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One of the most positive accomplishments of the

1993 legislative session was enactment of a variety of far-reaching reforms in the education omnibus bill (Chapter 224, HF 350). Within that massive bill, some 354 pages long, are found the seeds – if not the fruit – of some of the most substantial reforms in decades of how we teach our children and how they learn.

The purpose of this document is to summarize the highlights of these reform initiatives. Although the focus will be on Chapter 224, we will also make reference to education reforms contained in other legislation from the 1993 session. Following each article are the names of legislators and others who played key roles in the particular reforms and who are able to serve as resources.

This document has been produced by the Minnesota Business Partnership, an organization of the chief executive officers of 100 of the state's largest corporations. Our members are committed to making Minnesota an even better place to live, work and raise a family. We believe that quality education is essential to achieving that goal.

If you have comments about this document, or other work of the Partnership, please contact either Tom Triplett or Paula Prah at 612/370-0840. Thanks.

Funding Minnesota's Schools – A New Plan

The Minnesota legislature took a bold step forward in the area of school finance, charting the course for national leadership in funding system design. Building from a funding reform outline passed in the 1992 session and ideas presented in a report by the Minnesota Business Partnership, the legislature developed the blueprint for a three-part funding system designed to go hand-in-hand with the other reform measures offered in the education legislation. Key goals behind the new funding system are described in the box on page 8.

The new funding system calls for a carefully defined core instructional aid program with funding levels tied to education outcomes as described in the graduation rule under development by the State Board of Education. Core instruction will likely be defined to include such critical components as classroom teachers and aides and instructional equipment.

Related to core instructional aid is support services aid. This program will supply funding necessary to provide non-instructional programs essential to the achievement of the education outcomes such as nutrition, health, transportation, and social services.

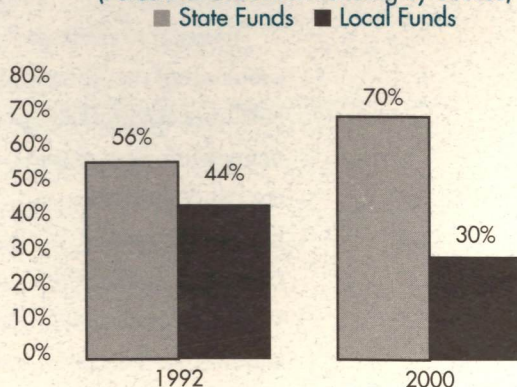
The third and final portion of the plan allows local districts to supplement the core instructional and support services aids in order to pay for programs which are deemed important for education but which fall outside of the core or support services (e.g. athletics, extra-curricular, central administration). Differing from the first two components, these "discretionary services" will be paid for with local dollars. To help insure that all districts would be able to provide basic discretionary services, a system of equalization will be instituted.

3-Part Funding System

State Funded	Core instruction
State Funded	Support services
Locally Funded	Discretionary

Funding continued on page 8

Probable Increased State Funding of Education
(Percent of Education Funding by Source)



Work-based Learning

The 1993 Minnesota legislature devoted significant attention to the problems of our "forgotten half" – the large numbers of students who are bright and are willing to work hard but who are not suited to the "academic" track of education. These are the students who tend to lose interest in formal education while still in high school. Many of these students also suffer because their parents subscribe to the view of most American adults that unless you go to a four-year college, you cannot possibly be "successful."

The legislature's interest in this issue was encouraged by the business community. In the summer of 1992, the Minnesota Business Partnership and the Employers Association of Minnesota surveyed some 300 Minnesota employers – large and small. Respondents noted that about 60% of them have trouble finding competent employees with the requisite skills to fill many entry-level positions. The skill shortage is particularly pronounced in fields requiring technology or technical skills.

To begin to relate the problems of the "forgotten half" and the problems of many Minnesota employers, the Minnesota Legislature enacted Chapter 335, HF 10 in 1993. That act establishes an umbrella Education and

Employment Transitions Council to oversee a youth apprenticeship program, a service learning program, activities in the field of youth entrepreneurship, and related other programs.

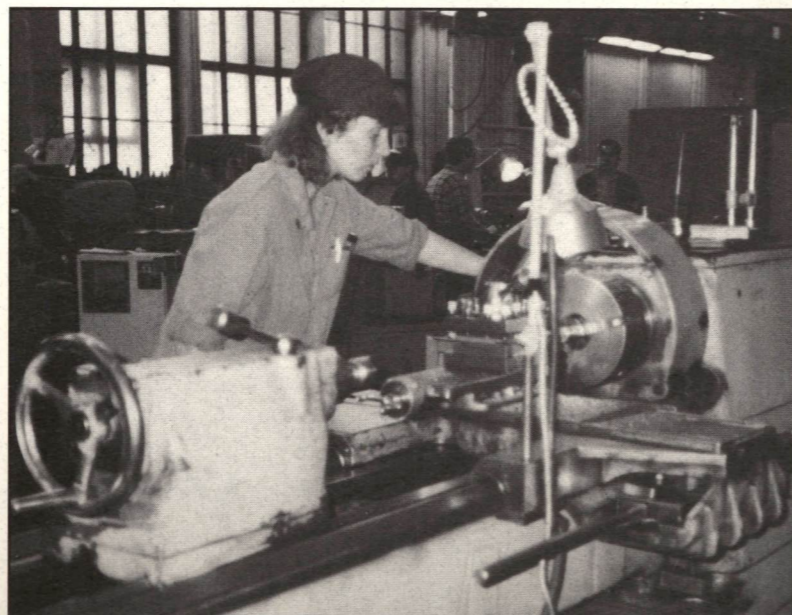
\$1 million is appropriated to the Council to be used to fund youth apprenticeship pilot programs around the state. To qualify for funding, sites must demonstrate a true commitment to the youth apprenticeship model – meaningful, work-based learning that is integrated with a core curriculum taught at a nearby high school or two-year college. The apprenticeship programs will be created in those industries that will create Minnesota's jobs for the future.

Youth apprenticeships and a start-up program for youth entrepreneurship are supplemented by a \$5 million service-

based learning program which will provide youth employment in service activities coordinated by local non-profits or municipal governments.

Taken together, these programs provide the basis for a substantial overhaul of secondary education in Minnesota. The net result will be a much wider range of options for our students, more added value to the last two years of high school, and more skilled future employees available for the highly technical jobs of our future.

For more information, contact Senator Tracy Beckman at (296-5713), Representative Dennis Ozment at (296-4306), Nick Waldoch at the Department of Education (296-6104), or Bobbie Henrie at Minnesota Technology (338-7722).



Minnesota's new apprenticeship programs will share many features of programs like those training the young Swiss woman pictured above.

Photo courtesy of Minnesota Technology, Inc.

Equity and School Funding

The issue of equity in funding was carefully considered in the 1993 legislative session. Legislative interest stems from recent judicial decisions challenging the constitutionality of education funding systems which rely on local funding and which permit property-rich districts to more easily spend higher amounts per child. Consistent with the intent of the overall funding reform plan, the legislature was seeking to reduce the reliance on local property taxes for education funding.

