reform program, supported by the U.S. Department of Education, Office of Educational Research and Improvement, Office of Research, contract No. RR 91-172012. The program supports studies and disseminates practical information about implementing and sustaining successful innovations in American education. The opinions in this document do not necessarily reflect the position or policy of the U.S. Department of Education or the Academy for Educational Development, and no official endorsement should be inferred.
School-to-Work Transition and its Role in the Systemic Reform of Education:

The Experience of Jefferson County, Kentucky, and the Kentucky Education Reform Act

by Regina M. J. Kyle

Prepared for
National Institute for Work and Learning
Academy for Educational Development
The Academy for Educational Development, founded in 1961, is an independent, nonprofit service organization committed to addressing human development needs in the United States and throughout the world. Under contracts and grants, the Academy operates programs in collaboration with policy leaders; nongovernmental and community-based organizations; governmental agencies; international multilateral and bilateral funders; and schools, colleges, and universities. In partnership with its clients, the Academy seeks to meet today’s social, economic, and environmental challenges through education and human resource development; to apply state-of-the-art education, training, research, technology, management, behavioral analysis, and social marketing techniques to solve problems; and to improve knowledge and skills throughout the world as the most effective means for stimulating growth, reducing poverty, and promoting democratic and humanitarian ideals.

The National Institute for Work and Learning, an institute of the Academy since 1988, seeks to bring the work, education, government, and community sectors together around the shared goal of working collaboratively to improve education–work relationships in the interests of individuals and society. Three areas of concentration define the Institute’s activities: successful youth transition; work life education and adult literacy; and productive aging. The Institute accomplishes its mission in each of these areas through research, program documentation and evaluation, policy analysis, technical assistance and training, and information networking.

The Academy for Educational Development is registered with the U.S. Agency for International Development as a private voluntary organization. The Academy is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. Contributions to the Academy are tax deductible.

Funds for the printing and dissemination of this publication were provided by the Academy for Educational Development.

Printed in the U.S.A.

1995
### Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>iv</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Systemic Reform</td>
<td>2</td>
</tr>
<tr>
<td>School-to-Work Transition and Systemic Reform</td>
<td>5</td>
</tr>
<tr>
<td><strong>Background</strong></td>
<td></td>
</tr>
<tr>
<td>The State, Work Force Education, and Systemic Reform</td>
<td></td>
</tr>
<tr>
<td>The District, Work Force Education, and Systemic Reform</td>
<td></td>
</tr>
<tr>
<td>Community Infrastructure</td>
<td></td>
</tr>
<tr>
<td>External Building Blocks</td>
<td></td>
</tr>
<tr>
<td>Implications for Future School-to-Work Transition Programs</td>
<td>16</td>
</tr>
<tr>
<td>References</td>
<td>18</td>
</tr>
<tr>
<td>Appendix</td>
<td>19</td>
</tr>
</tbody>
</table>
As we approach the twenty-first century, a large segment of our nation's young people are having a harder and harder time moving from school to work with any reasonable prospect for long-term productive employment. The lack of a comprehensive and effective school-to-work transition system not only frustrates many students but also has substantial costs to business and to our economy as a whole. A skill-deficient work force hampers our nation's economic growth, productivity, and ability to compete in an international economy. New modes of information and technology have forced a restructuring of the home, the school, and the workplace. As a result, there is a critical need to create systems that effectively serve the interests and potential of young people who are not planning to enter college directly after high school. These students need to leave school with the diverse skills, knowledge, abilities, and attitudes necessary for a rapidly changing world of work; community, social, family, and adult responsibilities; and lifelong learning.

The School-to-Work Opportunities Act of 1994 offers a chance to bring together partnerships of employers, educators, and others to build an effective school-to-work system that prepares young people for either high-quality jobs or further education and training. The new systems must include the following basic program elements:

- work-based learning that provides a planned program of job training or experiences, paid work experience, workplace mentoring, and instruction in general workplace competencies
- school-based learning that provides career exploration and counseling, instruction in a career major, and a program of study that is based on high academic and occupational skill standards and
- connecting activities that bring schools, students, and employers together to connect the worlds of school and work by matching students with work-based learning opportunities and by training teachers, mentors, and counselors

The challenge is to build and implement a new system that moves beyond business as usual for students who are not on the college path. Their transition process from school to work must become the coordinated responsibility of school, family, business, community, and government. No single institution can or should take sole responsibility for or be expected to provide all of the approaches to educating, training, guiding, preparing, and supporting our young people.

The Academy for Educational Development's National Institute for Work and Learning has undertaken a Study of School-to-Work Transition Education Reform
supported by the U.S. Department of Education, Office of Educational Research and Improvement. The study focuses on the planning and design, implementation, and impact of school-to-work transition reform initiatives. By documenting the design and integrity of exemplary programs and by assessing program experiences and impacts, the study offers critical lessons for those interested in adapting or adopting programs that effectively link schools with the business community to improve the transition from school to work. As part of the study, a series of papers have been commissioned to identify critical issues facing practitioners and policy makers as they begin to design and implement new school-to-work transition systems.

