A school/community partnership in Louisville, Kentucky, the Jefferson County Public Schools/Gheens Professional Development Academy, is described. This report provides a framework for assessing Jefferson County School System reforms in the past 8 years or more designed to enhance student success in learning. A Spiral of Assessment was used to evaluate student success and school role, in which four sets of indicators were combined in the following ways: (1) resource indicators reflect major inputs into the educational process; (2) "kaizen" indicators (continuing incremental improvement) reflect continuing growth; (3) milestone indicators reflect progress of students at various intermediate points; and (4) commencement indicators measure outcomes of a cohort of students on completion of their education. The Jefferson County experience is compared with other programs. Schools are transformed through the dynamic interaction among five essential resources that must be mobilized in communities seeking educational improvement: partnerships; leadership; systemic change; development activities; and time. They work as follows: (1) partnerships involve businesses, community organizations, labor organizations in schools, community, and parents; (2) leadership is requisite in the school system and does not reside in a single office or person; (3) systemic changes require various points of intervention; (4) professional development of teachers and administrators can catalyze innovations and continuing incremental improvements; and (5) changes require time. Systemic, long-term approaches can make a difference, where short-term marginal interventions fail. (RLC)
Transforming Our Schools
Lessons from the
Jefferson County Public Schools/Gheens Professional Development Academy
1983-1991

Louisville, Kentucky
Brief History

Founded in the late 1900s by Edwin and Mary Jo Gheens, The Gheens Foundation has dedicated itself to improving the quality of life in the two regions where the Gheens family and fortune were centered: Louisville, Kentucky and LaFourche Parish, Louisiana. While Mr. and Mrs. Gheens were very involved in community affairs in both Louisville and Louisiana, much of their philanthropic giving was done in a low key way. The Gheens Foundation continues their quiet approach, last year alone distributing almost two million dollars in grants.

A second important characteristic of The Gheens Foundation is its way of choosing grant recipients: it is a proactive, not a reactive organization. The Foundation continually assesses community needs; selects areas for attention that have the potential for major, long-term impact on community life; and assists the grantees in developing state-of-the-art approaches to the challenge at hand. Seventy five percent of the Foundation's grants result from Gheens-initiated activities.

Current grants of The Gheens Foundation support the professional development project in the Jefferson County Public Schools and the entrepreneurship program in Kentucky's private liberal arts colleges, as well as developments in the arts, human services, and economic growth.

The Author

Regina M. J. Kyle is President of THE KYLE GROUP, LTD. in Boston, Massachusetts. She has been The Gheens Foundation's consultant on this partnership from the beginning and is doing a continuing evaluation of the project.

She was educated at Regis College and Harvard University, where she served on the Faculty of Arts and Sciences. She has also been Executive Dean of Undergraduate Studies and Associate Professor of Comparative Literature and Education at the University of Texas at Dallas and Vice President for Programs and Planning of the Association of American Colleges.

The current emphases of her consulting work are on human resources and quality issues in education, the links between education and economic development, and the international dimensions of education and economic development.
November, 1992

Almost ten years have passed since The Gheens Foundation began a dialogue with Superintendent Donald W. Ingwerson and the Board of Education about the Jefferson County Public Schools. After almost a year of planning and discussion, the Foundation approved in December 1983 the development grant for a unique joint venture, the Jefferson County Public Schools/Gheens Professional Development Academy.

Over the years, the Academy has become a catalyst for transforming the schools in Jefferson County and a living laboratory that other school districts and communities have used in their search for school improvement. We have tried to share what we have learned with others, because no resource is more important to our communities than our children.

In 1988, the Foundation published *Innovation in Education*, our first progress report on the work of the Academy. This new report, *Transforming Our Schools*, focuses on the difference the work of the Academy has made in the schools themselves and on the achievement of students. Student success, one of the core values of the Jefferson County Public School District, is the ultimate aim of our investment in the schools.

This report shows that systemic, long-term approaches can make a difference, where short-term, marginal interventions fail. We do not have a recipe for success; indeed, there is none. We do believe, however, that the lessons we have learned through this endeavor may be helpful to other communities and donor organizations.

The Jefferson County Public Schools/Gheens Professional Development Academy is a school/community partnership, one of many that have evolved over the last decade in Louisville. In this report we offer a snapshot of just a few of the other partnerships that form a strategic approach to transforming our schools. It is only through such alliances and investments that our schools can prepare young people for the challenges of the future.

The Board of The Gheens Foundation offers this progress report on the Academy as a contribution to the continuing dialogue in our nation about education. Transforming our schools requires many things, not the least of which is long-term investment by both the public and private sectors. We hope that our experiences will encourage others to make similar commitments to the education of their young people.

Joseph E. Stopher
President
The Gheens Foundation, Inc.

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Transforming Our Schools

Lessons from the Jefferson County Public Schools/Gheens Professional Development Academy
Louisville, Kentucky
1983-1991
Regina M.J. Kyle
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Foreword

John T. Dunlop
Lamont University Professor Emeritus
Harvard University

In the midst of a national political and educational debate, often ideological in tone, on American schools, it is a welcomed occasion to have a factual report on almost a decade of experience with school reforms and programs related to the school-to-work transition. This report concerns what has been achieved, with interpretative hows and whys, rather than constituting another proposal for others to implement in the future.

Jefferson County, Kentucky, which includes the City of Louisville, is one of the twenty largest school systems in the country with 95,000 students, 158 urban, suburban and rural schools, 5,954 teachers and administrators, and with an annual budget of $470 million. The students are 69 percent white and 31 percent minority, primarily African American; 29 percent live in single-parent households. The district is far too large and complex to be turned on a dime: a strategy for gradual and continuing change was required to achieve enhanced learning by students and systematic innovation in the schools.

Before turning to the major elements of the Jefferson County and Louisville experience, it may be prudent to suggest that it is difficult to transplant institutions nurtured in one community and formed at one time to different settings at a subsequent time. The Kentucky experience was home grown. But we can all learn from examining the processes, substantive policies and institutions developed to enhance learning in the Jefferson County school environment in the 1980s. The urgent lessons for any other school system are not necessarily directly transferable and the sequence of changes in school systems cannot be standardized.

In 1983 the Gheens Foundation decided to invest in the improvement of the Jefferson County Public Schools as a means to enhance the future of the community. A joint venture of the school system and the foundation emerged as the JCPS/Gheens Professional Development Academy. The Academy was designed to be a catalyst and dedicated to linking the professional development of teachers and administrators to innovation in the schools. The Academy was located from the outset within the school district, but the Gheens Foundation originally provided 90 percent of its funding. As the Academy has expanded over the years, the school system has provided an increasing share of support, now over 75 percent of the $8 million budget. The long-term commitment of the Gheens Foundation and its dedication to the enhancement of student learning are an essential element in Jefferson County’s educational vitality and change.

The cluster of private sector partnerships or coalitions related to the Jefferson County Public School District or to individual schools is a significant element of the experience. The Academy with the Gheens Foundation is one such partnership; the participatory management agreement with the Jefferson County Teachers Association is another, and the initiative of Humana Inc. led to the installation of computer laboratories in all schools, with reasonable access for all students. Other partnerships involve the University of Louisville, other colleges and local business enterprises or plants of national firms in the area such as General Electric Company, Henry Vogt Machine Company, Rohm and Haas Kentucky and a host of other companies, significant to the learning of students. The coordination of these partnerships is a considerable community undertaking.

The formal reinforcement of the relationships between the school system and the world of work and employment has enhanced the learning and educational experience of students. In 1988 the Louisville Education and Employment Partnership became one of the pilot sites of the National Alliance of Business’ project that was established to replicate aspects of the Boston Compact. In 1993 the Kentuckiana Education and Workforce Institute was
established to facilitate workforce education and training across the metropolitan area that includes counties in Indiana. Committees from the separate sectors of industry survey the enterprises to identify workforce education and training problems. These committees and reports are used to shape technical education programs. Teachers and counselors are provided month-long summer internships in companies. These school-to-work partnerships are at an early stage but the three Labor Day reports have provided significant information for students, teachers and public and private management.

This report is centrally directed to provide a framework for assessing the reforms that have been under way for eight years or more in moving the Jefferson County School System towards the primary objective of enhancing student success in learning.

The report develops a distinctive methodology for evaluating student success and the contribution of schools by using a Spiral of Assessment as a framework. Four sets of indicators are combined: resource indicators reflect major inputs into the educational process; kaizen indicators (Japanese term for continuing incremental improvement) reflect continuing growth; milestone indicators reflect progress of students at various intermediate points such as at grades 4, 8 and 12; and commencement indicators measure the outcomes of a cohort of students on completion of their education. This evaluation is applied to various schools in the system.

The evaluation methodology of the report will be of wide interest in educational policy discussions. The application of the framework to assessment of change in process and for planning purposes will also evoke general attention.

A concluding section that should be of particular interest to other communities summarizes the Lessons of the Jefferson County experience and provides an assessment and comparison with other programs in process. The report concludes that schools are transformed through the dynamic interaction among five essential resources that need to be mobilized in a community seeking educational improvement: (1) Partnerships involving businesses, community organizations, labor organizations in the schools and the community and parents; (2) Leadership is requisite in the school system at levels from the board of education and superintendents through principals and teachers; it does not reside in a single office or person; (3) Systemic changes require a variety of points of intervention; no single tool such as school-based management or nongraded classes is sufficient; (4) Professional development of teachers and administrators can serve as a significant catalyst for innovations and continuing incremental improvements; (5) Change requires time, often a long time; instant reform is not possible.

The Gheens Foundation is distinctive in having decided almost a decade ago to focus on the improvement of the Jefferson County Public Schools and to have been persistently committed to the vital importance of school improvements. It has provided not only funding but also an active role in evaluating the programs, communicating with the various publics, helping to develop partnerships and building into the school system and school budgets continuing programs and institutions to accelerate improvements.

Through the Gheens Foundation, Regina Kyle has played a key catalytic role in the development of the Academy and the formation of a number of community partnerships essential to education reform and school-to-work transition. Moreover, her periodic evaluations and reports have focused on the quality of change and measured improvement. Not only Jefferson County, but communities elsewhere struggling with issues of the improvement of public education and the dismal record of transitions to the world of work, are indebted to her for this perceptive report.

Cambridge, Massachusetts
October, 1992
In Greek mythology, King Sisyphus of Corinth is condemned to roll one stone after another up a hill, only to see them come crashing down just as he reaches the top. School reform in the United States has been rolling for almost a decade in perpetual Sisyphean movement between exploring new ideas and making hesitant commitments to action.

National, state, and local leaders from the business, education, foundation, and government worlds bemoan our lack of progress in preparing students to meet the challenges of the future. The question is this: How do we, community by community, transform our schools so that all children leave them ready for work and further education, for their responsibilities as individuals, citizens, and family members?

The Gheens Foundation presents this second progress report on the JCPS/Gheens Professional Development Academy as a contribution to the continuing search of the nation for answers to that question.

Early in 1983 the Board of The Gheens Foundation approached Superintendent Donald W. Ingwerson and the Board of the Jefferson County Public Schools to discuss the development of a joint venture between the foundation and the schools. The outcome of these discussions was the creation of the JCPS/Gheens Professional Development Academy, an organization within the school district dedicated to linking the professional development of educators to innovation in the schools. From the start, the Academy was to be a catalyst for change.
In 1988 the foundation published *Innovation in Education*, a progress report on the first five years of the Academy's life. In describing the Academy that report said:

The vision began with the simple premise that good schools need good staff—teachers, administrators, and support staff, both in individual schools and in district offices.