In response to these equity concerns, legislators adopted two different plans designed to reduce funding disparities among the state's 411 school districts. The first plan focuses on the "supplemental" and "referendum" revenues received by some districts. The plan increases the general education formula allowance by \$100 per pupil unit in 1995. Districts which do not receive funding from supplemental or referendum revenue sources will receive the full \$100 per pupil unit while districts which receive supplemental or referendum revenue must offset the \$100 allowance increase by a reduction of \$100 in those revenues.

The net effect of this formula change is that districts without the benefit of supplemental or referendum revenue are "leveled up" toward the spending levels of districts with those revenues. At the same time, referendum districts' spending is transferred to state dollars, with fewer local property tax dollars required.

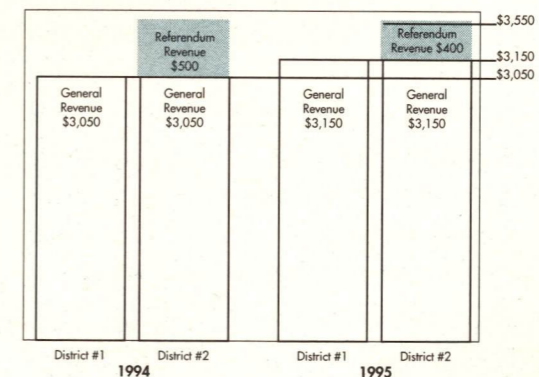
The second plan is targeted at providing

access to a limited amount of referendum funding for all districts. The plan calls for full equalization of the first \$315 per pupil unit of referendum revenue. All districts having referenda will benefit without distinction based on their relative property wealth. Resources to fund the increase in state aid necessary to provide the equalization are obtained through a reduction in school district Homestead and Agricultural Credit Aid (HACA).

While both plans seek to reduce the reliance on local referendum revenues for school districts, it is clear the discussions about equity in school district funding will continue to dominate legislative discussions for years to come, especially as the concept of education outcomes or adequacy is weighed against education equity.

For more information on the equity components of education finance reform, contact Rep. Jerry Bauerly (296-5377) or House or Senate Education Committee staff.

Referendum Reduction Plan



Results and the Graduation Rule

The 1993 legislature not only re-affirmed its commitment to results-oriented legislation, it accelerated development of the graduation rule. Focused on the knowledge and skills required of graduates rather than a list of courses and credits

("seat time" or "Carnegie units"), the new graduation rule holds great potential for increasing the learning of all students in Minnesota schools. It will also help to ensure that Minnesota graduates have the capacity to compete successfully

on a global basis.

At the initiative of the Carlson Administration, the legislature appropriated over \$10 million dollars in the current two-year budget period to support the accelerated rule

Results continued on page 8

Mandates No More

State mandates, in the form of both statutes and rules, regulate behaviors and practices in virtually every facet of education systems. These requirements range from teacher licensure and training to the kind of windshield defrosters required in school buses. Increasingly, educators cite the existence of outdated, duplicative, and unfunded mandates as a limit to education reform and a major driver of costs.

Early in the 1993 session, the Senate Education Committee began a long and somewhat contentious process of mandate review. Building on a Department of Education study directed by the 1992 legislature, the committee focused on about 900 separate statutes or rules.

The vision of the legislature on mandates is best expressed in the following preface to Article 12 of the bill:

"The legislature recognizes the need to give communities more local control over education so they can better fulfill the public school system's mission of ensuring individual academic achievement, an informed citizenry, and a highly productive work force. The purpose of this act is to repeal or modify restrictive and unnecessary mandates that hamper flexibility and innovation. The state's focus should be on performance rather than procedures. By decentralizing decision-making and emphasizing result-oriented rulemaking, this act also furthers the legislature's goal of moving from a means-based system of education to one that is accountable for outcomes."



Members of the Education Conference Committee debate H.F. 350. Members included: Representatives Kathleen Vellenga, Jerry Bauerly, Lyndon Carlson, Becky Kelso, LeRoy Koppendrayner, and Senators Larry Pogemiller, Tracy Beckman, Jerry Janezich, Jane Krentz, Sandy Pappas.

While the Senate committee discovered that virtually every rule has a historical purpose and advocates for its maintenance, the committee nonetheless recommended that over 500 mandates be repealed. The education conference committee eventually approved the Senate work, staging the removal of statutes and rules over a four year period. Some rules, particularly those relating to children with disabilities ("special education") were set aside for a separate study.

For more information on the repeal of state mandates, contact Senator Larry Pogemiller (296-4185).

MANDATE REPEAL SCHEDULE

- July 1, 1993
184 rules and statutes repealed
- August 1, 1994
91 rules repealed
- July 1, 1995
56 rules and statutes repealed
- August 1, 1996
218 rules and statutes repealed

Education, Essential Services, and Readiness to Learn

A broad, new grant program developed by the legislature will help communities build connections between their education system and the services which support children and families. Recognizing the critical need for students to be prepared to learn, this grant program focuses on the development of family services and community-based collaboratives.

The program provides up to \$5 million dollars to communities for either the development of a collaborative plan or for the implementation of such a plan. In order to qualify for a grant, a collaborative must include broad community representation with minimum memberships specified for each type of collaborative.

The goals of both of these collaboratives are to:

- improve child health and development,
- reduce barriers to adequate school performance,
- improve family functioning,
- provide community service,
- enhance self esteem, and
- develop general employment skills.

Collaboratives are required to develop goals and a planning process to coordinate local services. Additionally, they must design and implement an integrated local service delivery system that coordinates funding streams and service delivery between existing agencies.

The grant program requires the development of a local plan which must be approved by a



The floor debate in the House of Representatives.

new statutorily-created Children's Cabinet.

For additional information on the family services and community-base collaboratives, contact Senator Jane Ranum (297-8061), Senator Martha Robertson (296-4314), or Commissioner Linda Kohl of the Office of Strategic and Long-range Planning (296-3985).

The Learning Site as the Place for Reform

Consistent with its desire to remove restrictions on innovation in education, the 1993 legislature greatly empowered teachers, parents and principals at individual schools. If the local school board agrees, school site-based management teams may now be permitted to:

- implement flexible support systems for improvement in students' achievement of educational outcomes,
- allow teachers to identify instructional problems and control and apply the resources necessary to solve those problems,
- control purchasing, financial, and personnel resource decisions,
- implement parental involvement programs,
- hire teachers and other staff, and

• have teachers choose the principal or other person having general control.

The legislature made reference to site-based management in other portions of the 1993 legislation. For example, the new school finance plan stipulates that core instructional aid should flow directly to "the learning site." In addition, 50% of the new revenue provided for staff development must be directed to the school site for their own staff development needs.

These and other actions by the 1993 legislature clearly identify school sites as the critical place for focus and reform and set the stage for true site-based decision making in Minnesota's schools.

Legislation Overview



Photo courtesy of Minneapolis Public Schools

Additional funding to reduce K-3 class size is a feature of the K-12 education bill.