The overall study has been guided by a National Advisory Panel, which has provided direction and advice on the issues to be explored and topics to be considered. The National Advisory Panel comprises the following individuals:

- Paul Barton
  Director
  Policy Information Center
  Educational Testing Service

- Cynthia Brown
  Director
  Resource Center on Educational Equity
  Council of Chief State School Officers

- Jacqueline P. Danzberger
  Director of Governance Programs
  Institute for Educational Leadership

- Sandra Jibrell
  Senior Planning Associate
  Annie E. Casey Foundation

- Anita Lancaster
  Assistant Director
  Defense Manpower Data Center

- Hilary Pennington
  President
  Jobs for the Future

- Franklin Smith
  Superintendent
  District of Columbia Public Schools

- Nevzer Stacey
  Senior Program Officer
  Office of Educational Research and Improvement
  U.S. Department of Education

- David Stern
  Professor
  School of Education
  University of California

- Rafael Valdivieso
  Vice President
  Academy for Educational Development
This paper accomplishes the following:

- examines school-to-work in the broader context of K–12 systemic reform
- uses the experience of Jefferson County, Kentucky, and the Kentucky Education Reform Act as a case example for its arguments
- defines systemic reform as both a philosophical base for transforming education and a process for guiding change
- lays out the key building blocks for systemic approaches to school reform
- discusses systemic approaches as developed and implemented in the Jefferson County Public Schools
- discusses the role of the state, district, community infrastructure, and external building blocks as essential elements in work force education and systemic reform
- provides models of career/technical education restructuring and magnet career academies along with other specific examples of successful approaches and strategies for incorporating work force education as an element of systemic reform
- proposes that school-to-work transition needs to be part of a more comprehensive and strategic approach to educating students and that transition activities must be a regular part of the education process for all students
- offers a strong argument for school-to-work transition to be part of a larger education reform strategy

As the author notes, school reform without work force preparation is incomplete and school-to-work transition programs without systemic school reform will become trivial. Educators, policy makers, employers, and community leaders would do well to heed this call and to examine closely the message in this paper.

Ivan Charner
Vice President and Director
National Institute for Work and Learning
Academy for Educational Development
Introduction

This paper examines school-to-work transition in the broader context of systemic reform of the U.S. K–12 education system. It draws particularly from the experiences in Jefferson County, Kentucky, prior to and in the years following the passage of the Kentucky Education Reform Act (KERA) of 1990. The approach is both theoretical and practical: (1) theoretical because it presents a framework for systemic reform that can be used in the design of school-to-work initiatives that are embedded in systemic reform and in the analysis of existing programs, and (2) practical because it draws on twenty years of experience in designing and helping to implement strategic approaches to U.S. education that include significant attention to preparation for work and transitions from education to work.

Before looking at systemic reform and the role of school-to-work transition in the formation of American schools, it is critical to acknowledge the existence of a set of powerful and often unspoken beliefs and attitudes related to preparing students for the world of work. Any attempt to make school-to-work transition a normal and important element in education must deal with these beliefs and attitudes.

- Even though Americans see success at work as providing them with much of their identity and self-worth, they are quite ambivalent about the role that work force preparation should play in the education of all students.
- This ambivalence is rooted in the "either/or" and tracking approach to education too often characteristic of both secondary and postsecondary institutions: liberal arts programs do not often see preparation for work as part of their responsibility; college preparation and vocational education at the secondary level run along parallel tracks, with the choice of one most often excluding involvement in the other.
- Many view vocational education programs as second rate, at best, and the students in them as incapable of more advanced learning; indeed, in too many instances, vocational programs became "dumping grounds" for problem students.
- Many also identify school-to-work transition initiatives with "at-risk" students, those who will go into unskilled or low-skilled jobs, not with students who will pursue postsecondary education and become professionals or highly skilled workers.
This paper is based on a very different set of beliefs.

- School-to-work transition should be an integral part of work force preparation for all students, whatever their immediate plans for their post-high school years. A research scientist, a lawyer, a business executive, and a poet are just as much workers as are the carpenter, the medical technician, and the airplane mechanic.
- Preparation for future work should begin in the elementary schools and be integrated into the curriculum from the earliest years through postsecondary education.
- Career and technical education programs should offer integrated academic and technical curricula that include mandated work experiences, but that also prepare students for postsecondary education and lifelong learning.

**Systemic Reform**

Over the last few years, it has become fashionable to label various reform efforts as "systemic reform." In reality, very few approaches to public school reform can truly be called systemic. With few exceptions, the attempts to change schools over the last ten years have been short term in nature, focused on one segment of education (such as high school, middle school, elementary school), one student population (such as "at-risk" students, gifted and talented students, vocational education students), a single curriculum or skill area (such as mathematics, science, writing, cooperative learning), or different assessment tools for measuring education. Most of these "project" approaches to changing schools can be part of a systemic reform effort; not a single one, in and of itself, will result in systemic reform.