The Academy was born of the belief that the continuing professional development of individuals and groups should be related directly to school improvement and based on a continuing review of state of the art knowledge about teaching, learning, and organizational effectiveness.

That simple premise and belief still guide the Academy.

This new report complements the first one. It is not a complete review of the Academy's work but a look at work in progress, focusing on two questions:

Has the work of the Academy had an impact on what happens in schools, particularly on student achievement?

Does what we have learned over the eight years between 1983 to 1991 have lessons for school reform beyond Jefferson County, Kentucky?

The answer to both these questions is yes.

Before examining the schools, however, the context for this report needs to be examined from four perspectives:

- The Cycle of Transformation, a model of the complex process that enables schools to make fundamental changes;
- The characteristics of the Jefferson County Public Schools, partner with The Gheens Foundation in the development and growth of the Academy;
- The nature and extent of the web of partnerships connecting the community to the schools; and
- An introduction to the work of the Academy in fostering change in the Jefferson County Public Schools.

These four areas constitute the Beginnings of this report.
In a recent essay, Daniel J. Boorstin makes a salient point. Discussing what he calls "the dramatic and newly explosive phenomenon of change itself," Boorstin says, "To understand ourselves and our nation we must grasp these processes of change and reflect on our peculiarly American ways of viewing these processes." If all stakeholders in education lack an understanding of how fundamental change occurs in schools, then attempts to restructure American elementary and secondary education will continue to fail.

The Academy began with some consensus about how to effect change in schools, but without an explicit theory of the change process. Certain principles were clear. The Academy needed to build the capacity of individual educators and schools to rethink the work of education. It had to foster throughout the district the growth of a culture supportive of innovation. Finally, it wanted to assist educators to become what Max DePree calls, frantic learners, voyagers who would draw on the knowledge coming from research and practice to map new directions for their schools.

The process of exploration the Academy developed is best described by DePree, Chairman of Herman Miller, in Leadership Jazz. "We must search for a creative fecundity, a compost heap of experience and ideas, experiments and failures and successes, that will bring about the changes and improvements we need."

Schools and school districts transform themselves through a three-phase evolutionary cycle of activity. (See illustration next page.) At the heart of the Cycle of Transformation are the core values of the school district, expressed most often in a vision or mission statement. Actions in all phases of the cycle should relate to these values. For the Jefferson County Public Schools these core values, established by the Board of Education in a mission statement adopted in 1988, are Student Success, Community Collaboration, and Employee Efficacy.

Before entering the cycle, schools live in a pre-transformation state of satisfaction with the status quo and skepticism about the need for change. When the Academy began, a majority of schools fell into this category. I suggest that many schools in the nation are still in the pre-exploration phase of serious innovation. In spite of the intensity of national discussion about the need for structural change in schools, many educators, politicians, and the general public remain unconvinced about the importance of fundamental change for their schools.
Phase III represents the period of sustained commitment, with schools and school districts making the transition from short-term and fragmented approaches to change to long-term, systemic ones. They enter the world of what Peter Drucker calls "systematic innovation." The Academy offers schools several kinds of technical assistance during this Phase.

Phase II is the period of initial commitment, when ideas lead to action. Schools design and implement new approaches and receive technical assistance from the Academy. This may include time for and assistance in the design of the new approach, information, and visits to other schools with similar programs. Phase II requires three kinds of buy-in if the transition is to be made to Phase III: intellectual, affective, and organizational. Intellectual agreement is probably the easiest to achieve. Individual and group willingness to try the new is closely linked to the culture of the organization. If the culture does not support change with resources or takes a punitive approach to failures, the transition from Phase II to Phase III will not be made.

Phase I is a time of exploration, with educators and others challenging current practices and examining and evaluating new ideas and approaches. While exploration is the essential starting point of the process, it is also a necessary component of the next two phases as well. Exploration of relevant research and best practice builds capacity for diagnosing problems, for assessing alternatives, and for setting out in new directions. Small grants for innovations, opportunities for educators to attend professional meetings, and the bringing of outside experts to Louisville are among the strategies the Academy uses for exploration.

Phase I period of exploration

Phase II period of initial commitment when ideas lead to action

Phase III period of sustained commitment
The Jefferson County Public School District is one of the twenty largest school systems in the United States. Consolidation of the city and county systems and court-ordered desegregation in the mid 1970s brought together urban, suburban, and rural schools in an area that stretches over 375 square miles.

During the 1980s and early 1990s, the district has undertaken a continuing and rigorous examination of how it serves the students entrusted to its care; this has given birth to new ways of thinking, acting, and allocating resources.

The district has moved toward systemic approaches to school reform, exemplified in part by specific programs:

- Systematic introduction of computers into all schools, beginning with elementary schools, and progressing through middle and high schools.
- Use of human resource development to support continuing innovation through JCPS/Gheens Professional Development Academy.
- Alliance with the Jefferson County Teachers Association to introduce Participatory Management into all schools.
- Strategic use of business and community partnerships to weave a complex web of connections between schools and community.
The superintendent has restructured the district's central organization and allocation of resources to support fundamental change focusing on student success as primary work of the district.

Subtle but critical shift in emphasis from teaching to learning. New approaches in communications, mathematics, science, and other subjects, and Cooperative Learning and other programs, encourage students to take active responsibility for their education. Teachers are acquiring a better understanding of the different ways students learn, designing programs that take this into account, and using new modes of performance assessment to track student progress.

The district has moved over several years to offer students and parents greater choice among schools in the district. This began with magnet schools and special programs meant to assist desegregation and has expanded to the use of choice as means of achieving excellence. Beginning in the 1991-1992 school year, students may choose to enroll in any of the district's high schools. During that same year new plan was developed for elementary school students. Plan aims at using parental choice to improve student learning, while maintaining a desegregated system.

The district achieved successful desegregation of schools, becoming model for other urban systems under court-ordered desegregation mandates.

Progress 1981 — 1991

Between 1981 and 1991, average daily attendance rates increased from 91.2 to 94.1 percent and dropout rates declined from 6.4 to 2.36 percent.

Between 1982 and 1991, percentage of seniors going on to postsecondary education rose from 63 to 77 percent. Seniors graduating in 1988 received over $8.9 million in scholarships for postsecondary education; in 1991 total increased to more than $24.6 million.

Programs for pre-kindergarten children started with 45 boys and girls in 1984; in 1991 they served 1,145 youngsters.

In 1981, almost 20,000 adult students took advantage of the district's adult education offerings; by 1991, some 35,000 men and women enrolled in these courses.

In 1981, there were no workforce literacy partnerships, programs through which the district provides basic courses for specific companies. Five training programs of this type developed by 1986 and these had mushroomed to 45 by 1991.

PTA membership more than doubled between 1981 and 1991, from 34,000 to 76,000.

Business, community, and foundation partnerships, almost non-existent in 1981, expanded from fewer than 100 in 1983 to more than 700 in 1991.

Annual outside funding for special district initiatives reached $1.4 million in 1984; by 1991 it had grown to $10.3 million.

During the late 1980s, the Kentucky Supreme Court held that the state's system of schools was ineffective in educating students. It charged the legislature with designing a completely new system of schools. The Kentucky Education Reform Act of 1990 (KERA) instituted the new system and mandated for the entire state many of the approaches piloted in Jefferson County, including nongraded primary schools, performance assessment of student achievement, and a form of school-based decision making. Changes that had been voluntary in Jefferson County are now mandatory.
Partnerships are among the key investments helping schools and other community assets to grow in Jefferson County. The "Louisville Way" is becoming one of collaboration.

In bringing individuals and organizations together to improve the quality of basic community assets, the Greater Louisville area is adapting to its needs a strategy used often in the business community. Over the last decade, businesses have created complex regional, national, and transnational networks of cooperation. Beginning with industry-university linkages for research and development, this approach now includes an ever-changing variety of short- and long-term partnerships, alliances, and joint ventures within and across industries, with customers, suppliers, and competitors.

In Louisville, the network of partnerships began to take shape in 1982, expanded over the following years, and continues to grow. Those within the public schools embody the district's core value of community collaboration. Outside of the schools, partnerships focus on economic development, on long-range goals for the community, on the arts, and workforce education and training.

Over the last decade, many individuals and organizations in the community have worked closely with the schools. It would be impossible to recognize all who have worked for change in the community's schools, but among the many individuals owed a special "thank you" are Malcolm B. Chancey, Jr., President of Liberty National Bank; Henry V. Heuser Sr. and Henry V. Heuser Jr. of Henry Vogt Machine Co.; and David Jones, Chairman and CEO of Humana Inc. Each has given the schools something of himself, his time and resources, and his support for new ventures. In naming these individuals, The Gheens Foundation also recognizes all who have played a part in helping the schools. They stand for other individuals, just as the few specific alliances described here serve as a proxy for the over 700 partnerships now active in the Jefferson County Public Schools.

Three school-related alliances, the Jefferson County Public Schools/Gheens Professional Development Academy, The New Kid in School, and the Participatory Management agreement with the Jefferson County Teachers Association affect all schools. Others such as the Louisville Education and Employment Partnership and the Edna McConnell Clark project work on the needs of at-risk students at the high school and middle school levels. Still others, among them the General Electric partnership with Western High School, focus on a single school.
The New Kid in School and Humana Inc.

At a public lecture in Louisville in 1982, David Birch of MIT suggested that the most important thing the community could do for future economic development was to see that all students became computer literate. Humana Inc. agreed to support a pilot endeavor for bringing computers into the classrooms of the Roosevelt-Perry Elementary School in Louisville's inner city. The company supplied both funds and the assistance of Humana staff.

This project was so successful that The New Kid in School project to provide computers to all schools was born. The project began in 1984 with the elementary schools and moved level by level until all schools had computer laboratories. At a time when only 46 percent of students nationally have access to computers, all students in Jefferson County use them. Over several years, businesses, other organizations, and individuals contributed about $9 million to match the district's investment in computers.

This partnership has entered a second phase, The New Kid Moves Ahead, with a five-year fund-raising plan to expand the district's capacities to integrate advanced technology into the education of students. Each school will do a needs assessment and develop its own plan for expanded technology. Plans may include notebook computers, additional student workstations, and interactive video systems.

Jefferson County Teachers Association and Rohm and Haas

A second partnership affecting all schools came through the alliance between the Jefferson County Teachers' Association and the Board of Education to implement Participatory Management, a form of school-based decision making. In a precedent-setting action, JCTA agreed in its contract to allow teachers at Participatory Management schools to modify certain elements of the contract if these interfered with changes teachers wanted to make to improve education. Schools became PM schools in phases, over a period of four years. Rohm and Haas Kentucky, a company that had already established self-regulating work teams, offered to train Jefferson County staff in this approach and has provided continuing advice and technical assistance to the district.

University of Louisville and Other Colleges

Many alliances link the Jefferson County Schools to the University of Louisville. The Dean of the School of Education and the Executive Director of the Academy co-chair the university's Center for the Collaborative Advancement of the Teaching Professions, established with state funding in 1989.

The Center has worked with the district on projects that support various needs of the schools. Lattice, an algebra project, brings together teachers and curriculum specialists from the district and university faculty to design, implement, and evaluate instructional units in algebra that meet the standards of the National Council of Teachers of Mathematics. Examples of other Center projects are the Foxfire/Writing-to-Learn Institute, the Louisville Writing Project and the Middle School Mathematics Project.