The reforms contained in Chapter 224 can be generally grouped under three basic themes: quality, accountability, and equity (or fairness). The articles in this publication describe individual reforms related to these overarching themes.

The following "laundry list" provides an overview of those articles of Chapter 224 which have substantive reforms. While not inclusive of all the additions, deletions, and changes to the laws governing K-12 education, it does provide an overview of the highlights of the legislation.

Article 1: General Education Revenue

- Sets the formula allowance for \$3050 in 1994 and \$3150 in 1995.
- Reduces elementary class size through increasing pupil unit weighting.
- Reduces supplemental revenue.
- Reduces allowed referendum revenue and requires referendum levies in districts to expire July 1, 1997 (see related article on page 3).
- Increases revenue reserved for staff development from \$15 per pupil to \$30.50 per pupil in 1994 and \$63 per pupil in 1995.
- Equalizes referendum levies by transferring homestead and agricultural aid to fund equalization (see related article on page 3).

- Establishes a new education finance system (see related article on page 1).
- Establishes a Coalition for Education Reform and Accountability (see related article on page 1).

Article 3: Special Programs

- Creates a task force on education for children with disabilities to simplify rules while ensuring that state rules governing special education meet federal requirements and the state's interest in education outcomes.
- Establishes a three year project to pilot the use of alternative delivery methods for special education programs.

Article 4: Community Programs

- Directs the legislative commission on children, youth and families to study the coordination of children's services and their delivery. Also charges the group to study and recommend plans for the restructuring of state government to support integrated children's services.
- Removes restrictions on targeted age group for the learning readiness program.
- Creates and funds a grant program to support local family services and community-based collaboratives to coordinate service delivery to children (see related article on page 5).

Article 5: Facilities

- Allows use of rooms on floors below the fourth story of a school building for programs including young students (preschool through second grade) provided the building is protected by automatic sprinklers and automatic fire alarm systems.
- Provides equalized state funding for certain facility repair programs.

Article 6: Education Organization & Cooperation

- Creates a panel to review education delivery service plans submitted to the commissioner of education and requires the panel to make recommendations for a new intermediate education delivery system. All existing intermediate units are scheduled for repeal in 1995.
- Creates six pilot sites for direct reporting of UFARS, staff, and student data to the department of education.

Article 7: Commitment to Excellence

- Expands the mission of the Minnesota Academic Excellence Foundation to include community assistance and training in continuous quality improvement.
- Expands the scope of site-based management agreements between school boards and individual schools (see related article on page 5).

- Provides incentives for school districts to move to year-round schooling.
- Increases staff development funding and requires school sites to control use of 50% of the staff development funding.
- Develops a teacher residency program as a prerequisite for licensure.
- Provides funding for school district restructuring pilot sites allowing change in the organizational structure to improve student achievement of education outcomes (see related article on page 3).
- Establishes a teacher compensation task force to recommend alternative compensation methods which focus on knowledge, skills, and responsibility.
- Accelerates the development of a results-oriented graduation rule (see related article on page 3).

Article 8: Other Education Programs

- Makes several provisions for alternative assessment of prospective teachers' skills in order to help ensure the elimination of cultural bias, the assessment of interpersonal skills, and a comprehensive assessment of knowledge and skills.
- Provides incentives for the training and hiring of teachers of color.

Article 9: Miscellaneous Programs

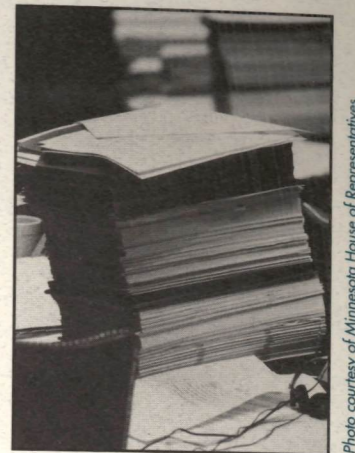
- Clarifies and expands charter school provisions.
- Requires the commissioner of education to review all education mandates every four years.
- Establishes a five year pilot project for up to three school districts interested in implementing substantial changes to improve education. Participating school districts will be exempted from many state statutes and rules.

Article 12: Mandate Repeals

- Repeals restrictive and unnecessary state statutes and rules related to education. Also repeals the state board of education's general rule-making authority (see related article on page 4).

Article 13: Realignment of Responsibilities

- Realigns the responsibilities of the commissioner and the state board of education, placing general administrative and oversight duties with the commissioner.



The mounting stack of legislation.

Photo courtesy of Minnesota House of Representatives

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Funding

continued from page 1

The 1993 legislation is not a finished reform plan; much additional work is needed before full implementation can occur. To help accomplish these additional steps and develop future reform agendas, the legislation establishes a Coalition for Education Reform and Accountability. The first charge of the group relates to the financial plan outlined in the legislation:

- develop definitions and estimated costs for the core instructional, support services, and discretionary aid programs,
- develop a method to monitor

the progress toward education outcomes and for rewarding or assisting learning sites based on their measured progress, and

- develop a plan for full implementation of the new system by the year 2000.

For more information on the new funding system, contact Representative Kathleen Vellenga (296-8799), House or Senate Education Committee staff or the Minnesota Business Partnership (370-0840). For more information on the Coalition for Education Reform and Accountability contact Senator Jane Krentz (296-7061).

"Financing the education of our children is one of state government's most important functions. In performing this function, the state seeks to provide sufficient funding which encourages equity, accountability and incentive toward quality improvement. To help achieve these goals and to help control future spending growth, the state will fund core instruction and related support services, will facilitate improvement in the quality and delivery of programs and services, and will equalize revenues raised locally for discretionary purposes."

Article 1, Section 24.

Results

continued from page 3

development and to provide necessary public information about the rule. The legislation directs the money to be used:

- to fund assessment and standards pilot sites,
- to broaden public understanding of the rule,
- to continue development of curriculum frameworks,
- to support ongoing statewide assessment efforts, and
- to develop system performance standards.

The graduation rule is the focus of other pieces of legislation. Early development of the graduation rule is critical to the definition of the core instructional aid component of the new education financing system. In addition, legislation provides for the pilot development of alternative organizational structures which will allow improved student achievement of educational outcomes. Staff development

plans must now be focused toward improving student achievement of defined education outcomes.

The rule is scheduled to be phased in over the next seven years with all students graduating under the new rule by the year 2000. In 1996, all ninth graders in the state will develop a graduation plan under the new rule.

For more information on the graduation rule, contact the State Board of Education office (297-1925) or Commissioner of Education, Gene Mammenga (296-6104).

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An
Education Agenda for
Minnesota:
The Challenge
to our Communities
and Schools

A Report of
The
Minnesota Business
Partnership



March 1991



Minnesota Business Partnership K-12 Education Quality Task Force

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The Minnesota Business Partnership is an association of the Chief Executive Officers of 95 of Minnesota's largest corporations. The Partnership was created in 1977, and its mission is to promote a healthy economic and social environment for all Minnesotans. Our goal is to create an environment that will attract quality jobs to Minnesota and that will permit us to keep the ones we already have.