Systemic reform is both a philosophical base for transforming education and a process guiding the changes needed in schooling at any point in time. It defines the business of schools as student achievement: student success in acquiring the knowledge, skills, and behaviors required for active and productive participation in society. It sees public education as a system and understands how the various components interact and depend upon one another.

Systemic reform is a process that, to be fully effective, involves all the internal components of the public education system and the external organizations with an interest in the success or failure of education. Figure 1, Building Blocks for Systemic Approaches
to K–12 Education, illustrates three internal and two external components and the potential relationships among them.

1. The key building block, school district policy/programs, is the central component because it is within the school district that American public education happens. Lack of attention to the district has been one of the critical weaknesses in school reform efforts over the last ten years.

2. School district policies and programs are, to a greater or lesser degree, driven by the second element, state policy/programs. The U.S. Constitution leaves the responsibility for education to the states. Systemic reform efforts at the local level can be helped or hindered by state policies and programs. If the state is committed to a systemic approach to school reform, it is much more
likely that individual districts will develop strategic and comprehensive approaches as well.

3. The ability of the school district to make significant changes in education also depends on a supportive community infrastructure. Major innovations require a community understanding and agreement about goals and the ways to attain them, expertise that may not currently reside in the school district, additional funding, and collaboration with other community organizations.

4. Federal policy/programs may affect systemic school innovation in several ways. They may develop awareness from a national perspective of the need for school reform and critical issues related to it. Through specific federal programs, support is given to short-term demonstration projects and longer-term interventions such as Head Start, Chapter 1, and the new School-to-Work Opportunities Act. Federal regulations may hinder or may further systemic reform.

5. The last component of this model framework is national business/foundation support. Much of the emphasis on education reform comes from the growing concern of American companies about their need for an educated and flexible work force to compete in the global economy. Programs supported by corporate and other foundations have been active in assisting a variety of changes in K–12 education. Some of these have been integrated into systemic approaches to reform at local sites; some have been pursued as discrete projects, unconnected to the whole redesign of the education enterprise.

The impact of and interactions among these components may be positive, negative, or neutral with respect to the systemic reform of education. This is demonstrated in a study published in 1993 on the impact on student learning of the approaches of Jefferson County Public Schools (JCPS) to school reform in the JCPS/Gheens Professional Development Academy. The Gheens Foundation commissioned this report as its support for innovation in education in the Jefferson County Public Schools approached its tenth year.

Transforming Our Schools (Kyle 1993) provided an in-depth examination of 42 out of 157 schools in the district by comparing three groups of schools: (1) one using systemic approaches to reform, (2) one taking a fragmented, project approach to reform, and (3) one having little evidence of reform activity. The three groups were compared on the basis of three indicators: two involved cohort improvement over three years in standardized test results, and one involved a composite of three-year improvement by the same cohorts of students in areas such as attendance, retention, suspension, and dropout rates, as well as parent and student satisfaction. Schools with a three- to five-year history of systemic approaches to school reform outperformed both those schools
with an activist but short-term approach to change and those schools with strong beliefs that there were no reasons for them to change. Indeed, the schools using fragmented approaches to innovation demonstrated the least value added to student performance across all levels of schooling and on all three indicators.

All three sets of schools had federal funds (Chapter 1, Carl Perkins, magnet school funds), assistance from the state, foundation grants, and some local community and business partnerships. The key differences among them were the presence or absence of a systemic approach to change and the leadership to develop such an approach in a district culture that prized voluntary involvement in school reform.

**School-to-Work Transition and Systemic Reform**

To demonstrate how school-to-work transition fits into a systemic approach to education reform, this paper presents a mini-case study of the education system represented by the Commonwealth of Kentucky and its largest school district, the Jefferson County Public Schools, to apply the framework for systemic reform presented above to work force education. Figure 2, Work Force Education as an Element of Systemic Reform, on page ten, adapts the model presented in Figure 1 to the situation in Kentucky and Jefferson County.

**Background**

During the early 1980s, the Greater Louisville business, education, government, and labor communities began to focus on the quality of the public school system as an essential part of the infrastructure needed for the growth of a dynamic and prosperous community. Out of this concern grew a series of business/community/education partnerships to assist in the transformation of the public schools in Jefferson County, a consolidated city-county system of over 93,000 students. Over the period from 1983 to 1993, the community and the schools have developed an increasing understanding of and capacity to pursue a systemic approach to school reform.