Some school-university partnerships go back to the early 1980s. Since 1983 a joint Jefferson County Public Schools/U of L Coordinating Committee has funded proposals from teams of university faculty and Jefferson County administrators and teachers. These have included projects training middle school science teachers in scientific research methods and assistance to elementary school teachers in the design and implementation of a Philosophy for Children curriculum.

Some high school students attend college classes at the University of Louisville or Bellarmine College, and the Aviation Magnet at Shawnee has begun partnerships with Jefferson Community College and Embry Riddle University to offer advanced educational opportunities for their students.
**Henry Vogt and Technical Education**

The Henry Vogt Machine Company, a Louisville-area manufacturer, has been a driving force in restructuring technical education in the district. The company has provided funds and the expertise of its employees for a new CAD/CAM and Computer Integrated Manufacturing laboratory at the former Jeffersontown Technical Center, a school now in the process of becoming a magnet career academy for advanced manufacturing technologies. The success of this venture led to the establishment of a second laboratory at Pleasure Ridge Park Technical Center. Both high school students and Vogt employees use these facilities. Vogt’s president has served as the chair of the committee overseeing the planning and development of the district’s new career academies. Vogt has also been a leader in fund raising for The New Kid Moves Ahead, the second phase of the project to use advanced technologies in helping students to learn.

**General Electric and Western High School**

GE has been investing in the Jefferson County Public Schools since 1981, through its Elfun program, which brings GE staff into the schools: support for increasing the numbers of minority students going into engineering; and contributions to The New Kid in School. In 1989, the GE Foundation awarded Western High School the largest grant it has ever given to a single school. The aim is to increase significantly the numbers of Western students going to college. The money covers the development of new academic programs, as well as a college aid fund. Staff at GE’s Appliance Park mentor students and give them opportunities for shadowing people in the workplace.

These partnerships represent a very small sample of the range and depth of those currently active in the schools. Banks, law and accounting firms, retail stores, and real estate developers have assisted individual schools. Other alliances include those with non-profit agencies, examples: one with the Urban League to improve the academic performance of minority students and another with the YMCA for after-school activities for latchkey children.

This introduction to the Louisville Way would be incomplete without some attention to two community partnerships independent of the schools but having a profound influence on them. Both are related to the community’s concern with the quality of its future workforce.
In 1988 Louisville became one of the pilot sites for the National Alliance of Business' five-city project to replicate the best aspects of the Boston Compact. Seed money came from NAB and was supplemented by financial support from the city of Louisville, Jefferson County government, the Jefferson County Public Schools, the Louisville Chamber of Commerce, and the Private Industry Council of Louisville and Jefferson County. Two years later, Metro United Way and the Greater Louisville Economic Development Partnership joined the founding group.

The program is available in every high school in the county. A career planner in each school recruits low income students who are at risk of dropping out to participate voluntarily in the program. It focuses equally on the student's successful completion of high school and readiness to enter the workforce. Compared with a control group, students in LEEP have shown increases in attendance and decreases in the number of courses failed.

Many of the business and community leaders who established this venture are also closely linked to the Kentuckiana Education and Workforce Institute.

Kentuckiana Education & Workforce Institute and the James Graham Brown Foundation

— The availability and quality of the future workforce has concerned business and community leaders for some time. In 1990, the Louisville Area Chamber of Commerce established the Kentuckiana Education & Workforce Institute, known as KEWI, to address issues of workforce education and training across the seven-county, two-state metropolitan area. The James Graham Brown Foundation has given seed funding for the Institute's development. Over 300 volunteers from more than 200 organizations work in committees and task forces to identify problems in workforce education and training and find solutions to them. KEWI's mission is to be a catalyst for change, helping institutions in the community to bridge the gap between education and work.

KEWI's industry surveys, its annual Labor Day report, and the information generated by the Industry Subcommittees are influencing what happens in the classrooms of Jefferson County. KEWI's findings are used in the planning and development of technical education programs. Teachers and counselors who have had month-long summer internships in companies are using what they have learned about the nature of the contemporary workplace to aid them in their work with students. These examples only hint at the potential KEWI has to affect the quality of the workforce and the long-term economic development of the community.

The Jefferson County Public Schools/Gheens Professional Development Academy partnership is part of this expanding web of connections between the schools and the community.

Without these other partnerships, the Academy would not have accomplished as much as it has. The major focus of this report is on the Academy and the lessons The Gheens Foundation has learned from supporting it.
In *Innovation in Education*, the 1988 progress report on the Academy, I called the Academy people, a place, and a vision. It is still all of these. The JCPS/Gheens Professional Development Academy is the infrastructure linking professional development to systemic school improvement in Jefferson County.

It is about continuing growth, innovation, and entrepreneurship. The Academy builds on capacities already present in the district and enlarges them; it challenges schools to focus on student success; it provides some of the resources needed by schools to achieve their goals.

The Academy's first Executive Director, Phillip W. Schlechtv, began his work part-time in the fall of 1984. Over the next two years, the Academy gave teachers and administrators the chance to explore options for new approaches to the education of young people and to become familiar with state of the art research and practice.

Teams of teachers and administrators were sent to national meetings; national experts were brought to Louisville. Those attending meetings away from the community developed a seminar or workshop to share what they had learned with their colleagues. A series of competitive grants supported pilot approaches proposed by teams from specific schools. Support was given to principals to meet and share ideas, problems, and solutions. Faculty from different schools formed Collegial Support Groups to work on projects related to their teaching: writing, mathematics, science, students with special needs, and other areas. Together with the Council For Basic Education, the Academy sponsored summer institutes for science teachers.

The district's traditional inservice unit was merged with the Academy. This made the Academy responsible for all education and training of teachers and administrators in the district, not just the professional development needed for school restructuring. Facilitating both systemic innovation and continuing incremental improvement became the work of the Academy.

In 1986, the Academy initiated the first of several district-wide approaches to reform, the Professional Development Schools. Over the next few years, other programs — Ted Sizer's *Coalition of Essential Schools*, the *Middle Grades Assessment Program*, nongraded primary school pilots, and others — were integrated into the reform effort. Terry Brooks, Schlechtv's successor, has continued to develop a mix of programs to support the building of new capacities and the implementation of new approaches to the education of the community's children.

An extended foldout at the center of this report outlines the growth of the Academy in a year-by-year listing of milestones and programs.
JCPS/Gheens Professional Development Academy

Within the Academy, several different units offer a variety of services and technical assistance to individuals, schools, and the central office.

1. Restructuring Team: helps schools plan and implement major systemic change initiatives
2. Professional Development Team: develops and implements Master Inservice Education Plan, continuing incremental improvement activities
3. Learning Choices Team: manages the federal magnet schools grants
4. Information Resources: tracks emerging trends and developments, state-of-the-art research and practice
5. Professional Library: 15,000 print and video resources; open to public and private school teachers, parents, university students preparing to be teachers
6. Curriculum Resource Center (CRC): joint venture, originally with the Norton Foundation, now the Creative Education Foundation: a place for teachers to develop materials and units for their own classrooms; open to public and private school teachers
7. Exceptional Child Education Materials Center (ECE): helps teachers meet special education needs of students
8. Resource Development Team: identifies, develops proposals for external and internal resources to support programs
9. Building Support Team: schedules activities, makes the Academy a good working environment.

The Academy touches the lives of most employees in the district through the Master Professional Development Plan. Shaping Success for Students and Staff is a 152-page catalog describing the professional development courses available for teachers, administrators, and classified staff during the coming year. The program for 1992-1993 is part of a long-range, comprehensive professional development program for the Jefferson County Public Schools. A 140-member task force representing all components of the school system designed the program.

The Academy is an applied research and design center and a small university; it is an asker of difficult questions and a supporter of those willing to take risks to find the answers. The Academy has gone from a small planning and development operation to a complex organization of several units. Its annual budget has expanded from about $400,000, with over 90 percent coming from the Gheens Foundation, in the first two years of development, to over $10 million (exclusive of federal grants) at the present time, with less than 10 percent now coming from the Foundation. This has required a major reallocation of school district funds, a clear sign of the commitment of the Jefferson County Public Schools to using professional development as the instrument of school reform.
In Italo Calvino’s novel *Invisible Cities*, Marco Polo describes a bridge, stone by stone, to Kublai Khan. The emperor wishes to know which stone is most important, which supports the bridge. Polo tells him that no one stone accomplishes this; it is the line of the arch that the stones form. Kublai Khan then asks, a bit irritably, why the adventurer is talking to him about stones. “Isn’t the arch what really matters?” Marco Polo’s answer to the Khan is relevant to school reform. “Without stones there is no arch.” Stones are necessary; they are not sufficient. Even the keystone by itself is useless. Stones in a design, a relationship, can form an arch. To shape new schools, many different approaches are necessary; but they, too, are not sufficient. They must be connected, form a system, an arch, a transformed school.

Shaping schools for the new millennium is a design problem. To help schools move from the exploration of new ideas and approaches to educating young people to the design and building of student-centered schools, the Academy established a group of programs to support fundamental restructuring.

These Academy programs involved in the fundamental redesign and restructuring of schools in Jefferson County are described in the list at the end of the report. Schools participating in these programs are the major focus of this report, the ones that will answer the essential question: *Has the work of the Academy contributed to increasing student success in the schools of Jefferson County?*

This question tests a belief at the very heart of our approach to transforming schools: the continuing professional development of educators explicitly linked to school innovation should have a positive impact on student success.

In searching for a framework and analytical tools to examine the impact of the JCPS/Gheens Professional Development Academy on the schools, it soon became clear that current paradigms for evaluating the schools are incomplete. In spite of
the ongoing national discussions about student, school, and teacher evaluation and the efforts of some states to redesign their assessments, no consensus about a systematic framework for evaluation has yet emerged.

The clearest discussion of the issues surrounding the debate about the relationship of testing to school improvement is Ruth Mitchell’s *Testing for Learning*. She notes that reshaping the system requires changing assessments, “not so much because we need to know what we are doing (although we certainly do) but because assessment drives instruction.” She also states that the reform of testing is only one of many required to transform our schools. In other words, as I have stressed elsewhere in this assessment, it is necessary but not sufficient. New standardized tests and innovative forms of assessment by themselves will not increase student learning.

The Kentucky Education Reform Act of 1990 mandates new approaches to student assessment. These are under development by the State Department of Education and will include performance-based examinations similar to those being experimented with in California and Connecticut and portfolios not unlike those being developed in Vermont.

This lack of an agreed-upon system of evaluation, in particular the lack of value-added, continuing improvement indicators, led to my constructing the *Spiral of Assessment*, a systemic model for evaluating student success and the contributions of schools to it. The assessment of all components of the educational process — individual students and student groups, programs, schools, educators, and school districts — can be generated by using the *Spiral of Assessment* as a framework.

**Spiral of Assessment**

The Spiral includes four sets of indicators; all four should be present in an evaluation system:

- Resource Indicators
- Kaizen Indicators
- Milestone Indicators
- Commencement Indicators
Resource Indicators encompass the major inputs into the education process, the students and district resources, represented by the amoeba-like shapes at the base of the spiral. A systemic approach to evaluation includes information about the characteristics and readiness of students and the nature and extent of the resources available for educating them. Parent, community, and business involvement, as well as the school district’s capital, physical, and human resources fit into this category.

Kaizen indicators form the spiral proper and are measures of continuing growth. Kaizen is a Japanese term for continuing incremental improvement.