In addition to education quality improvement, Partnership goals include: providing a favorable tax and spending climate for Minnesota government, controlling government-imposed costs on the workplace, promoting broad access to a basic level of health care for all Minnesotans, reducing the costs of civil litigation to Minnesota society, and helping Minnesota state government to become more efficient and productive in its operations.

For further information about the Partnership and its work, contact Tom Triplett, Executive Director, at (612) 370-0840.

Brochure printed
on recycled paper.



March, 1991

Fellow Minnesotans:

On behalf of my colleagues in the Minnesota Business Partnership, I hope you find this Report informative and useful. I also hope you agree with our recommendations and are willing to join the effort to improve Minnesota's schools.

After months of conversations with Minnesota educators, parents and students, we conclude that our schools are not fundamentally "broken." We found, however, that major change is needed in many elements of our system. Such change does not necessarily mean more dollars, but it does mean improved efficiency and outcomes for all of our students, not just the few who are thriving now.

Most of our report's recommendations focus on what we call "learning readiness." The evidence is overwhelming that far too many of our children are not ready to learn when they enter kindergarten, and they remain not ready to learn as they proceed through high school. Remedies for this problem include intensive early childhood education and better coordination of social service programs for our children.

We have specific recommendations designed to make school organization and funding more rational, fair and cost-efficient. We also call for redefining the roles played by persons most directly involved in education: educators themselves, parents and students.

The work of the Business Partnership is not done; throughout this Report, we note the need for business to provide implementation assistance to our schools. In addition, more study is needed to help refine our schools' "academic agenda." These tasks require much additional work, and we in the Partnership pledge to be a constructive force as these efforts proceed.

Dr. James J. Renier
 Chair, MBP Education Quality Task Force
 Chairman and CEO, Honeywell, Inc.



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Introduction

The Minnesota Business Partnership has been involved in education issues since the early 1980's. This involvement began out of the concerns of business leaders that our education systems were not producing the quality of graduate necessary for the increasingly complex jobs of our future. Also, the Partnership members believed that the maintenance of education quality was essential to preserving our state's high quality of life.

In the mid 1980's, the Partnership produced a series of recommendations designed to promote excellence through competition in our school systems. The MBP recommended that the legislature adopt various "Choice" programs for Minnesota schools. Beginning with the 1990-91 school year, the Choice initiatives have been fully implemented in Minnesota — the first state to accomplish this goal.

Although pleased with the success of its Choice initiatives in Minnesota and around the country, the Partnership quickly realized that Choice in and of itself does not guarantee quality education. Therefore, the Partnership began in the Spring of 1990 to consult with educators, parents and teachers in Minnesota. From dozens of meetings, both large and small, in the metro and Greater Minnesota regions, came a series of observations and findings about Minnesota's education systems. These observations and findings led, in turn, to this Report.

Acknowledgments

The MBP Education Quality Task Force wishes to acknowledge and thank the hundreds of people who gave their ideas to the Task Force. We particularly want to acknowledge Minnesota's many excellent school superintendents who took it upon themselves to review and comment on the multitudes of observations, findings and recommendations discussed at various times during the course of our meetings. Without the assistance of all of these dedicated educators and supporters of education, this Report would not have been possible.

Education and the Healthy Society



Americans have always believed that education is the fastest and surest route to personal success, economic prosperity and social progress.

Their faith has been justified. Education, accompanied by abundant natural resources and a rigorous work ethic, has made Americans the richest — and most envied — people of the world. American democracy, built on a philosophy of nearly universal education, has become the most rewarding — and most admired — of the world's social systems.

Continued progress in this country will demand continued attainment in education — whether progress is measured in personal achievement, social well-being or our ability to compete in global markets.

Currently, jobs in this country require a median of 12.5 years of education. A high school education is no longer enough, whereas an elementary education was adequate for most workers when we were a rural, agricultural nation. The educational demand will continue to grow. Jobs created in this decade will require 13.5 years of education. Today, less than 25 percent of jobs require a college degree; about one-third will by the year 2000.

Continued progress in this country will demand continued attainment in education — whether progress is measured in personal achievement, social well-being or our ability to compete in global markets.

But while educational *requirements* are rising, educational *attainment* is not. In addition, other issues compound the problem.

Every eight seconds of the school day, an American child drops out of school. Almost a third of our ninth-grade students fail to graduate from high school with their class — a figure that has not improved in two decades. In Japan, the dropout rate is six percent, and literacy is virtually universal.

Even the students who *do* graduate are not holding their own in world competition. In an assessment made in 1986, the average American 13-year old could understand basic math operations and beginning problem solving. But Korean 13-year olds could solve

two-step math problems. In science, U.S. students placed second to last, able to understand and apply only the simplest scientific principles. Korean students were able to use scientific procedures and analyze scientific data.

The U. S. Department of Education concluded that “stagnation on a relatively low level appears to describe the level of performance of American students on the various national assessments.”

If we allow Magazine's time bomb to tick down to zero hour, we will lose our leadership in world business, and we will also lose other values that are less measurable, but perhaps even more important.

By some measurements, “stagnation” has become deterioration. Scholastic Aptitude Test (SAT) scores remained fairly constant through the 1960's. But during the 70's, both math and verbal scores plummeted, and today they still have not regained their historic highs.

What we know about education today does not bode well for our ability to compete in world business tomorrow. Alan Magazine, President of The Council on Competitiveness has written:

We have, in a sense, a ticking time bomb that can't be ignored anymore. Some people have been saying that for years, but now people in the corporations are really seeing it. They're seeing it in the kinds of people they're hiring, the amount of money they have to spend for basic learning to get people up to a level that they can do even menial jobs; they're seeing it in the results of the tests that they give hundreds of people for minimum-wage jobs, and the numbers of people who actually pass those tests.

If we allow Magazine's time bomb to tick down to zero hour, we will lose our leadership in world business, and we will also lose other values that are less measurable, but perhaps even more important.

Where there is inadequate education there are cycles of economic want, lost personal opportunities, and wasted potential for independent, productive citizenship. An under-educated society is not a free society. We need knowledge, understanding and the discipline of clear thinking to make the decisions required in a functioning democracy.

Education in Minnesota



Minnesota advertises itself as “the Brainpower State.” And it has the academic record to back it up. We have justly taken pride in our impressive high school graduation rate, our high literacy levels, and our knowledgeable and skillful workforce.

But our state has not escaped the national trends in education. While Minnesota graduates 91 percent of its students entering high school and ranks first in the nation, there is a question of whether our requirements are rigorous enough. Further, the percentage of dropouts has been creeping upward for a decade. While the graduation rate increased for American Indian and Black students (from low levels), it went down for White, Hispanic and Asian students, resulting in a loss overall.

Predictably, dropout rates are highest in larger cities, reaching nearly 11 percent in Minneapolis and St. Paul. “We're graduating 91 percent of our kids,” said a top official of the state Department of Education, “but that's not nearly enough. It's not okay to throw away ten percent of our kids.”