In the latter part of the decade, a school finance lawsuit brought by several of Kentucky’s poorer school districts resulted in a landmark decision declaring the entire public education system out of compliance with the state constitution and assigning to the legislature responsibility for designing and implementing a new system of education for the state. KERA was passed in 1990 and provides the framework for a systemic transformation of K–12 education in the commonwealth.
The relationship between Jefferson County's pre-1990 school reform efforts and KERA has not been studied in detail, but the work in Jefferson County did have an impact, both direct and indirect, on the directions taken by the commonwealth. Members of the legislature from the community were leaders in the design and adoption of KERA and familiar with innovations in the Louisville area schools. Every major reform being implemented in Jefferson County is present in some form in the new legislation. The work of school reform in Jefferson County began in 1982-83 and by the 1986–87 school year was attracting attention locally, nationally, and internationally through articles in the press and journals, studies, and visits by academics and other school districts to the JCPS/Gheens Professional Development Academy, where the changes in Louisville public schools were being designed and implemented.

The State, Work Force Education, and Systemic Reform

KERA established six goals for schools:

1. Schools shall expect a high level of achievement for all students.
2. Schools shall develop their students' abilities in six areas:
   a. Students shall apply basic communications and mathematics skills in situations similar to what they will experience in life.
   b. Students shall apply core concepts and principles from sciences, mathematics, social studies, arts and humanities, practical living studies, and vocational studies to situations similar to what they will experience in life.
   c. Students shall demonstrate self-sufficiency.
   d. Students shall demonstrate responsible group membership.
   e. Students shall think and solve problems in school situations and in a variety of situations they will encounter in life.
   f. Students shall connect and integrate experiences and new knowledge from all subject matter fields with what they have previously learned and build on past learning experiences to acquire new information through various media sources.
3. Schools shall increase their students' rates of school attendance.
4. Schools shall reduce their students' dropout and retention rates.
5. Schools shall reduce physical and mental health barriers to learning.
6. Schools shall be measured on the proportion of students who make a successful transition to work, postsecondary education, and the military.
While all the goals are important for successful school-to-work transition, the last goal is directly related to the issues considered in this paper.

The Kentucky Department of Education has created a detailed curriculum framework to assist schools in developing curricula and delivery systems to achieve these goals. While all the learning goals will have an impact on successful post-high school transition for students, the second goal, which includes vocational studies, has three learner outcomes of interest.

1. Students demonstrate strategies for selecting career path options.
2. Students produce and/or make presentations that communicate school-to-work/postsecondary transition skills.
3. Students demonstrate the ability to complete a postsecondary opportunities search.

The state's new curriculum framework, which begins in the earliest years of education and proceeds systematically across all levels of schooling to add new experiences and more depth to this aspect of education, outlines an approach to vocational studies. The framework states,

_Educators must do everything in their power to encourage and assist all students to be the best they can be. By integrating vocational studies outcomes into the curriculum, teachers help students create visions for their futures and realize their full potential. In order to do that, students must lay the foundations through early exploration, planning, and periodic revision of the goals they have set for themselves_ (Kentucky Department of Education 1993).

While these goals and learner outcomes speak directly to the transition issue, all of the goals and learner outcomes are relevant to successful school-to-work/postsecondary transitions because they focus on the complex of knowledge and skills required for both productive employment and lifelong learning.

Potentially intricate relationships exist between a state's systemic approaches to school reform and those of the individual school district. Three examples from the Kentucky/Jefferson County experience demonstrate the possibilities.

- Several elements of KERA's approach to systemic reform, such as nongraded primary schools, a form of school-based management, and new forms of student evaluation, such as portfolios and performance assessments, were being tried on a pilot basis in schools in Jefferson County before the passage of the reform act.
• The Kentucky Department of Education and other statewide organizations have used the JCPS/Gheens Professional Development Academy in the training of other school districts to implement the reforms.
• A statewide task force on high school restructuring included as chairs of key committees principals from Jefferson County who have been leaders in transforming vocational education there. Among the recommendations of the task force to the state for all high school students were some elements included in Jefferson County's career academy guidelines: an individual graduation plan and integrated academic portfolio; a student-initiated culminating project and presentation; and required activities, among them work-based learning, which includes a work program, internship, or simulation with predetermined learning goals at an approved place of employment and in compliance with applicable youth employment laws (Kentucky Department of Education 1994).

Mutual influences and interactions are not always tension free. Through a collective bargaining agreement with the Jefferson County Teachers Association, the district began implementing in 1988 a participatory management model in all schools. This model is somewhat different from the school-based decision-making model mandated by the state through KERA, and some problems between the state and the district have arisen over this issue.

In addition to passing the Kentucky Education Reform Act in 1990, the legislature also created the Kentucky Cabinet for Workforce Development to take the lead in providing a comprehensive, systemic, and strategic approach to work force education and training. The agencies included in the Cabinet for Workforce Development are the state technical education system of seventy-seven postsecondary and secondary vocational-technical schools, adult education, and literacy programs. This new executive division of state government enlarges on the work of KERA and intends to address the full range of issues related to work force development.