Kaizen indicators are developmental in nature, show value-added improvement over time, and are critical to diagnosing the needs of students and designing the most effective programs for them. These indicators are also essential for the proper evaluation of educators, schools, and school districts. Kaizen indicators include such traditional measures as attendance, suspension, retention, and dropout rates.

Parent and student satisfaction and the new performance assessment approaches to student achievement gathered under the umbrella of authentic assessment are also kaizen indicators.

A necessary tool for developing important kaizen indicators is an external instrument for measuring the annual progress of students by cohort. This instrument would track the progress and diagnose the needs of students, as well as help to evaluate the effectiveness of educators and schools. There is no external evaluation instrument designed to do this, although portfolio and other performance assessments have the potential to provide some of the information required.

Standardized tests can be used for developing value-added indicators, and I have used them in this report. They are far from ideal, not only because they do not measure the most important aspects of student learning, but also because they are more traditionally used as milestones.

Milestone indicators, placed along the spiral at varying intervals, mark student progress at set points in time. Milestone indicators include Kentucky’s planned performance assessments at grades four, eight, and 12 and the competency and mastery examinations required in some states.

Standardized tests are normally used as milestone indicators. The National Assessment of Educational Progress (NAEP) and ACT and SAT scores are also milestone measures.

Such evaluations provide a snapshot of achievement at specific points in time and are the basis for student comparisons with previous cohorts in the community, as well as for regional, national, and international comparisons. The general public in the United States relies almost entirely on milestone indicators for its evaluation of schools and educators. While these indicators are a necessary component of an evaluation system, they are insufficient as proxies for quality education and, indeed, often misleading as they are currently used.
Commencement indicators measure the outcomes of a particular cohort of students at the completion of their education within a school or school system. These may include the completion rate for students entering the system; milestone indicators from tests taken in the final year of school; SAT and ACT scores; special honors and awards for students in that group, including scholarships for further education; the percentages of students in postsecondary education or employed; and the satisfaction of students, postsecondary institutions, and employers, tracked over a period of three to five years.
The JCPS/Gheens Academy Grows

Programs

- Participatory Management (131 schools)
- Student/Beginning Teacher Program (130 participants)
- Learning Choices (39 schools)
- Administrators' Retreat (~50 participants)
- Principals' Institute (200 participants)
- Lyman Johnson Fellows Continue (8 Fellows)
- Performance Tasks for Authentic Assessment (15 schools)
- Cooperative Learning (24 schools)
- Literature-Based Reading (16 schools)
- Student as Worker (15 schools)
- Nongraded Elementary (70 schools)
- Eggs & Issues
- Cultural Diversity Project
- Master Inservice Education Program
- Coalition of Essential Schools (11 schools)
- Continuing Education and Extended School Services and Programs
- Future Principals' Seminar (50 participants)
- CRC, C & I, Speed Museum Collaborative Interdisciplinary Art in the Classroom
- Teacher Management Project Continues
- Technical Support for Vocational/Technical Restructuring
- Peer Coaching
- Collaboration with Personnel Department in Selection and Training of Future Principals

School Year '91 — '92
School Year '83-'84
Milestones
- Exploration of the Idea: Needs Assessment/Recommendations
- Approval of Phase I Grant
- National Search: Executive Director

Programs
- None

School Year '84-'85
Milestones
- Executive Director Appointed
- Small Staff Appointed
- Site for Academy Selected
- Academy Framework Developed
- Programs for 1985-86 Planned
- Baseline Survey for Evaluation

Programs
- Science Institute - Summer 85
School Year '85-'86
Milestones
- Inservice Unit Merged with Academy
- Staff Structure Refined
- Management Systems Developed
- Specifications for Renovations of Academy Building
- Plans for Professional Development Schools Outlined

Programs
- Invitation to Invention
- Lecture Series
- Travel Grants
- Teacher Hotline
- NIE/U of L Project
- MGAP Begins
- I/D/E/A Groups
- Minority Teacher Recruitment Project
- Science Institute
- Master Inservice Education Program

School Year '86-'87
Milestones
- Academy Team Expanded
- Academy Building Opened 11/86
- PDS Group Selected (24 schools)
- Coalition of Essential Schools Formed
- PDS Constitution and Standards Developed
- Carnegie and Matsushita Fund PDS Schools
- Professional Library Merged with Academy
- ECE Materials Center Merged with Academy
- Norton Foundation's Resource Center Relocated in Academy as Curriculum Resource Center

Programs
- MGAP (6 schools)
- Invitation to Invention
- PDS Planning
- Travel Grants
- Coalition of Essential Schools Planning
- NIE/U of L Project
- Minority Teacher Project
- Senior Directors Seminar
- Master Inservice Education Program
- Administrators Retreat (750 participants)
- Grants Assistance

School Year '87-'88
Milestones
- Learning Choice Schools Formed (10 schools)
- Computer Unit Merged with Academy
- Leadership Academy Started
- School Improvement Plans Linked to Professional Development
- Student Teaching an Academy Responsibility
- Academy Receives State Authority to Award Middle School Certification for Teachers

Programs
- PDS Phase II Planning
- MGAP (13 schools)
- Coalition of Essential Schools (6 schools)
- Future Principals Seminar (102 participants)
- Collegial Support Groups (17 groups)
- Student/Beginning Teacher Programs
- Minority Teacher Project
- Master Inservice Education Program
- Grants Assistance
- Project Lasso (7 schools)
- Administrators Retreat (750 participants)
- Development of Interdisciplinary Methods and Materials in CRC
- CRC Hosts National Teacher Center Conference
School Year '88-'89

Milestones

- Participatory Management Begins (24 schools)
- Extended Year Services Begin
- 13,000th Patron Served by Professional Library Staff Since Becoming Part of the Academy in 1986-87
- Ford Grant Funds Clinical Training Sites (7 schools)
- Collaboration with Personnel in Selecting New Administrators
- Partnership Established with Center for Leadership in School Reform
- McNeil-Lehrer PBS Documentary on Educational Reform Cites JCPS as "The Place To Go To Find Effective Schooling"
- National Governors' Association Features JCPS Teacher Initiated Reform Efforts in Restructuring In Progress: Lessons from Pioneering Districts
- Host Site for Conference on Work and Education for America's Youth
- Academy Staff Serve as Presenters/Trainers for State and National School Restructuring Endeavors

School Year '88-'89 Programs

- Learning Choice Phase II (15 schools)
- Collegial Support Groups (20 groups)
- Project Lasso (11 schools)
- Literature Based Reading Initiated (8 schools)
- Parent Advisory Councils: Learning Choice
- Student/Beginning Teacher Programs (163 participants)
- Clinical Supervision and Effective Teacher Training (2,500 participants)
- Master Inservice Education Program
- Administrators Retreat (750 participants)
- Coalition of Essential Schools (6 schools)
- Future Principals Seminar (116 participants)
- Multi-age Teaming/Ungraded Elementary Initiatives Implemented (2 schools)
- JCPS/BellSouth Leadership Development Collaborative

School Year '89-'90

Milestones

- Authentic Assessment Projects Begins (15 schools)
- Johnson Fellows Minority Leadership Development Begins (10 Fellows)
- District Featured in Book Allies in Educational Reform
- Peer Coaching Model Established
- Eggs & Issues Breakfast Series for Administrators
- Student As Worker Project Begins (15 schools)
- Host Site for Phi Delta Kappan Conference on School Reform
- Host Site for Leadership in Administrative Development Conference on School Reform
- Barrett Endowment Funds CRC
School Year '89–'90
Programs
- Participatory Management (48 schools)
- Collegial Support Groups (5 groups)
- Administrators Retreat (750 participants)
- Learning Choices Begin in Foreign Language Immersion, International Studies and Montessori
- Cultural Diversity Project Begins
- Project Lasso (15 schools)
- Student/Beginning Teacher Programs (150 participants)
- Ford Grant Clinical Training Sites (7 schools)
- Coalition of Essential Schools (7 schools)
- Literature-Based Reading (16 schools)
- Cooperative Learning (24 schools)
- Multi-age Teaming/Ungraded Elementary (25 schools)
- Ungraded Elementary Pilot (2 schools)
- Future Principals Seminar (90 participants)
- Parent Advisory Councils
- Master Inservice Education Program
- Student As Worker/Curriculum Redesign Consortium (15 schools)
- CRC Collaborative Projects
- Professional Library
- Research Assistance

School Year '90–'91
Programs
- Participatory Management (96 schools)
- Student/Beginning Teacher Programs (190 participants)
- Learning Choices (25 schools)
- Administrators Retreat (750 participants)
- Principals' Institute (200 participants)
- Lyman Johnson Fellows (10 Fellows)
- Project Lasso (15 schools)
- Performance Tasks for Authentic Assessment (15 schools)
- Cooperative Learning (24 schools)
- Literature-Based Reading (16 schools)
- Student As Worker (15 schools)
- Ungraded Elementary (30 schools)
- Eggs & Issues
- Cultural Diversity Project
- Master Inservice Education Program
- Coalition of Essential Schools (11 schools)
- Future Principals Seminar (50 participants)
- Technical Assistance/Support for Coalition of Essential Schools
- CITICORP Teachers
- CRC, C & I, Speed Museum Collaborative Interdisciplinary Art in the Classroom
- Teacher Manager Project Continues
- Technical Support for Vocational/Technical Restructuring
- Peer Coaching
- Collaboration with Personnel in Selection and Training of Future Principals
- Professional Library
- Research Assistance

School Year '90–'91
Milestones
- National Staff Development Council Names JCPS National Exemplary Staff Development Site
- JCPS Becomes NEA/JCTA Restructuring Lab Site
- Vocational/Technical Education Restructuring Begins
- Information Resources Office Established
- JCPS/Kentucky Department of Education Collaborative for School-Based Decision Making
- JCPS Principal is Guest on NBC's Today to Discuss District's Site-Based Decision Making
- CBS' Charles Kuralt Spotlights Multi-Age Grouping and Middle School "Families" at two JCPS Schools
- Radio Commentator Paul Harvey Calls JCPS "The School System That Has Set an Example for the Rest of Us in Computer Literacy, School Restructuring, and Educational Reform"
- Creative Education Foundation Begins CRC Support
Milestones

- Host site for National Middle School Association Annual Conference
- Host site for international conference on restructuring held with CRAC (Careers Research and Advisory Centre)
- Project Renaissance begins: elementary schools achieve integration through parental choice
- National CNN broadcast originates from Louisville to highlight school restructuring agenda
- Citicorp Teacher Project and Thompson Fellows Program initiated with the Coalition of Essential Schools
- JCPS/Gheens Academy named Regional Service Center by the Kentucky Department of Education
- Academy designs statewide training to implement KERA at the secondary level
- Academy designated as Kentucky Department of Education Training Center for school-based decision making councils from across the Commonwealth
- NEA gives Academy annual Innovation in Program Award
- Kentucky Association of School Administrators (KASA) gives Nallia Award to Academy for state leadership in education
- NEA names Academy provider of professional development for all National Reform Lab Sites
- Iroquois Initiative begun as a "break the mold" school reform effort
- National Governors Association joins with the Academy on a reform research agenda
- District accepts invitation to join NCREST (National Center for Restructuring Education, Schools, and Teaching)
- Host site for Holmes Group National Symposium
- District featured in Edward Fiske’s book Smart Schools, Smart Kids
- Exchange visits with representatives from Kent County (England)
- Academy becomes technical assistance agent for KEF (Kentucky Education Foundation) Institute for 21st Century
- Academy becomes headquaters for Kentucky Staff Development Council (NSDC)
To answer the question "What impact has the work of the Academy had on student learning in Jefferson County?" both the Cycle of Transformation and the Spiral of Assessment have been used to examine 42 schools: 18 elementary schools, 12 middle schools, and 12 high schools. Kaizen indicators assess continuing progress and compare three sets of schools at each level. Short descriptions of three individual schools provide some insight into how various schools are approaching systemic change and the role of the Academy in helping them to achieve their goals.