For ten years, informed observers of the Minnesota educational scene have felt a growing sense of anxiety and frustration. From some of that frustration and anxiety arose creative and forward-looking change in the educational system. The Legislature's enactment, with strong Minnesota Business Partnership support, of “open enrollment,” “post-secondary option,” and “high school graduation incentive” programs signaled a new freedom for students and families in designing appropriate educational opportunities.

Concern for the education system also provoked unsuccessful change. The “Minnesota Miracle,” touted in part as a plan to reduce financial disparities among districts in the early 1970's, failed ultimately to do so. Financial inequity is an even larger issue in Minnesota education today.

Inequities aside, Minnesotans have been generous in funding. In the past decade, the education portion of the state budget, over and above increases in local school district spending, has doubled from \$1 billion per year to \$2 billion.

Because of this dramatic increase in spending, taxpayers might well expect clear evidence that our students' educational performance is edging higher. But the needle has not moved. On the contrary, recognized measurements show that performance has in fact declined.

Deteriorating performance is evident even among the 90 percent of students who remain in high school to graduation. Wisconsin, Iowa and Minnesota rank one, two and three in the nation in American College Test (ACT) scores, respectively. But in the years from 1969 to 1989 the Minnesota scores have trended lower, dropping more than the national average.

Traditionally, Minnesota has overcome certain economic handicaps—our demanding climate, distance from national markets, distance from either ocean—by offering its companies a telling advantage: a smarter workforce that has a better education and is quicker to learn.

In addition, during the same timeframe, the state's Scholastic Aptitude Test and Advance Placement scores have continued in a steady decline and fallen to close the national average. The Preliminary Scholastic Aptitude Tests scores have actually dipped below the national average.

Even though test scores and data on dropouts fail to paint the whole picture, this information comes as a rude shock to Minnesotans who pride themselves on the state's tradition of intellectual attainment. “We found,” reported the Office of the Legislative Auditor in a recent report, “strong evidence that Minnesota's reputation is overstated and out of date.”



The trend in education has disturbed no one more than the state's business leaders. Traditionally, Minnesota has overcome certain economic handicaps — our demanding climate, distance from national markets, distance from either ocean — by offering its companies a telling advantage: a smarter workforce that has a better education and is quicker to learn.

Now, with the educational barometer falling to the national average or below, that advantage may be blown away, and Minnesota businesses could be in for some heavy weather. In a state that has been successful in attracting investments by high tech companies, a drooping learning curve is particularly foreboding.

Employers are now observing that the lower third of job applicants are unqualified even for the least-skilled jobs. In the past, there were always some jobs that required little or no education. Now, with few exceptions, all jobs demand basic math and verbal skills. And, higher levels of mastery are required for virtually every *new* job being created. Yet, average Minnesota eleventh-graders today are unable to read as well as teachers think they should read.

In a state that has been successful in attracting investments by high tech companies, a drooping learning curve is particularly foreboding.

"Business groups have intense concerns about the quality and efficiency of primary and secondary schools," concluded a research report by the Minnesota Department of Trade and Economic Development. The report indicated that elementary and secondary education are rated as the most important government functions by Minnesota companies. But fewer than half of those companies — and only 27 percent of the surveyed high technology firms — are even somewhat satisfied with the education being delivered.

Among the 50 states, Minnesota with its record of high academic attainment, may have the most to lose. But with our traditional faith in education and habit of community responsibility, we may also have the most to gain.

Concern is growing across the country about education, and Minnesota is not immune. Among the 50 states, Minnesota with its record of high academic attainment, may have the most to lose. But with our traditional faith in education and habit of community responsibility, we may also have the most to gain.



Learning Readiness — A Key to Learning

The education system is more than the schools. The system comprises all the institutions and processes, public and private, that prepare children to learn, support and encourage their learning, provide facilities for learning, make knowledge available and attractive, and coach children in the learning process.

Therefore, our "education system" includes students, their families, state and local governments, social agencies, business, and taxpayers, as well as schools.

In most of the United States, including Minnesota, these elements of the system are out of sync. There is an alarming lack of coordination between the elements. What used to be the mission of schools is no longer complete, and the new mission, along with the role for all elements of the system, is not defined.

The agenda for education—as currently viewed—is really the sum of two major elements: the academic program and the learning readiness requirements for that program. Instead of one crisis, the larger educational system is suffering from crises on two fronts.

The agenda for education — as currently viewed — is really the sum of two major elements: the academic program and the learning readiness requirements for that program. Instead of one crisis, the larger educational system is suffering from crises on two fronts:

The first crisis relates to the *academic agenda* of education. We need to restructure the process and content of instruction. We must be sure that we are teaching our students the proper topics and that they are learning what they need to know for the jobs of their futures. We must be sure that we have evaluation and accountability mechanisms to insure that weaknesses are identified and change implemented.

The second crisis relates to the ability of children to learn — their *learning readiness*. To meet society's demands for improved educational achievement, our children must surmount a myriad of social and family problems. Teachers are finding themselves performing nontraditional and unfamiliar tasks formerly performed by the family. The schools are not equipped to respond successfully to both these priorities at the same time.

Children cannot learn until and unless they are ready to learn.

Children cannot learn until and unless they are ready to learn. Educators say that knowledge cannot be injected into students. Teachers can coach and encourage, but students have to do the work. And students can only work if they are physically fit, mentally and socially well developed, and inspired to gain and use knowledge.

The inadequate educational attainment among students and the excessive dropout rate in later school years are attributable, to a large degree, to a lack of learning readiness from the first years of school.

More and more people are understanding that "early childhood education" — programs for young children before they enter kindergarten — is an important aspect of learning readiness and is the foundation for continued learning readiness. Although early childhood education is a critical element for later success, early childhood programs by themselves are not enough.

Learning readiness needs to be seen as a continuum from birth (and in fact from conception) throughout formal education. Too few families today are able to provide the readiness and support our children need. Healthy babies begin the chain — followed by the right nurturing, nutrition and development.

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The Changing Family and Its Impact on Learning Readiness

A revealing index of change is the increasing number of families in which both the father and mother work outside the home. For 20 years, the fastest growing segment of the U.S. labor force has been married women with young children. Seventy-three percent of mothers with school-age children have jobs. Many of them must work; if they did not, 35 percent more families would be living in poverty.

But even two jobs per family do not guarantee affluence. In fact, most poor parents work full-time the year round. But they may have jobs at the minimum wage, earning roughly \$7000, while the poverty line for a family of four is nearly double that.

Almost a quarter of all children under six years of age live in poor families. They face the gravest risks. *The Unfinished Agenda*, a report prepared by the Committee for Economic Development, shows that among family-related causes, poverty is a key reason for the failure of education:

Children born and reared in poverty generally suffer a multitude of debilitating health, emotional, social and family problems that can impede learning. These children usually start school poorly prepared for formal school work (and) many disadvantaged children fall farther and farther behind until poor performance, low self-esteem, alienation and frustration cause them to drop out.

In Minnesota, the plight of children in poverty has been increasing for the past decade. In 1980, 89,000 children received monthly AFDC assistance; by 1989 the number had grown to more than 105,000. (And this growth occurred during a period when the total number of children in the state actually declined.)