The outcomes of the state's new approach to education in general and to vocational education in particular will not be seen for many years. The curriculum framework that provides teachers with more information for implementing these reforms became available only in the fall of 1993. One of the great dangers in Kentucky's experiment with change might be rushing to judge the new approach too quickly and declare either success or failure within a few years. Real change requires at least eight to ten years of work.
The District, Work Force Education, and Systemic Reform

The Jefferson County Public Schools began to focus on school reform in 1983, several years before the state reforms entered the picture. Two private/public partnerships; the development of the JCPS/Gheens Professional Development Academy; a model for using continuing professional development as a major tool in school reform; and the New Kid in School, a community partnership to integrate computers into the schools, were and are key factors in the district's approach to transforming its schools. Over the last decade, through the Gheens Academy in particular, the district has developed a growing capacity to address school reform in systemic ways.

This paper focuses on one major innovation—the restructuring of vocational education—with an emphasis on work force preparation and school-to-work and postsecondary education transitions. At the head of Figure 2 is the school district, with the three levels of schooling indicating the articulation and flows characteristic of a systemic approach to school innovation.

In 1988, the district began to closely examine its vocational education component. It then consisted of eight centers offering a range of part-time programs over a two-year period to juniors and seniors. The superintendent established an executive committee, chaired by the president of a local manufacturing firm and including teachers, principals, central office staff, and business and community representatives, to develop a new strategic approach to vocational education and to oversee a review and planning activity in each of the then-active vocational centers. Working from a model developed by The Kyle Group and basing its planning on economic and demographic information about the Greater Louisville community, this committee proposed a radical transformation of vocational education in the Jefferson County Public Schools.

- The name vocational education was replaced by career and technical education.
- The former system of part-time, two-year centers was phased out completely. All of them are now closed or have been transformed into four-year magnet career academies.
- A new system of four-year magnet career academies, based on the needs of companies in the region and projected growth industries, is being implemented. Most academies opened during the 1992-93 school year.
- The new system uses an elementary through high school and adult education approach that works with all students to prepare them for school-to-work and postsecondary education transitions and to become productive members of the work force.
Figure 2
Work Force Education as an Element of Systemic Reform: Kentucky, Jefferson County Public Schools, and The Greater Louisville Community Working Together

Figure 3 on the following page taken from Jefferson County Public Schools' Blueprint for Change (1993), a description of the new vocational education approach, illustrates the elementary through adult model guiding the transformation of career and technical education in Jefferson County.

At the elementary school level, schools are adapting Howard Gardner's work on dominant intelligences to identify students' strengths and talents, using the concept of student as knowledge-worker developed in 1987 in the constitution of the district's Professional Development Schools and focusing on helping students to acquire good work habits and become active learners. The goals of KERA reinforce the goals of preparation for work.
Figure 3
Career/Technical Education Restructuring Model*

WORK FORCE
Continuing Education/Training
(lifelong learning)

Employment/Apprenticeship Program

Tech Prep

Community College
Technical Institute
Postsecondary Technical School

Four-Year College and University

Applied

Concentrate
Technical Focus

Integrated Studies

Concentrate
Academic Focus

Core Education:
Critical Thinking, Problem-Solving, Team Work,
Mastery of Basic Skills
(mathematics, science, communications),
Computer Applications

Middle School
Technology Education/Integrated Curriculum
Career Exploration
Career Assessment

Elementary School
Career Awareness
Identification of Dominant Intelligences
Student as Worker
Good Work Habits/Attitudes

*Adapted from model in Solutions, The National Council on Vocational Education
The middle schools continue to build on the foundations established in the elementary schools. They also offer career assessment and exploration opportunities for students through technology education laboratories. A comprehensive career assessment is available to all eighth-grade students on a voluntary basis.

The major organizational unit for career and technical education is the career academy for high school students, discussed below. Some academies are already working with adult students; over time all will expand to include adults. Fifteen of the twenty-one comprehensive high schools have career academies, ranging from public safety, aviation, and advanced manufacturing technologies to health services and construction technology; three other high schools are introducing Tech Prep programs; and the Youth Performing Arts School, created many years ago, prepares students in these areas.

Each academy is developing an integrated academic and technical curriculum, requires a demonstration of advanced proficiencies for graduation, and offers students a variety of transition and student support services. All students will have some form of internship, apprenticeship, or cooperative education experience. There are close links to business and industry and to postsecondary institutions. Each collaboration is critical to the quality of opportunities for students in the academies. An industry advisory board has assisted in developing each academy and offers continuing help to the school. Industry/school linkages include opportunities for faculty exchanges, work experiences for students, and the acquisition of new equipment. Business liaisons at the academies work with companies to offer training opportunities to adults currently in the work force.

Postsecondary education linkages offer articulation programs, leading to two- and four-year degrees, advanced curriculum development, and opportunities for advanced training for academy faculty. Child-care facilities exist at a few sites; plans are to expand these as rapidly as possible.