Using the Cycle of Transformation all 131 K-12 schools were divided into three groups:

- Schools in the pre-exploration stage, those satisfied with their current approach to educating students;
- Schools in the exploration and initial commitment phases of the transformation cycle; and
- Schools in the third phase of the transformation cycle, that of sustained commitment to school restructuring.*

* See Technical Appendix for discussion of approach.
Cycle of Transformation

Schools in the sustained commitment phase of the cycle generated the Group I schools; these were limited to schools with a three-to-five year record of commitment to systemic restructuring. These schools have been closely-linked to the Academy through their frequent participation as schools in major Academy programs. Schools with fewer years of experience were not included.

Group II schools came from those in the exploration and initial commitment phases of the cycle; for this report the group included only schools with a tendency toward moving from one short-term project to another, again over a three-to-five year period. Often these programs served only a small segment of the students in the school.

Schools selected from the pre-transformation pool, those satisfied with current approaches, make up Group III.

Because the Foundation's interest is in the impact of Academy activities on the schools and the lessons we might learn from sustained involvement in systemic approaches to restructuring, Group I schools were chosen first. Group II and III schools were matched to them on the basis of the socioeconomic and ethnic characteristics of students, and student mobility rates. These are the student resource indicators in the evaluation framework.

Other resource indicators from the framework model are district resources. Because of the district's systemic approaches during the 1980s, in addition to the basic per pupil expenditure, all schools received computers through The New Kid in School initiative, all schools had access to the programs of the JCPS/Gheens Academy, and all schools were encouraged to develop business, community, and foundation partnerships to bring additional resources to their efforts.
Kaizen indicators, those tracking the continuing improvement of students, are the ones used for this analysis of patterns of improvement in the schools. These indicators are based on:

- Attendance, suspension, retention and dropout rates, in all schools and graduation rates in the high schools;
- Parent involvement in the elementary schools; and
- Cohort analysis of patterns of improvement in standardized test scores.

This last item needs further explanation. The essential job of the school is *kaizen*, taking students where they are and adding value, from year to year. Because of our over-reliance on milestone indicators, there are no external instruments designed to measure this. However, traditional standardized tests such as the Comprehensive Test of Basic Skills (CTBS), while not ideal, can be analyzed to reveal the patterns of change in specific groups of students, if they are given frequently enough to the same cohorts of students.

*Cohort analysis measures the changes in student achievement annually and over time of a specific set of students.* The cohorts in this study are based on groupings of students by grade.

For this report, I examined the CTBS scores over the period 1988-1989 through 1990-1991 for two cohorts of students in the elementary schools and three cohorts in the middle and high schools. I selected test results from those years because they fell within the 1986-1991 time frame for looking at the schools in some depth.
I developed two indicators from the CTBS4 scores —
One asks “How Often?” the second “How Much?”

**How Often...**

*Basic Cohort Improvement Indicator* — measures patterns of change in student achievement annually and over time. It answers the simple but vital question of how often over a particular time period students show improvement. Is the pattern of student achievement consistent or erratic? The proxy for achievement chosen was the percentage of students performing at or above the 50th percentile on the Comprehensive Test of Basic Skills 4.

**How Much...**

*Cohort Improvement Rate Indicator* — measures the average annual rate of improvement of a cohort over a specific number of years. To the patterns of improvement identified through the Basic Cohort Indicator, this adds a second dimension by examining the rate of improvement as well as the patterns of improvement in the first indicator.

A third indicator also asks the question *How Often?*, looking again for continuing patterns of improvement.

**How Often...**

*Positive Involvement Indicator* — This composite measure, based on how often schools improve their attendance, dropout, suspension, and retention rates, as well as the graduation rates of high schools and PTA participation in elementary schools, tracks the patterns of improvement in these areas. It adds another perspective on the schools in the study.

Using these three indicators, what do the patterns of improvement in our three sets of schools look like?
Across all levels of schooling — elementary, middle, and high — the Group I schools outperformed both sets of comparison schools on the three kaizen indicators. Students in Group I schools show:

- More frequent patterns of student improvement on the Basic Improvement Indicator;
- Higher average rates of improvement on the Annual Rate of Improvement Indicator; and
- More frequent patterns of improvement on the Positive Involvement Indicator.

W. Edwards Deming, in his work with companies seeking to transform themselves through a total quality approach, warns about the dangers of short-term solutions and tinkering at the margins. Such approaches waste valuable resources and short-circuit the improvement process. This is what seems to be happening in the Group II schools, where much activity does not appear to result in consistent patterns of improvement for their students.

Students in Group II schools perform significantly lower than those in Group I on all three indicators. In many instances they also underperform the students in the Group III schools. In both Group II and Group III schools there is a tendency to wild swings in performance, up one year, down the next. I think there is an important lesson here for education reformers, politicians, and corporations and foundations supporting the transformation of our schools.

### Elementary School Patterns of Improvement on Three Kaizen Indicators 1988-1991

#### BASIC IMPROVEMENT

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<thead>
<tr>
<th></th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
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<tbody>
<tr>
<td>88%</td>
<td>50%</td>
<td>58%</td>
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- Students in Group I schools increased the percentages of those scoring at or above the 50th percentile on the CTBS 88 percent of the time.
- Students in Group II and Group III schools showed improvement 50 percent and 58 percent of the time, respectively.

#### AVERAGE ANNUAL IMPROVEMENT RATE

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<th></th>
<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
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<tbody>
<tr>
<td>8.3%</td>
<td>2.6%</td>
<td>5.5%</td>
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- Students in Group I schools improved at an average rate of 8.3 percent a year.
- Students in Group II and Group III schools improved at rates of 2.6 percent and 5.5 percent respectively.

#### POSITIVE INVOLVEMENT

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<th>Group I</th>
<th>Group II</th>
<th>Group III</th>
</tr>
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<tbody>
<tr>
<td>83%</td>
<td>44%</td>
<td>50%</td>
<td></td>
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</table>

- Students in Group I schools increased attendance, parental and student satisfaction, and parental involvement and decreased suspensions and retentions 83 percent of the time.
- Students in Group II and Group III schools improved in these areas 44 percent and 50 percent of the time, respectively.

Patterns of improvement in Group I schools are consistent. Patterns of improvement in Group II and Group III schools are erratic.
**Middle School Patterns of Improvement on Three Kaizen Indicators 1988-1991**

**BASIC IMPROVEMENT**
- Students in Group I schools increased the percentages of those scoring at or above the 50th percentile on the CTBS every time the test was given in the 1988-1991 period.
- Students in Group II and Group III schools showed improvement 75 percent and 83 percent of the time, respectively.

**AVERAGE ANNUAL IMPROVEMENT RATE**
- Students in Group I schools improved at an average rate of 7.2 percent a year.
- Students in Group II and Group III schools improved at rates of 3.6 percent and 5.5 percent, respectively.

**POSITIVE INVOLVEMENT**
- Students in Group I schools increased attendance, and parent and student satisfaction, and decreased suspensions, retentions and dropouts 69 percent of the time.
- Students in Group II and Group III schools improved in these areas 56 percent and 44 percent of the time, respectively.

Patterns of improvement in Group I schools are consistent. Patterns of improvement in Group II and Group III Middle schools are less consistent than in Group I Middle schools, but generally more consistent than in schools at other levels.

**High School Patterns of Improvement on Three Kaizen Indicators 1988-1991**

**BASIC IMPROVEMENT**
- Students in Group I schools increased the percentages of those scoring at or above the 50th percentile on the CTBS 83 percent of the time.
- Students in both Group II and Group III schools showed improvement 67 percent of the time.

**AVERAGE ANNUAL IMPROVEMENT RATE**
- Students in Group I schools improved at an average rate of 6.8 percent a year.
- Students in Group II and Group III schools improved at rates of 4.5 percent and 4.6 percent, respectively.

**POSITIVE INVOLVEMENT**
- Students in Group I schools increased attendance, parent and student satisfaction, and graduation rates and decreased suspensions, retentions and dropouts 85 percent of the time.
- Students in Group II and Group III schools improved in these areas 50 percent and 65 percent of the time, respectively.

Patterns of improvement in Group I schools are consistent. Patterns of improvement in Group II and Group III schools are erratic.
Elementary Schools

The 18 elementary schools in the sample serve students from all socioeconomic groups. However, about 50 percent of them have high percentages of students eligible for free or reduced meals. Group II and III schools have been carefully matched with those in Group I for socioeconomic and ethnic characteristics of students, as well as their mobility rates.

One factor separating the Group I schools from the others is the presence of a coherent philosophy of elementary education rooted in cognitive psychology.

The United States has not had a common philosophy on which to build elementary education. There are, indeed, many thelogies of elementary education that divide people and communities. Until the National Association for the Education of Young Children (NAEYC) issued its 1987 guidelines for a developmental approach to early childhood and elementary education, no national organization had integrated what we know from research and best practice into a wholistic approach to educating young children.

This lack of a central theory about what elementary schools should do and be has driven many schools either to experiment with every new idea that comes along or to hunker down, dismiss the need for change, and declare themselves successful at what they do.

What does an elementary school with such a philosophy, one of the Group I schools in this study, look like? How does the Academy support its work of building a new small world for young people? Eastwind Elementary School is one example.

Eastwind Elementary School — The principal and teachers at Eastwind Elementary School began to talk about transforming their school in 1985. Over the next few years they continued exploring what an elementary school dedicated to student success should be and began to involve parents in their planning.

In the fall of 1986 the school became one of 24 Professional Development Schools (PDS), a program established by the Academy to review and rethink all aspects of the education of young people. The PDS schools, based on the model of medical education, serve as training sites for the induction of new teachers.

Eastwind joined the second group of Participatory Management schools. Participatory Management enables the principal, teachers, and parents to work together more effectively in making critical decisions about the school.

They read: John Goodlad and Robert Anderson on the nongraded primary school, Howard Gardner on multiple intelligences, and others. They went to meetings, brainstormed ideas, worked with the position statement on developmentally appropriate practice of the National Association for the Education of Young Children. Then a group of teachers at Eastwind asked to pilot nongraded primary and intermediate teams.

Both groups use multi-age team teaching, a strategy combining students from two or more grade levels with team teaching by two or more teachers. A team of teachers became responsible for students’ multi-year educational experience. Eastwind now has two primary teams for grades one through three and two intermediate teams for grades four and five.

Eastwind has redesigned its curriculum, acquiring a new science lab and introducing a hands-on approach to mathematics and a literature-based reading program.

The school also uses thematic, interdisciplinary units emphasizing common subject matter across the teaching of reading, writing, mathematics, and science.

The Academy has supported the Eastwind primary pilots in many ways: providing basic information, sending educators to national meetings and sites in other communities, bringing in experts to work with the teams, and designing and presenting week-long summer institutes on implementing the nongraded primary school.
A Year in the Professional Development Life of Eastwind Elementary School

At Eastwind Elementary the principal, teachers, and other staff are, separately and together, frantic learners. Ninety percent of them take more professional development courses than the state requires; 53 percent have more than double the hours needed to meet state guidelines. More important than the quantity, however, is the quality and relationship of their choices to the changes underway at the school.