In 1984, 54,000 Minnesota women were on the Supplemental Food Program for Women, Infants and Children (WIC). By 1990, the number had grown to 76,000. While births to teenage mothers decreased during the 1980's, births to unwed teenagers and to all single women increased nearly 60 percent, from less than eight thousand to more than 12,000 in 1988.

The problems of poverty, while they may appear different, are no more acute in metropolitan Minnesota than outstate.

For a decade, Minnesotans have been aware of the growing problems of children who live in poverty. We know there are ways to help children overcome the debilitating learning handicap of simply being poor. We have ample demonstrations of programs that can work to break the generation-to-generation cycle of inadequate learning, poverty, despair and neglect. But we have not done enough to install and expand these programs.

In 1989, we had 6000 of our children in Head Start; but we had another 16,000 who were eligible but could not be served. In 1988, our state's child care fund helped provide service to 10,000 families with 14,000 children, but that was only 32 percent of eligible families.

We have the tools to help children. We know what works and what does not. If we are to improve the education process, we must use these tools to reinforce the efforts of Minnesota families as they prepare their children to learn. The efforts of the schools to improve instruction and the academic program will not reach their potential unless we do a better job of learning readiness — and that means readiness for kindergarten and every morning of every school day thereafter until graduation.

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Lack of Learning Readiness and the Academic Program

We can, and probably should, reform the academic agenda for our schools. However, academic reforms will be of little use unless we first provide adequate and effective learning readiness programs for all of our students. The lack of physical health, mental development, emotional stability, and the desire to learn has created a crisis for our children — a crisis that society as a whole has helped to create, but one that we have dumped at the school house door.

According to researchers in the Department of Education, "Many Minnesota children and youth come to school each day with personal, family, and social problems that interfere with learning, school attendance, progress toward graduation and future



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employability. The problems these young people face are frequently multifaceted and inter-related. Simply put, problems tend to come in packages."

Given these "packages" to deal with, the schools are being overwhelmed. In interviews with school superintendents, the Minnesota Business Partnership found that student performance is deteriorating due to "unsettling, sometimes chaotic family situations," and that "schools and teachers are forced to provide an increasing number of 'social services' for students."

The president of one of the state's teacher unions told us that "what we used to call 'teaching' is now morning-to-night service to families. Some days it looks like nobody else is helping."

With schools being pulled in several directions, there is, in the mind of educators, growing confusion about their mission. They repeatedly told the Partnership that before teachers can teach, they are forced to provide an increasing number of learning readiness services in all their physical, intellectual and behavioral aspects.

Even in schools where class size has been reduced, too much of the time and energy of teachers is absorbed by the unmet social and developmental needs of their students. Thus, students who are not ready to learn deprive other students of equal instruction time.

The problem of class size can be expressed as a problem of learning readiness. If every student were ready and eager to learn, teachers could work with more students in each class.

The problem of class size can be expressed as a problem of learning readiness. If every student were ready and eager to learn, teachers could work with more students in each class.

Services schools are now asked to perform range far beyond the traditional teaching mission of the schools. They are providing social services that used to be the responsibilities of families. Few of them are prepared with the professional skills and supporting resources to deal with social requirements of this magnitude.

Role of the Entire Community in Solving the Problem

It is clear that the problem of education is not a "school problem" — it is a dysfunction of the whole education system, both learning readiness and academic programs. It is a problem that confronts our whole society.

To get education back on track, our whole society, sooner or later, must participate. This includes families, governments, social service agencies, businesses and the schools. The challenge is to coalesce the abilities and resources of the multiple service providers in our entire community to coordinate services for children.

This coordination of services needs to happen not only within government but more importantly within the private sector. We can no longer thwart real progress in academic achievement and educational reform by ignoring the necessity of learning readiness. We can no longer afford to cloud the mission of schools with society's responsibilities. Each component of society is responsible, and each will benefit as the problem is erased.

We can no longer afford to cloud the mission of schools with society's responsibilities.

The school should be the place for the delivery of most of these services. That is not to say that teachers should be the service providers. Quite the contrary. As we say quite explicitly later in this report, teachers should focus on the academic agenda; they should not be distracted by learning readiness problems.

Nor are we saying that "traditional" social service agencies should be expected to carry the full weight of these programs. More contributions are needed from other elements in the community. Businesses themselves need to assume a much more active role in providing these needed services to our schools.



Recommendation for an Educational Renaissance

Just as all of society will reap the benefits of an improved education system, all segments of the community must cooperate in bringing them about.

This community-wide focus and investment invites a problem of coordination. How do we align the activities of local social service agencies with the state education bureaucracies? How do we mesh the objectives of a school board with those of the city and county governments? Is business prepared to do its part?

Based upon our extensive analysis and consultations, we in the Minnesota Business Partnership believe that consensus is possible both on the nature of the problem and the general direction toward the solution.

We found that impediments to a complete and successful education for all Minnesota children range across a wide field of barriers. For example:

Early childhood education is crucial to learning readiness and is not currently supported at the level necessary.

Opportunities to support and enhance the teaching profession are often hindered by our current practices of compensation.

We do not attract enough outstanding people to the teaching profession, and we do not provide future teachers with a solid grounding in the "learning readiness" issues that they will face in the classroom.

The schools do not provide enough opportunities for parental involvement.

There is a serious question about the harmful effects of student employment on learning.

The funding structures for education are too far removed from the actual spending decisions and fail to provide incentives for cost-saving.

The Partnership does not expect easy resolution of the disparate problems of this magnitude. But we do hope that our recommendations will initiate and facilitate a process that will engage every part of the broad Minnesota community.

It is in this spirit that the Partnership offers this report as a starting point. It is clear that substantial additional work is necessary to organize to effect the change which we seek. Throughout our recommendations, we offer specific ways in which we and our colleagues in the Minnesota business community can be of assistance. We pledge to Minnesota our continued constructive involvement in education improvement.

The talent and commitment exist in Minnesota to accomplish the tasks before us. We in the Partnership are prepared to play our part in the solution, but we also know that we cannot do it alone. All elements of the Minnesota community must be involved. Without the cooperation of all, success is doomed; with cooperation and joint commitment, success is possible.

Specific Proposals

The Minnesota Business Partnership's program described here comprises 13 proposals — unnumbered because none have priority over others; all are of equal urgency. Each proposal contains four central points: one or more introductory findings based on our conversations with Minnesotans interested in education quality, a central conclusion drawn from those findings, recommendations for reform, and specific strategies for implementing those recommendations.

Many of the following specific recommendations deal with the learning readiness issue. Other recommendations deal with the school site and the persons involved in the education process.

Few of our recommendations deal directly with the academic agenda. By this omission, we do not mean to suggest that there are no problems with this element of Minnesota education. We believe problems do exist in this area and that significant reforms are needed.

However, we deeply believe that we must first focus our efforts on learning readiness and the other issues identified in the following pages. We must first make significant progress on these matters. Only then can we take on the difficult problems associated with the academic agenda.