The academies are works in progress whose success will depend upon successful school-to-work and postsecondary education transition by their students. Within this context, the use of career assessment and exploration activities, apprenticeships, cooperative and internship programs, and career passports and other transition services can have a lasting impact on the quality of the future work force in the Louisville area. These, however, require a third building block from the model, community infrastructure.

**Community Infrastructure**

The third internal building block needed for systemic school reform is a community infrastructure to support such profound changes. Over the ten-year period beginning
in 1983, the Greater Louisville community has built such an infrastructure through the over 700 business/community/education partnerships developed to support change in the schools, through the creation of the Kentuckiana Education and Workforce Institute (KEWI) to address the full range of work force education issues in the seven-county, Kentucky-Indiana area, and through collaborative community and economic development planning processes.

The business/community/education partnerships have made important contributions to the district's systemic approach to preparing students to become productive workers. A few examples follow.

- The Junior League of Louisville, with financial assistance from four foundations and in-kind donations from six companies, developed and implemented in several elementary schools a career education program called "Tracking Down Your Future" and in middle schools, "Pathway to the Future." Most of these schools are in the group funded through federal magnet school monies.
- Local banks have created small banks in some elementary schools and student financial centers in high schools. The banks and centers are run by students.
- Some elementary schools have K-Mart and Sears retail operations on site; the academy at one high school has a mini-mall to provide experience in retailing, and entrepreneurship, while another site has a Kentucky Fried Chicken demonstration operation.
- Two academy sites have advanced CAD-CAM laboratories donated by the Henry Vogt Manufacturing Co. These are used to train students, and employees of the donating company in the advanced manufacturing technologies program as well.
- The Louisville Education and Employment Partnership (LEEP), established in 1988, provides career planners at each high school and focuses on students' successful completion of high school and readiness to enter the work force. City and county government, the Chamber and the PIC, Metro United Way, and the Greater Louisville Economic Development Partnership all support LEEP.
- Currently, more than forty collaborative agreements between two or more partners and specific career acdemies have been signed or are being negotiated. Agreements include companies and postsecondary institutions in varying combinations. For example, the health careers academy has two agreements: (1) one with the University of Louisville Medical School for mentoring, job shadowing, career exploration, and academic and scholarship opportunities and (2) one with Super-X Pharmacy, Jefferson Community College, and the University of Kentucky's School of Pharmacy.
This last example, part of the new community-wide Youth Apprenticeship Program established as a collaboration of city and county government, the JCPS Magnet Career Academies, and a variety of companies and postsecondary institutions, includes KEWI as a key actor.

In 1990, while the state legislature was passing education reform legislation and establishing the Cabinet for Workforce Development, business, education, labor, and government leaders in the Greater Louisville community decided to do something serious to address the full range of issues related to the creation and nurturing of a flexible and educated work force to support long-term economic growth and development. The result was the creation of KEWI, a program of the Louisville Area Chamber of Commerce. KEWI brings together business, education, labor, and government leaders from the entire metropolitan area to identify problems related to the creation and nurturing of a flexible and educated work force and to find solutions to those problems. Over the four years of its existence, KEWI has grown and developed to respond to community needs.

Fourteen industry groups meet to identify issues common to each industry. An annual survey identifies change to areas such as skill needs for both entry-level workers and those already in the work force, areas of worker shortages, and companies’ plans for hiring over the next twelve to eighteen months. In-depth case studies provide education organizations with more detailed information on specific industries to assist with program planning, expansion, or contraction.

An educational resource information system has mapped and updated on a continuing basis work force education and training offerings available to area companies from a full range of providers: the public schools, colleges and universities, proprietary schools, private providers, and company programs open to other firms. In addition to assisting firms already in the region, this resource is used as an economic development tool to show companies considering locating in the area what the community has to offer to support their work force education and training needs.

KEWI has a school-to-work transition task force. This group has several active initiatives. A summer internship program for teachers and counselors brings these educators into companies for one month to learn more about the changing nature and needs of the workplace. KEWI has also co-sponsored a career fair for students in the region.

New transition programs include (1) the recently established Youth Apprenticeship Program, in which KEWI is a partner with the city and county governments and the career academies in the public schools, and (2) the newly signed articulation agreement
with seventeen postsecondary area institutions that will assist with the creation of joint secondary/postsecondary programs related to Tech Prep in the high schools.

**External Building Blocks**

The model for systemic approaches to education reform includes two external building blocks: federal policy and programs, and national business and foundation support.

Federal policy and programs affect local school districts in a variety of ways. Federal focus on specific issues creates awareness, offers a platform for discussion and debate, and may offer financial support for selected projects and approaches. These areas of potentially positive impact are counterbalanced by federal regulation of programs and the short-term nature of most funding. Federal focus on short-term project approaches to K–12 education funding makes it difficult for these programs to have a lasting impact on education at the district level. In the context of a district’s systemic approach to innovation in education, however, federal programs can provide invaluable assistance. In the case of the Jefferson County Public Schools, federal magnet school funding, the Carl Perkins vocational funds, and other targeted programs have contributed significant improvements in those schools using systemic approaches to reform.