The professional development year for Eastwind begins before school opens in the fall. The principal takes the staff for a two-day retreat to refine their approaches to the nongraded elementary school. They develop the school plan for the coming year: curriculum, the integration of Howard Gardner’s theory of multiple intelligences into the program, and a report on the progress of the nongraded pilot. At the request of the principal, a few Academy staff assist them.

About ten days later, the school staff gathers again, this time to review and interpret the achievement data from the previous year. Smaller groups will work on the whole language approach to teaching, using a university professor, and the implementation of a collaboration model developed in Scotland for integrating special needs and regular students and teachers into the nongraded system.

Over the year, teachers, administrators, and staff will use many Academy programs to help them achieve their goals.

Before school opens, the principal will attend the district-wide Administrators’ Retreat and the Principals’ Institute. Throughout the year, the principal will participate in the BellSouth Leadership Seminar, sessions on team building and site-based management for principals, a workshop on cultural diversity and three lectures on using the Japanese concept of kaizen in school reform. Interest in the new books and ideas discussed at the Eggs and Issues breakfasts for administrators will take this principal there as well.

Several teachers will choose seminars in implementing the new mathematics standards and in problem-solving in math. Some will take advantage of Technology in the Elementary Classroom or a short course on the whole language approach to reading. The music teacher puts together a solid program related to music for young children. Another group works on new modes of performance assessment, particularly on the development of the student portfolio.

The school has designated a team to participate in the Academy’s Cooperative Learning Project. This group will then come back and train the rest of the school in the uses of cooperative learning in the classroom. Other teachers are learning how to become Participatory Management trainers. Throughout the year, the school will get technical assistance in implementing Participatory Management from their liaison at the Gheens Academy.

In the summer following this school year, many will take one of the week-long institutes or shorter programs related to the implementation of the Kentucky Education Reform Act offered by the Academy. Within a few short weeks, it will be time for the annual school retreat once more.
Middle Schools

The 12 middle schools are evenly divided among the three socioeconomic tiers of district schools. Group II and III schools have been carefully matched with those in Group I for socioeconomic and ethnic characteristics of students, as well as mobility rates.

Middle schools in Jefferson County have had many years of experience in taking a developmental approach to adolescent education. One basic difference between middle schools and elementary and high schools, as well as junior high schools, is a strong philosophy of what constitutes an appropriate education for adolescents. The middle school movement is built on the translation of research on the physical, intellectual, and social growth of adolescents into a developmental approach to educating young men and women in their pre-high school years.

Ten years of teaming in the middle schools nurtured a climate of collaboration and built a structure for implementing change. Flexible scheduling, common planning periods, and team budgets are common.

What do the Group I middle schools look like? How does the Academy help administrators and teachers in them to reach their goals? Harbor Middle School is one example.

Harbor Middle School — Harbor Middle School has been one of the most active participants in the Academy’s programs since it opened. It was in the first group of middle schools to use the Middle Grades Assessment Program, developed by the Ford Foundation and the Center for Early Adolescence in North Carolina to help middle schools take a hard look at themselves and chart new directions. Out of this assessment came the decision to restructure the school’s administrative staff and assign a dean to each grade to coordinate all student services. The same dean stays with a group of students over the three years of middle school.

Like those at Eastwind Elementary, Harbor’s principal and teachers voted to become a Professional Development School. The school works closely with the university in placing student teachers, developing job descriptions, and inviting prospective teachers to apply for experience at Harbor. Harbor was also in the first group of schools to implement Participatory Management.

All middle schools have used interdisciplinary team teaching for several years. Harbor has also moved to multi-age teaming, mixing students from grades six to eight. One of its multi-age teams developed a no-fail policy for its students that includes extending the school year for students needing additional time to complete their work.

Harbor was an early pioneer in flexible scheduling and in developing student conflict resolution programs.

Students at Harbor who are at-risk of dropping out have the option to contract with the school to spend part of the day at the middle school acquiring basic skills and the rest of the time at a cooperating high school that offers an integrated academic/technical program. This eases the transition from middle to high school for these students and encourages them to stay in school.

Harbor has a more comprehensive partnership with this same high school. Teachers from both buildings meet regularly to determine the necessary skills involved in the transition to high school for all students.
A Year in the Professional Development Life of Harbor Middle School.

The professional development activities designed by the Harbor staff fall into four categories:

• Sessions introducing the Kentucky Education Reform Act of 1990 and its implications for middle schools;
• Work groups on the implementation of the annual school plan and skills sessions on team-based management and school-based decision making;
• Multiple offerings on new modes of assessment, including sessions on authentic assessment and the development of student portfolios for reading and writing assessments; and
• A wide range of offerings on integrating computers into the curriculum, including such areas as introducing staff to new technology in the building and specific courses in laptop computer training, desktop publishing, and the uses of Linkway, a hypermedia software program.

Just before the new school year begins, the principal attends the Administrators' Retreat and the Principals' Institute. Over the year the principal takes seminars on leadership for the 1990s, on cultural diversity, on how to bring about needed changes in the school, and on how to adapt the Japanese notion of kaizen, continuing improvement, to the work of the school.

Attendance at the National Middle School Conference, as well as the Kentucky Middle School Association, helps this principal, teachers, counselors and the school secretary to keep up with the latest developments in middle school education. Counselors attend the meetings of the Kentucky Association for Counseling and Development. Several teachers go to the annual meeting of the Kentucky Council for Social Studies or the regional conference of the National Council of Teachers of Mathematics.

Mathematics teachers participate in sessions on implementing the National Council of Teachers of Mathematics' new standards in mathematics, on the impact of KERA on mathematics, on the use of manipulatives in teaching fractions, or on enhancing the teaching of general mathematics and algebra.

Social sciences teachers take advantage of several offerings on teaching about China and Africa. Music teachers increase their skills in specific instruments; some also take a seminar on the use of music to enhance learning.

A designated team works with teachers from other schools in the Academy's Cooperative Learning program. They will return to Harbor and share what they have learned with their colleagues.

Counselors attend the summer institute on substance abuse and short courses on such issues as crisis intervention, guidance information systems, introducing students to careers in engineering, assisting students in dealing with the Persian Gulf war, and new initiatives for summer programs.

New teachers at the school join a collegial support group for new middle school teachers and have a teacher-mentor to assist them.
High Schools

The 12 high schools in our sample include schools serving students from all socioeconomic levels. Several of these schools, in both city and suburban locations, face daily the challenges of working with students who are dealing with serious problems: low expectations for the future, lack of parental support for high achievement, and poverty. Group II and III schools have been carefully matched with Group I schools for the socioeconomic and ethnic characteristics of students, as well as mobility rates.

Effecting change in high schools anywhere in the nation is a major challenge. The college model adopted by secondary schools is somewhat like a castle surrounded by a moat. The dwellers within are reluctant to let down the drawbridge. The Group I schools in this study have done that, although the process of rebuilding the castle is still in its early stages.

High schools suffer from the same problems as elementaries; they lack a coherent philosophy of what a high school should be and do. Despite numerous studies and the amount of analysis and debate about high schools over the last ten years, the nation seems to move further and further away from such a consensus.

There have been a number of positive developments, especially with such programs as Ted Sizer's Coalition of Essential Schools and the Tech/Prep movement that assists schools with integrating technical and academic courses. No approach, however, is comprehensive enough to stand alone.

Riverside High School — Riverside High School is one of the four Group I schools. It was an early and active participant in Academy programs. In 1986 it conducted a self-study and voted to become a Professional Development School. It is also a Participatory Management School and one of the first of the Jefferson County High Schools to have joined the Coalition of Essential Schools.

The Coalition of Essential Schools was founded by Ted Sizer and based on his research and experience in high schools. It has as its foundation a set of nine principles that all schools in the Coalition use as touchstones for designing new approaches to high school learning.

Riverside's ninth grade special team helps students bridge the gap from middle school to high school. It fully integrates the honors and ECE programs with the regular ninth-grade program. Team teaching and interdisciplinary units are hallmarks of the Success Team.
At Riverside High, teachers coordinate professional development designed by their school-based inservice team with major programs and individual courses offered by the Academy.

For the principal and other school administrators, the new academic year begins with the Administrators' Retreat. This is followed by the Principals' Institute. Later in the year, one of the assistant principals will attend the BellSouth Leadership Seminar; the principal was one of the original group working with BellSouth on this program.

Before school opens, the principal will plan a two-day session bringing all staff together to prepare for the coming year. In addition to this time apart, faculty will also have the choice of workshops on the Kentucky Education Reform Act and the Coalition of Essential Schools, assessment strategies, the integration of technology into the curriculum, interdisciplinary teamwork, and the use of laptop computers. A special workshop assists members of the ninth grade Success team with intensive planning for the coming year. The principal will also take the administrative team, which includes assistant principals and counselors, away from campus for another day of intensive planning and team building.

Teams from Riverside High are participating in several major programs of the Academy, among them Cooperative Learning and Students as Worker. Another faculty member is being trained to train others in Participatory Management techniques. In all three instances, a train the trainers mode is being used, so teachers, at the end of each program, will return to Riverside and offer training for their colleagues. The school will also receive technical assistance for the implementation of Participatory Management from their Academy liaison.

Mathematics teachers will attend one of two intensive summer institutes on the teaching of algebra, and some a third institute on technology in the high school mathematics classroom. Riverside High's math teachers will also be found in sessions on the National Council of Teachers of Mathematics' standards for mathematics teaching, the Kentucky/JCPS Mathematics framework, mathematics as a third language, or mathematics for consumers. Some will participate in the banking applications seminar at a local bank's training center.

Some physics teachers will find themselves in the Physics Teachers' Institute; still others will work with the Museum of History and Science, study the biology of the sea, or learn about urban ecology.

Some language and literature teachers will take advantage of the Writing Project's advanced institute. Foreign language faculty will examine the impact of KERA on foreign language teaching, especially as it relates to the new modes of assessment. A German teacher will attend a weekend immersion program offered by the Goethe Institute and a course on the cultural implications of the unification of Germany.
Building for the Future

Shaping the vision. Understanding that the whole is more than the sum of its parts. Becoming frantic learners. Finding patterns in complexity. Weaving new connections. Tolerating ambiguity. Leveraging resources. Taking risks. Seizing opportunities. Balancing individual and group needs. Transforming words into actions.

These are some of the things that go on in schools engaged in transforming themselves. Schools that are becoming learning organizations.

Schools are small worlds; when we work with them we are dealing with the fundamentals of human well-being. A common characteristic of the schools in Group I is that they are always mindful of this. Decisions, directions, and actions are measured against their potential effects on students.

In these small worlds hallways are clean and bright; student work is displayed publicly. They are safe, warm places. They are also places of laughter and energy, where students seeing a stranger in the hall will ask what the visitor thinks of his or her school.

You can feel the energy within three minutes of walking in the door: you see the vitality in the face of the six-year old girl, three weeks into the school year, heading, with all the dignity of a college student on graduation day, from her mathematics team to her reading team. It radiates from the face of the young boy who, four months before, could barely be heard on a videotaped interview and who today is presenting the results of a science project to the class with wit and humor.

These schools are not without their real world problems; many students come from families with little hope for the future, families under stress, families that are poor. In these schools, however, people come together to enlarge the opportunities for growth and creativity for students, teachers, parents — all members of the school's community. These schools don't always succeed; there are heartbreaks and failures. It is simply that they are different.

They are not afraid of new ideas; they seek them out. They see things whole, are willing to try that uncomfortable thing called systems thinking and apply it to the task at hand.