LEARNING READINESS

The mission of education in Minnesota and the nation lacks clarity. As the activities occurring in our schools have changed, we have not prioritized their relative importance, nor have we given them proper attention and resources.

Our schools are simultaneously offering an array of "social" and "academic" programs which we call public education. On the one hand, we seek to promote general knowledge and critical thinking. On the other hand, we are trying to meet the unmet social and developmental needs of learners. Our schools are, in essence, assuming more and more of the responsibilities formerly carried by American families.

This mixture of functions and goals impedes the ability to improve the overall quality of American and Minnesota education. Our schools are trying to fill roles that are difficult to understand and articulate.

Many persons would prefer that our schools not attempt to replace traditional family activities. On the other hand, research has shown that too many students are burdened by social problems that impede their academic performance. These students are not "ready to learn."

Conclusion:

The mission of education is unclear; the social agenda of schools competes for resources and staff time with the academic agenda. Students are increasingly in need of social services and programs to attain learning readiness. Consequently, too many non-academic burdens are taken on by teachers. The mixing of these two agendas has caused confusion about the overall mission of education.

Recommendations:

- All affected state and local agencies must cooperate to insure that all students in Minnesota's schools are ready to learn each and every day of the year. The state's various support programs for families and children need to work together to make sure that every child can take full advantage of the education offered.

- Teachers should play a primary role in the assessment of learning readiness in students, and teachers should be provided with effective referral systems for learning readiness programs. Teachers should not, however, be seen as the primary providers of learning readiness programs. Removing many learning readiness service responsibilities for teachers will make them better able to perform their principal academic functions.

- The private sector should act as a catalyst in the community for discussion regarding learning readiness. The state should coordinate information for use in community discussions which highlights the importance of learning readiness and provides examples of how learning readiness can be improved through community involvement.

- Leaders in government, education, business and the community should develop long-range goals for support of children and youth programs in general and learning readiness programs in particular.

Implementation Strategy:

- The Legislature by law or the Governor by executive order should enact the Minnesota Readiness to Learn Act or other similar initiative designed to integrate social service programs into a comprehensive support effort for schools.

- State business and education leaders should jointly review efforts such as "Cities in Schools" for their possible replication in Minnesota.

- Minnesota Business Partnership members and other major state employers should initiate meetings within school districts to enlist employee volunteers to assist in school readiness programs, and to encourage coordination of readiness programs provided by public and non-profit agencies.



EARLY CHILDHOOD EDUCATION

Traditionally, formal American education has begun at age five. Preparing students to meet the social and intellectual demands of kindergarten was seen as the role for families. This "school readiness" function has always been absolutely essential to future success in school.

The degree of school readiness exhibited by many five year olds is no longer adequate, and this absence of readiness has introduced new challenges for which the school system is not prepared.

One of the results of inadequate levels of school readiness is a growing percentage of school dropouts. Research shows that improved school readiness could well have the greatest effect at the lowest cost in reducing dropouts.

Although the research evidence is clear, there is still no widespread public understanding of the importance of early childhood programs, and their positive impact on school readiness, to the overall education system. While many systems have some types of early childhood programs, the priority assigned to these efforts is not consistent with the significance of their effect.

While there are many questions about the most appropriate location and management structure for these programs, the ultimate goal must be school readiness for all children. None of the present infrastructures are prepared to deal with the numbers of children requiring these programs.

Conclusion:

- Effective early childhood education programs are needed for all Minnesota children, and such programs are crucial to the learning readiness continuum.

Recommendations:

- A strong and effective early childhood development program must be included as a part of the mission of the state's education system.
- Minnesota business organizations and individual businesses should actively support such programs.
- Special programs should be developed to meet the needs of pregnant and parenting teens and their children.

Implementation Strategy:

- The Legislature should enact recommendations from the Child Care Task Force of the Legislative Commission on the Economic Status of Women which call for the re-direction of current state spending to child care programs and increased coordination of service delivery.
- The Minnesota Business Partnership, in conjunction with other business organizations, should continue to study business participation in shared business-education facilities and should promote joint ventures with education institutions and programs.
- The Legislature and relevant state and local agencies should reduce nonessential building code and related requirements, or be generous in granting waivers from such requirements, in order to facilitate the location of early childhood education programs in alternative facilities.
- The Minnesota Business Partnership, in conjunction with other business groups, should further study and catalogue programs designed for parenting and pregnant teens and early childhood programs. Businesses, working with local school systems, should consider establishing on-site programs targeted to pregnant and parenting teens. These and other support programs should be promoted for replication within the education and business communities.



ACCESS TO EDUCATION

Historically, American society has not been overly concerned about full access to education. For much of our history, formal education was not required for all Americans. Many jobs were available that did not require a high school education but did provide a level of income sufficient to support a family.

Over the last decade, an increasing number of occupations have come to require higher skill levels. At the same time, however, our country is faced with a declining number of available workers.

Our education system has not expanded its access to respond to these trends. We continue to rely on an education system that is intended to serve all, but which realistically serves only some. Most schools do a good job of educating about one-third of their students, a passable job with another one-third, and an unsatisfactory job with the remaining third.

It is now more important than ever that we educate all of our children.

Changing the current system will not be easy. Many established institutions will fight to preserve the current system, fearing that change will bring increased competition for success.

Conclusion:

- We can no longer afford to fail to educate all students to their full potential. Our future competitiveness is dependent upon developing the potential in each student. In the future, each young person who does not have the academic, workforce and citizenship skills to be productive will unlikely be successful in later life.

Recommendations:

- A vision and message must be espoused that all children can and should learn and that it is to everyone's benefit for all children to learn much more than in the past.
- Learning readiness and academic programs should be tailored as appropriate for each student. All school programs should be designed to assure that all students achieve their full potential.
- Local community leaders, media, and civic groups should work to create a community learning culture and support a network through which all children can more easily acquire high skill levels.
- Efforts must accelerate to increase public awareness of the importance of extending education to all students.

Implementation Strategy:

- The Minnesota Business Partnership and other business organizations should express support for full implementation of learning readiness programs and outcome-based education in classrooms and should actively offer assistance with the development of desired outcomes and goals.
- The Legislature should insure that appropriate support and re-directed resources are provided for the full implementation of outcome-based education.
- The Department of Education, when evaluating each school district's outcome-based education standards, should stress the importance of individual student development to the fullest extent of each student's abilities.
- The business community, in conjunction with government and community leaders, should promote public understanding of the necessity of educating all students and the importance of learning readiness.



RESEARCH AND DEVELOPMENT

The educational system's research and development program carries insufficient priority. One of the indicators of this lack of priority is inadequate time and resources for training and development of teachers. Another indicator is the frequency with which reform programs are thrown at districts, often with unrealistic expectations regarding implementation and desired outcomes.

Very few educational reform efforts are developed with a clear plan for replication. This means that the educational system faces a problem familiar to many businesses: the difficulty of technology and innovation transfer.

Conclusion:

More research application is needed to fuel education improvement. Schools are too often burdened with untested new reform ideas. The state should avoid overly standardized reform plans: education needs differ widely throughout the state, and there is not a universally acceptable solution to education improvement.