National corporations and foundations have become more involved in K–12 education over the last decade than in the past. In Kentucky, the state affiliate of the Business Roundtable has been active in creating and funding grass roots support for KERA across the state. Within Jefferson County, national corporations and foundations have been instrumental in developing some key work force education and school-to-work transition initiatives. Delta Airlines and United Parcel Service have been partners in the Shawnee Aviation Academy. The National Alliance of Business funded the creation of the Louisville Education and Employment Partnership. General Electric’s corporate foundation has made a major investment in Western High School to increase the number of students making successful transitions to post-secondary education and work.
Implications for Future School-to-Work Transition Programs

The issue of school-to-work transition is a structural one. The workplace in every kind of organizational and industrial setting is changing rapidly. New knowledge, better knowledge, new skills, and better skills are needed to meet the challenges of competing in an ever more complex and global economy. The most recent annual survey of the Kentuckiana Education and Workforce Institute shows that employers place high value on such skills as problem analysis and problem solving, ability to work in self-managing teams, oral and written communication, and leadership. School-to-work transition programs grafted onto "business as usual" in secondary and postsecondary institutions will have no real impact on the long-term development of a skilled and flexible work force.

This paper proposes that school-to-work transition programs need to be part of a more comprehensive and strategic approach to K–12 education and beyond. If such programs are to have a return on investment commensurate with the expectations of those who design and fund them, such initiatives should have two important characteristics.

- School-to-work transition activities must be a normal part of the education process and be required of all students. If transition programs continue to be used as sorting and tracking devices, as they have been in the past, they will continue to fail to produce the results expected of them.

For too many decades, America has developed work force-related programs for students as "deficit" remediation. If new federal and state approaches to school-to-work transition follow this pattern, they will be no more successful than the programs of the past. This requires convincing our communities that all students need preparation for future work.

- School-to-work transition should be an element in a comprehensive and systemic approach to educating students, one that is based on high expectations for all students and on individualized plans to help students become prepared for the future and is related to the real-world settings in which students will apply their knowledge and skills as individuals, family members, citizens, and workers who continue to learn and grow.

If we have not restructured schools over the last ten years of debate on the issues of educational quality, it may be because the nation does not yet really believe that
fundamental transformation is necessary. Grafting school-to-work transition programs on to a dying vine is not the answer either to what schools should be or what the future workplace requires. School reform without work force preparation is incomplete; school-to-work transition programs without systemic school reform will become trivial.

Both Jefferson County and Kentucky are headed in the right direction on these issues, but the final outcome depends on the patience of the citizens of the state, their willingness to fund these changes over many years, and their tolerance for ambiguity in finding solutions to the problems that emerge.

Demonstration programs and projects related to school-to-work transition, whether funded by public or private sources, also need to carefully assess the demonstrated capacity of states, communities, and school districts to integrate such programs into the total education process and to institutionalize support for them when outside funding is no longer available.

As a nation, we can no longer afford to treat school-to-work transition as a marginal intervention; suited to a restricted group of students and to a brief and fleeting concern in our-communities. What we can do is recognize the severity of the problem, acknowledge that it relates to all students, and put our creative energies into transforming schools and making preparation for work and school-to-work transition programs a priority in the new American school.
References


Appendix

Relationship Between Systemic School Reform in Jefferson County and Kentucky after the Kentucky Education Reform Act of 1990

Relationships, whether personal or organizational, are rarely simple. This is particularly true when examining developments in a state and its largest school district. No study has been done of the formal and informal linkages between what happened in Jefferson County and the reforms instituted by the state in 1990. The comments here are based on monthly visits from 1983 through the present, observations, and close contacts with both the school district and state leaders.

The Jefferson County Public Schools (JCPS) began to focus seriously on the transformation of its schools during the 1982-83 school year, while under the leadership of a new superintendent and with active support from the local business community, which saw the quality of the public schools as a critical component of the community's future economic development. Between 1983 and 1990, the year of the Kentucky Education Reform Act (KERA), a rich and diverse mix of new approaches to education were introduced in the Jefferson County Public Schools, supported by the JCPS/Gheens Professional Development Center and an ever-increasing number of business and community partnerships with the schools. These approaches included the focus of this paper: the reform of vocational education and a new emphasis on preparing all students for future work. Throughout this same period, the executive director and other staff from the Gheens Academy spoke to and worked with a range of other school districts in the state.

While the Kentucky Education Reform Act was passed in 1990 in response to the Kentucky Supreme Court's declaration of the entire state system, not just the finance aspect of it, as unconstitutional, ideas and plans for school reform were circulated as early as the gubernatorial election of 1983. Many of the same people involved in Jefferson County's reforms helped to prepare a plan for education for the newly elected governor, and a statewide foundation, the Kentucky Educational Foundation, was set up to assist the state by providing money for some reform efforts that the state itself could not fund. Groups such as the Pritchard Committee worked to make new ideas about education more familiar to the public.