Thinking and acting systemically is a long-term strategy, not unlike a preventive medicine approach to health. Tinkering at the margins is treating the symptoms while the patient gets weaker and weaker.

Strategic partnerships plus leadership plus systemic approaches plus professional development plus time equals successful school reform.

"The best leaders, like the best music, inspire us to see new possibilities." is Max DePree's belief. Leaders in education need to make this belief their own.

To understand the role of leadership in changing schools, first look at leadership at the head of the school district. Without leadership by the Superintendent, the Board of Education, and the series of presidents of the Jefferson County Teachers Association, the process of transformation would not have begun or been continued over many years; without leadership in individual schools, the process would have had no impact on the students.

The Superintendent and Board of Education together made it possible for a new vision of shared leadership to generate new ways of accomplishing the work of the district. A flattening of the organizational structure eliminated a layer of middle management; principals now report directly to the superintendent.

Changes in organization and management in the district helped the Superintendent and Board to reallo-
cate existing resources. One of the district's explicit goals has been to increase regularly the percentage of the district budget going directly to schools.

The concept of the leadership roles of the principal and teacher fostered by participatory management emerged from the Visions, Beliefs, and Standards document developed by the 24 Professional Development Schools during the 1986-1987 school year. The relevant section states:

To assure that students are successful in completing school tasks, it is critical that teachers view themselves as leaders, that they have the skills and competencies necessary to lead, and that they be empowered within the system to make decisions and exercise the authority that is essential for leadership to occur. The primary role of the principal is to create the conditions in which teachers can lead, to develop leaders, and to lead leaders.

Some important innovations began with the leadership of groups of teachers. Without their initiative, important pilot programs — among them, the nongraded primary schools and team teaching in the elementaries, no failure policies and interdisciplinary approaches in the middle schools, and the Coalition of Essential Schools in the high schools — would not be so advanced. Leadership and teamwork are complementarities, not opposites.

Time is another building block for successful school reform. And, he least understood by those who want schools to change.

If a school district changes superintendents every three years as many of the nation's larger urban and suburban districts have been doing over the last decade, then it is impossible to make significant changes in those schools. A superintendent must have time to put in place the complex processes required for transforming schools. Without continuity of leadership over the last ten years, what has happened in the Jefferson County Public Schools would have been impossible.

Continuity of leadership in individual schools is also essential. I have already noted that most of the Group I schools had the same principal throughout the period examined for this report. Seeds once planted have not borne fruit in some other schools because the necessary leadership was missing.

Throughout its history the Academy has offered special programs for principals. This year it will design a new Principals' College, to identify and train the principals who will be leaders for schools capable of constantly renewing themselves. The district needs to grow its future leaders from within. Most current education and training programs for principals prepare people for the schools of the past.

Beyond duration in the offices of superintendents and principals, extended time is most needed to change schools. As a nation we are impatient; in recent decades this impatience has manifested itself most destructively in the inability of our children to deny themselves the desire of the moment. Equally destructive is the nation's inability to invest time as well as other resources in school reform.

Until we recognize this, the nation will continue, like Sisyphus, to push the rock up the hill only to have it come crashing down. A community, in partnership with its schools, must be prepared to give at least eight to ten years to the transformation of the education of young people — and to realize that it is, in reality, a never-ending process.

Most have been at the same school for several years; in schools that have had a change of principal during the last five years, the new principal has a philosophy of schooling very similar to his or her predecessor.

They believe in Participatory Management, not just tolerate it. Before it was called that, these principals were already involving their teachers in making decisions about the school.

They share a profound respect for students and parents, as well as for the staff in the school.

They are tough-minded; if some teachers find it hard to adjust to the rapid changes occurring in the schools, they assist them to find new options.

They are truly frantic learners. This group of principals has participated in a vast range of Academy programs; most have been through the BellSouth Executive Leadership Program. They attend national and regional meetings regularly to keep up with research and practice; they are avid readers. They encourage their teachers to do the same.

Most of them have strong entrepreneurial tendencies and are adept at finding and gathering additional resources for their schools.
In the hope of assisting other communities, The Gheens Foundation wants to share the lessons it has learned from the nine years of this joint venture with the Jefferson County Public Schools.

Changing schools is not a linear process. Schools are transformed through dynamic interactions among five essential resources: Partnerships, Leadership, Systemic Approaches, Professional Development, and Time.

**Partnerships**

Working together in alliances, partnerships, joint ventures, lasting for a brief time or for many years, is the way organizations will flourish in our complex society. Schools need to develop partnerships with business and community organizations, with the unions representing their employees, and with the parents of the children they educate.

Lesson 1: Without business and community partnerships it will be difficult, if not impossible, for the public schools to acquire the resources needed to shape the schools of the 21st century. Capital resources, volunteer time, and good will flow from such alliances. Regular contact and deeper understanding of the challenges benefit all.

Lesson 2: Fundamental change in the schools requires the collaboration of the unions representing the teachers and other district employees. The experience of Jefferson County is proof that such alliances are possible, that they can succeed.

Lesson 3: Without parents as active partners in school reform, it is extraordinarily difficult to implement new programs and approaches.

**Leadership**

The leadership required to transform schools does not reside in a single person or office. It is vested in many people and has several dimensions.

Lesson 4: Fundamental change demands a new kind of leadership from boards of education, superintendents, union presidents, principals, and teachers. It is a leadership grounded in the belief that student success is the only work of schools. All decisions must relate to that essential belief.

Lesson 5: A leader who is serious about changing schools must be a risk-taker, a strategist, a dreamer, a doer, an entrepreneur, a discoverer of the new and a recycler of the old — and support the development of these qualities in others.

Lesson 6: Leaders, whether at the school or district level, must develop better modes of accountability and more effective ways of communicating with their communities.
Systemic Approach

Systemic approaches to the transformation of schools do not offer the single formula some would like. The foundation's 1988 report declared “No single model of excellence has all the answers for all the schools.” Nothing we have learned in the last five years contradicts this. There is no recipe, no cookbook, no single blueprint for school reform.

Lesson 7: Systemic change requires all stakeholders in education to be involved. In an individual school this means administrators, teachers, other staff, parents, students, and the community.

Lesson 8: Systemic change must be grounded in an assessment of the present, a knowledge of possibilities, and a plan for the future. Projects undertaken outside of this framework have little potential for sustained impact.

Lesson 9: A school district serious about change should provide key technical assistance units to assist the schools. Examples include a statistics unit to collect and analyze the data needed for feedback and accountability and a professional development organization to make education and training available to all staff.

Lesson 10: No single tool, whether it be school-based management, nongraded primary schools, the Coalition of Essential Schools or any other program, is sufficient by itself to accomplish the work of changing schools. To make a real difference, each must be part of a larger system.

Lesson 11: Students in schools taking a systemic approach to transforming themselves are more likely to show consistent improvement from year to year than students in schools with a project philosophy of change, or schools that see no need of change at all.

Professional Development

New approaches to education, new forms of governance and decision making require new information, new experiences, and new ways of thinking and acting. They require continuing professional development. School-based management, performance assessment of students, and other approaches to reshaping schools cannot be implemented without adequate preparation of administrators, teachers, and others with an interest in the outcomes.

Lesson 12: Professional development can serve as the catalyst for major innovations and is an essential supporter of continuing, incremental improvement in the schools.

Lesson 13: Continuing professional development for educators requires substantial up-front investment, as well as the long-term commitment of the school district to funding and other resources.

Time

Time is the invisible presence in school reform, often ignored, its role not understood. It can be the death of school reform or its life.

Lesson 14: Schools and school districts are complex organizations; structural change in complex organizations requires time. If transformations are to occur in American elementary and secondary education, then long-term investments are critical at federal, state, and local levels and by both private organizations and public agencies.
Public schools, as a whole, do a very poor job of reporting to their communities. If the community tends to judge the quality of schools by single milestone indicators such as standardized test and college entrance examination scores, it is because schools have given them no other reliable basis for judgment. This cannot continue if public education is to survive into the 21st century. Using indicators from the Spiral of Assessment described in this report, I am suggesting a framework for annual reports to the community from both the school district and individual schools.
# Annual School District Report

## RESOURCE INDICATORS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Students</td>
<td>Numbers, ethnic and socioeconomic characteristics of students</td>
</tr>
<tr>
<td>Staff</td>
<td>Staff and organization to achieve district goals</td>
</tr>
<tr>
<td>Budget</td>
<td>Major budget categories and their relationship to education programs</td>
</tr>
<tr>
<td>Capital Improvements</td>
<td>Percent of the budget going to the schools</td>
</tr>
<tr>
<td>New Programs</td>
<td>Major capital improvements undertaken or completed over the last year</td>
</tr>
<tr>
<td>Parent Involvement</td>
<td>Numbers and work of the PTA or other parent organization</td>
</tr>
<tr>
<td>Business &amp; Community</td>
<td>Review of business and community partnerships</td>
</tr>
<tr>
<td>Partnerships</td>
<td>State and federal grants for special projects</td>
</tr>
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</table>

## KAIZEN INDICATORS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Involvement</td>
<td>Improvements in attendance, retentions, suspensions, and dropouts by school level</td>
</tr>
<tr>
<td>Student Achievement</td>
<td>Improvements in student achievement on the continuing improvement (kaizen) indicators developed by the district</td>
</tr>
<tr>
<td>Parent &amp; Student Satisfaction</td>
<td>Improvement in parent and student satisfaction on a selected group of school attributes</td>
</tr>
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## MILESTONE INDICATORS

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>State-Mandated Tests</td>
<td>Student achievement on milestone tests required by the state at specific points in schooling: grades 4, 8, and 12 or other intervals</td>
</tr>
<tr>
<td>Minority Student Achievement</td>
<td>Comparisons of these achievement levels with earlier district cohorts, with all students in these grades across the state, and, if possible, with students in similar communities outside the state and students nationally</td>
</tr>
<tr>
<td>SAT &amp; ACT Scores</td>
<td>Comparison of current SAT or ACT scores with those from the previous year and with state and national achievement</td>
</tr>
<tr>
<td>Awards</td>
<td>Awards from outside organizations to the district, the schools, students, and staff</td>
</tr>
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## COMMENCEMENT INDICATORS

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Profile of Graduating Class</td>
<td>Profile of students graduating in the year of the report, including completion rates for students who entered in Grade 1; milestone indicators for the final set of state-mandated tests taken by this group; percent going into postsecondary education or the workforce; amount of scholarship money; special awards or honors for these students</td>
</tr>
<tr>
<td>Update on Past Graduating Classes</td>
<td>Report on alumnæ/i, employer and college satisfaction for the last five graduating classes</td>
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# Plan for the Coming Year

Major goals for the district for the coming year, related to the district's mission and core values.
## Annual School Report

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<tr>
<td>Description of the student body</td>
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<tr>
<td><strong>Our Staff</strong></td>
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<tr>
<td>Description of the staff, including any changes in number of staff from the previous year and the reasons for those changes</td>
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<tr>
<td><strong>Budget</strong></td>
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<td>Amount of the school budget and the categories for which it is used</td>
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<td>Description of capital improvements undertaken or completed during the school year</td>
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<td>Description of numbers and work of the PTA and other volunteers</td>
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<td>Comparison of these achievement levels with other schools in the district and across the state</td>
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<td><strong>Minority Student Achievement</strong></td>
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<tr>
<td>Where appropriate, report separately on minority student achievement on mandated state tests</td>
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<tr>
<td><strong>SAT and ACT Scores</strong></td>
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<tr>
<td>High schools report scores of current graduating class and compare with previous classes</td>
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<td>Summary profile of the class leaving the school to move to another level within the district or to go to higher education or work, including completion rates for students who entered the school; achievement on state-mandated tests for that specific cohort of students; awards to students in the cohort</td>
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<td>For high schools, report on alumni/i, employer, and college satisfaction for the last five graduating classes</td>
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**Plan for the Coming Year**

Major goals for the school for the coming year related to the mission and core values of the school
Commentary

A. Graham Down

President, Council for Basic Education

I welcome the opportunity to comment on the excellent report submitted by Dr. Regina Kyle detailing the evolution of the Gheens Professional Development Academy and its influence on the quality of teaching and learning in the Jefferson County Schools. The reputation of the Gheens Professional Development Academy is sterling and Dr. Kyle’s account of its history, purposes, and impact support this proposition.

The three overarching characteristics of the Academy appear to be:

1) an awareness of the importance of systematic change;
2) a willingness to embrace a concept of partnership which highlights the intersection of all segments of the community; and
3) an appreciation of genuine professional development for the teaching profession in restructured schools.

Let me summarize the implications of these three points. Although genuine reform frequently occurred school by school, or even classroom by classroom, the extent of improvement in academic performances shown in the paper appears to have been in direct proportion to the degree of intervention by the JCPS/Gheens Professional Development Academy.

The Academy’s activities as depicted in this report, although ultimately centered on the impact on the classroom, are variegated. The University of Louisville, the business community, the teachers’ union, the active cooperation of the individual school principals, the involvement of salient representatives of the community as a whole, are all seen quite correctly as essential to transforming the culture of participating schools.

It is clear from this report that one cannot put this complex of forces into a traditional school. Radical restructuring and a different approach to the delivery of instructional services are required. No longer will the sound bites characteristic of a series of disconnected 45-minute periods suffice. Learning has to be integrated across disciplines, and, if the logic of the argument holds good, the improvement in the level of academic achievement of the participating schools has to be measured externally, which includes, but is not limited to, standardized tests.

The national reverence for raw data as incontrovertible evidence of improvement is understandable. However, the very appreciation of the complexities of the 20th century culture vitiates against exclusive reliance on such data. This report, good as it is, seems constrained by having to rely on numbers rather than on thoughtful analysis supported by classroom visitation and various kinds of performance assessment.

Where, for instance, is the evidence that the writing of students placed in the charge of teachers trained by the Gheens Professional Development Academy has undergone significant improvement? If to write is to think, and if our teachers are to become the coach/facilitators properly presumed by the Gheens Academy, then an evaluation of their new and revitalized approach to classroom instruction deserves specific attention to student’s work.

New student portfolios are now in their first stage of implementation as an important part of student evaluation in Jefferson County and the array of performance assessments being developed by Kentucky will, over the next several years, offer enriched information and data about student achievement in these schools. I hope that The Gheens Foundation will follow this excellent overview with some in-depth studies of students in the individual schools, focusing particularly on such areas as writing, mentioned above.

In sum, the report shines as a coherent vision of what public education should be. The Jefferson County Schools that have participated in this experiment are clearly the beneficiaries. The report is a significant first step in describing a strategy of incalculable value not only to Louisville but also capable of serving as a model worthy of national emulation.

Washington, D.C.
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This report is the second report published by The Gheens Foundation on the development of the JCPS/Gheens Professional Development Academy. It is the first to address directly the impact of the Academy on the schools and student learning. The decision to take this approach was not taken lightly. After eight years of work, the Board of the foundation wanted to see if there were differences between schools active in the Academy’s restructuring initiatives over a several-year period and other schools in the district. To do this, it was necessary to rethink issues related to the evaluation of schools. This resulted in the development of the Cycle of Transformation as a model of the stages of change and the Spiral of Assessment as a framework for evaluation.

The Cycle of Transformation, with its three major phases of change, generated the organization of all K-12 schools in the district into three groups. Schools serving only special populations were excluded from the pool. The basis for assigning schools to one of these three sets was the detailed data and information on school participation in the major restructuring programs of the Academy. These are listed at the end of this appendix. Separately, without reference to this data, Academy staff, who work daily with the schools, also assigned schools to one of the three categories.

The three categories are: (1) schools in the pre-exploration stage; (2) students in the exploration and initial commitment phases of the transformation cycle; and (3) schools in the sustained commitment phase of school restructuring.

A note on Academy involvement with schools is appropriate here. All schools are involved with the Academy to a greater or lesser extent through the Master Inservice Education Plan and Participatory Management. Involvement in fundamental restructuring has been voluntary in the Jefferson County Public Schools. The strong support for innovation by the district does mean, however, that there is constant movement and change, with more and more schools beginning to take systemic approaches to school reform. At the present time about 35 percent of the schools are in the “sustained commitment” phase, 45 percent in that of “initial commitment” and moving toward sustained commitment, and 20 percent still in pre-exploration stage.

In selecting the Group I schools for the study, only those schools with at least a three-to-five year history of using systemic approaches to change were considered. The schools in Group II and Group III were then selected to match the Group I schools on the basis of the socioeconomic and ethnic characteristics of students, student mobility rates, and, where possible, geographic location in the county.

This study focuses primarily on two sets of what I have called kaizen, or continuing improvement indicators. One, the Positive Involvement Indicator, combines improvements in attendance, suspensions, dropouts, retentions, and graduation rates, parent and student satisfaction, and parental involvement over a three-year period into a single indicator. The other set of indicators, the Basic Improvement and the Rate of Improvement indicators, show the patterns of continuing improvement on an external examination for that same three-year period. Cohort analysis was done on the results of the Comprehensive Test of Basic Skills 4 between 1988 and 1991. These tests were given frequently enough to each grade in that period to track specific cohorts of students. The proxy used was the increase/decrease in the percentage of students testing at the 50th percentile or above on the composite score.

Current standardized tests are very imperfect instruments both for what they measure and for the kind of kaizen evaluation schools need to do. They are used here because, at the present time, no other external examination exists to assess school performance, and an external assessment tool was essential for our purposes. Jefferson County and the state of Kentucky are introducing student portfolios and performance assessment examinations that, in the future, will provide us with assessments of the more complex skills needed by students for the future. Alas, these are still being developed primarily as milestone indicators. The continuing improvement, kaizen, indicators needed are still nowhere on the horizon.

I hope that the Spiral of Assessment, as a new framework for thinking about and developing systematic evaluation of our schools, will refocus some of the discussion and work being done on assessment across the nation. We need to move away from almost total reliance on milestones and track more effectively the continuing incremental improvement that alone will lead to the standards of excellence we desire.

For more detailed information on the Cycle of Transformation or the Spiral of Assessment, please write:

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Appendix B: Major Restructuring Programs 1986 — 1991

• Professional Development Schools — In the spring of 1986, the Academy asked schools to consider volunteering for a multi-year program that would rethink the structure of schooling, redefine its mission, and create new environments for students. Modeled on medical education, these would become sites for the induction of new teachers into the Jefferson County system. Twenty-four schools began work in the fall of 1986. Teams of teachers and administrators from these schools wrote a new constitution for the schools, Visions, Beliefs, and Standards for the Professional Development Schools. This document was completed in 1987. With its description of student success as the goal of all school activity and its standards emphasizing a shared vision, results, shared decision making, and flexibility, this led to the adoption by the Board of Education of the constitution’s key principles in 1988. The Board expressed these principles in its establishment of student success, community collaboration, and employee efficacy as the core values of the district.

• The Middle Grades Assessment Program — This is a tool for self-assessment by middle schools developed by the Ford Foundation and the Center for Early Adolescence in North Carolina. Since the 1985-1986 school year, about 80 percent of all middle schools have used it to analyze their strengths and weaknesses and to reshape their operations to meet student needs.

• Learning Choice Schools — Funded with federal magnet school money, this restructuring initiative began with eight elementary schools, one middle school and one high school in 1987 and has expanded to additional sites over three phases of funding. The major emphases are on academic achievement, school integration, parent and community involvement, increasing student attendance and decreasing the isolation of minority students.

• Participatory Management — Shared decision making is one of the principles of the Professional Development Schools’ constitution. In 1988, the Jefferson County Teachers Association proposed, as part of the new contract, to formalize this approach. Over a four-year period, Participatory Management was phased in across the entire district. The Academy offers training and technical assistance to the schools in setting up their local school councils and in acquiring the skills needed to use them effectively.

• Coalition of Essential Schools — This is a systemic approach to reshaping high schools founded by Ted Sizer, former Dean of the Harvard Graduate School of Education and now professor at Brown University. Nine basic principles focus on student learning. These are guidelines: participating schools develop programs appropriate to the needs of their students and communities. The Academy has brought Sizer and other experts to Louisville to work with schools and sent teams from the schools to national and regional meetings. Eleven of the districts 23 high schools belong to the Coalition.

• Student As Worker — This program combines the student as worker and authentic assessment approaches proposed by the Coalition of Essential Schools and other reform efforts. A core group of elementary, middle, and high schools are working to design and pilot test a more thought provoking curriculum and performance assessment approaches to evaluating its impact on student success. The Academy developed a series of workshops with an external consultant for the teams of teachers. It also supports the network teams that collaboratively design new curriculum, observe its implementation, refine it, and support classroom changes. A ten-day summer institute brings together teachers and students to model the approach for other schools.

• Cooperative Learning — Students need to learn how to work together as well as by themselves. Surveys of both local and national companies show that teamwork is now considered a basic skill in the workplace. Cooperative Learning focuses on assisting teams of teachers from 18 schools in making cooperative, team approaches a significant element in student experience. These teachers will become Cooperative Learning Consultants to help other schools to bring team learning to the classroom.

• Nongraded Primary Schools — Rethinking the earliest learning experiences of children is critical to an educational philosophy based on student success. Several Jefferson County elementary schools have been experimenting with a nongraded approach to the education of young children. The Academy brings these schools on-site technical assistance in designing and implementing a model for each site. Staff development opportunities on the primary school philosophy, structural and institutional frameworks for implementing it and parent orientation are open to all elementary schools in the district. What began as a voluntary experiment in Jefferson County is now mandated for all schools in Kentucky.

• Vocational Restructuring — Over the last three years, the district has begun an ambitious redesign of technical and career education. The plan is to establish a group of innovative career academies, among them one on advanced manufacturing technologies and one on health service careers, to prepare students for both work and further education. The Academy has given technical assistance to the site-based teams designing the new schools and funds for workshops, consultants, and visits to programs in other parts of the country.
Ten years ago this spring, The Gheens Foundation and the Jefferson County Public Schools began planning the partnership that became the Jefferson County Public Schools/Gheens Professional Development Academy. Since then education has become a major focus of debate and action, nationally, in the state of Kentucky, and in our own community. Over the years, the JCPS/Gheens Academy has become a catalyst for helping Jefferson County to transform its schools.

Transforming Our Schools, Lessons from the Jefferson County Public Schools/Gheens Professional Development Academy 1983-1991, just released by The Gheens Foundation and developed with the assistance of the Jefferson County Public Schools, presents new perspectives on and insights into that debate. Because the report has important implications for the success of school reform, we want to share it with you. We hope you find it useful as you work toward shaping schools that will truly serve our children and our communities in an ever-changing world.

We would be happy to have your comments on the report.

Sincerely yours,

[Signature]

JOSEPH E. STOPHER
President
The Gheens Foundation Inc.