The ideas for school reform that are the basis of KERA were present in a variety of ways in the state for several years before 1990; the main source in the pre-1990 period was the Jefferson County Public Schools. By 1990, statewide concern was growing
about the need for a flexible and educated work force. This is reflected not just in the transformation of the entire vocational education system in Jefferson County, but also in the vocational studies requirement that forms part of KERA, the establishment by the state of a Workforce Cabinet, and the formation of the Kentuckiana Education and Workforce Institute by the Greater Louisville Chamber of Commerce.

Jefferson County began to examine its vocational education system in 1988. An executive committee and planning groups in each of the vocational centers began to look at the old system, the needs of the community, and possible new approaches to preparing students for work. Over a four-year period, issues were debated, new designs developed, and, finally, the old two-year, part-time system was closed down in phases to make way for four-year magnet career academies. For some this was a painful process. In 1993–94, the first year of the new system, the number of students in career and technical programs increased from just over 2,000 under the former system to over 7,000 in the transformed one. Fifteen of twenty-one high schools have graduating magnet career academies within them.

From the beginning, the plan in Jefferson County was to make work force preparation a part of education from the elementary school through the high school. The emphasis on student as worker was introduced in 1986, and elementary and middle school elements were included in the overall design for career and technical education. Some elements have been required, such as Technology Education Laboratories at the middle schools; some have been available to students at their option, such as comprehensive career assessment for eighth graders. Although the introduction of Howard Gardner's multiple intelligences approach and the focus on student as knowledge worker have been optional in the elementary schools, about 60 percent of the elementary schools in 1992 were using them and one or more other approaches to developing students with an understanding of school as the first place of work. The requirements in vocational studies in KERA for all three levels have hastened the introduction of a wide range of approaches in the elementary and middle schools.

The issue of mutual influence between the school district and the state goes beyond questions of voluntarism versus requirements or linear impacts that can be clearly tracked. Kentucky and Jefferson County present an interesting case because of the intersection of a systemic local initiative with the total transformation of the state approach to education. The success of neither one can be judged for another five years, at least. Yet, they offer one of the few examples at both state and local district levels of the intersections between process and substance, both positive and negative, required for true systemic change.
Sol M. Linowitz, Honorary Chairman of the Board:
Former Senior Counsel, Coudert Brothers; former U.S. Ambassador to
the Organization of American States; and former Chairman of the Board,
Xerox Corporation

Cassandra A. Pyle, Chairman of the Board:
Executive Director Emeritus, Council for International Exchange of Scholars

John Diebold, Chairman of the Executive Committee and Vice Chairman of the Board:
Chairman, The Diebold Institute for Public Policy Studies, Inc.

Joseph S. Iseman, Secretary of the Corporation:
Counsel to Paul, Weiss, Rifkind, Wharton and Garrison

Stephen F. Moseley, President and Chief Executive Officer

Robert O. Anderson:
President, Hondo Oil and Gas Company

Barbara B. Blum:
President, Foundation for Child Development

Roberta N. Clarke:
Associate Professor and former Chair, Department of Marketing, School
of Management, Boston University

Alonzo A. Crim:
Professor, Department of Education and Special Assistant to the President on
College and School Partnerships, Spelman College

Joseph L. Dionne:
Chairman and CEO, McGraw-Hill, Inc.

Marie Davis Gadsden:
Chair Emeritus, OXFAM; former Deputy Director, National Association for
Equal Opportunity in Higher Education
Frederick S. Humphries:  
President, Florida A&M University

Walter F. Leavell:  
Health Advisor; Former President, Charles R. Drew University of Medicine and Science

F. David Mathews:  
President, Kettering Foundation; former U.S. Secretary of Health, Education and Welfare

Ann McLaughlin:  
President, Federal City Council; former U.S. Secretary of Labor

James A. Perkins:  
Chairman Emeritus of the Board, International Council for Educational Development

Frank H.T. Rhodes:  
President, Cornell University

Joseph E. Slater:  
President Emeritus and Senior Fellow, Aspen Institute for Humanistic Studies

Niara Sudarkasa:  
President, Lincoln University

Willard Wirtz:  
Partner, Friedman and Wirtz; former U.S. Secretary of Labor
Academy for Educational Development

Principal Offices:

1875 Connecticut Avenue, NW
Washington, D.C. 20009-1202
Tel: (202) 884-8000
Fax: (202) 884-8400
Internet: ADMINDC@AED.ORG

1255 23rd Street, NW
Washington, D.C. 20037
Tel: (202) 884-8700
Fax: (202) 884-8701
Internet: ADMINDC@AED.ORG

100 Fifth Avenue
New York, NY 10011
Tel: (212) 243-1110
Fax: (212) 627-0407
Internet: ADMINNY@AED.ORG