Recommendations:

- The Department of Education should provide research necessary to support local districts' reform decisions. Current efforts in R&D need to be expanded to include study of learning readiness and should link health and human service agencies in the R&D initiatives. The state should assess the types of R&D occurring in individual districts (two examples are the magnet schools in St. Paul and the programs in the Cyrus district) to promote information transfer as well as determine state R&D priorities.

- Quality education R&D requires close linkages with the state's institutions of higher education and colleges of education. Teacher training needs to expand to include R&D application and learning readiness concepts.

- State-wide educational R&D initiatives should adopt an industry R&D model with an emphasis on development of the ability to transfer technology.

Implementation Strategy:

- The Legislature should support the maintenance of current R&D initiatives of the Department of Education and the ten state-wide R&D sites for outcome-based education.

- The Department of Education should augment its current initiatives with study of R&D initiatives emanating from other states and state organizations and from local district activities within Minnesota.

- Businesses engaged in relevant R&D should offer assistance with technology and innovation transfer and application of an industry R&D model to education.

- The Minnesota Business Partnership should provide coordination for a Research Advisory Board linking the state's institutions of higher education, K-12 leadership and business leaders.



ASSESSMENT

Measurement of outcomes, or assessment, must be a critical part of our educational system. Given all of the resources put into education, and the phenomenal importance of the success of education's mission, it is imperative that we have the ability to measure how well we are doing in preparing our children for the jobs and society of tomorrow.

Meaningful assessment of education outcomes has proven extraordinarily difficult. In part, this difficulty is a reflection of the multiple objectives education must meet. Schools are trying to accomplish multiple goals, and they have ineffective tools for measuring their success.

A high degree of clarity about expectations is necessary before the appropriate measurement tools can be developed. This is a challenging task, and business may be in a position to contribute to this effort.

Conclusion:

Assessment tools are necessary and appropriate for education, but there is currently no fully acceptable set of tools. Statewide understanding of educational goals is critical to the determination of proper assessment tools.

Recommendations:

- The state should identify general education goals for state students and provide districts with a variety of proven assessment tools which can measure progress toward those goals. These statewide goals and assessment tools should be developed in concert with a comprehensive effort to establish a shared understanding of educational goals.

- The assessment tools should address both the academic achievement of students and their learning readiness. These two areas should be linked when discussing and assessing student achievement.

- Businesses and higher education should be actively involved in the development of desired outcomes particular to their respective fields. Requirements for entry into those fields and institutions should reinforce and be consistent with these desired outcomes.

- Decisions regarding individual district's or school's methods for achieving stated goals must be made at the school and district levels; they should not be mandated from the state. However, individual district goals and methods must be compatible with broad state goals.

- Districts and schools should establish and meet assessment standards which are consistent with state goals and which reflect unique situations within each district and school.

- Districts and schools should be rewarded for successful completion of goals and standards.

Implementation Strategy:

- The Minnesota Business Partnership should coordinate with and support the Minnesota Academic Excellence Foundation/Quality Council pilot project on school quality assessments and should support eventual state-wide adoption of similar quality assessment programs.

- The Legislature should direct a study to develop a full complement of assessment tools. The study should suggest replication, where appropriate, of other states' assessment programs. Suggested assessment tools should be consistent with state-wide goals for schools and should include assessment of learning readiness in students. The resulting plan should be implemented in 1993.

- Business leaders should offer assistance and should be involved in the establishment of outcome standards for assessment.

- Once the goals are established and assessment tools developed and implemented, the Legislature should provide that at least a portion of education funding should be awarded on the basis of success in meeting established assessment goals or a pre-determined standard of continuous quality improvement.



EDUCATION MANDATES

Uncertainty about where education policy decisions should be made is caused, in part, by the complexity of the mission education is trying to address. School superintendents and other educators frequently complain about the continuing increase in legislative mandates and interference with the operation of schools.

State-imposed mandates perpetuate the micromanagement of the academic function and the continued expansion of the "social curriculum." They also lead to a general dilution of the entire academic effort because they are often imposed without the means to carry them out. As a result, the entire program suffers.

Without a release from the state's micromanagement, reforms like "School Choice" have little chance of success. As long as schools must respond to numerous mandates and requirements, there is little opportunity to create enough different schools to make Choice a reality.

The state's waiver of requirements and procedures can help schools overcome barriers to reform that are codified in rules and regulations. School districts have made infrequent use of this procedure. Waivers alone, however, will not generate the major overhaul of education desired, but they are an important part of the equation.

Conclusion:

The operation of our schools is overburdened by legislative, Department of Education and Board of Education mandates.

Recommendations:

- The number of statutory and rule mandates should be reduced.
- Application for and the liberal granting of waivers to remaining statutory and rule mandates should be encouraged.
- Mechanisms need to be developed to provide training, technical assistance and support to schools and districts which desire to take advantage of the waiver provisions.
- The state's Department of Education should focus on the provision of service to districts in addition to its current role of school regulation.

Implementation Strategy:

- The Department of Education should invite suggestions from school districts on mandates needing repeal or liberalization and encourage the Department to propose necessary actions to repeal.
- In the 1991 session and thereafter, the Legislature should repeal unnecessary or counterproductive mandates, and should insure that the Board and Department are given waiver authority in respect to remaining mandates.
- For remaining mandates, the Board or Department, as appropriate, should adopt a policy encouraging the use of waivers in situations where locally-desired changes will result in more successful education improvement.



SCHOOL CALENDAR

One particular mandate is deserving of special attention.

The Legislature has determined that school districts must follow a rigid yearly calendar. This calendar is not based on anything related to academic excellence and is shorter than the school calendars in neighboring states as well as school calendars in other parts of the world. The calendar appears to be based on economic factors and tradition. Further, it seems to have no relationship to efficient capital utilization.

Many students have different rates of learning and limited access to cultural, recreational, and library facilities, all of which could be enhanced by extension of the school year or day. Most superintendents insist that a longer school year is absolutely necessary.

Conclusion:

Our short school calendar, with its artificial constraints, impedes education improvement. The calendar is no longer relevant nor competitive.

Recommendations:

- The optimum length of school year should be determined. This may vary depending on a district's or school's needs but should adequately take into account the time and resources needed to insure both learning readiness and academic achievement.
- Those organizations that have lobbied for particular constraints on the school year calendar should be brought together to work on solutions that address their concerns and the state's concern for quality education.

Implementation Strategy:

- The Legislature should review and adopt general guidelines for the school year calendar. Relevant laws should allow flexibility within individual districts.
- The State Board should continue to provide waivers for school year length.



EDUCATION ORGANIZATION

Minnesota has a very large number of school districts. These districts vary in size from 89 students to 38,742 students. Over 70% of our students are educated in only 20% of our school districts.

There is debate about the optimum size of districts and the effect that size has on education quality. The state has not developed criteria which would lead to the optimization of the number of school districts.

Minnesota also has a large number of intermediary education structures. Some of these were established to serve as "super districts"; others serve as central suppliers of various sorts of school services. The role for these organizations, and whether they should be required as a matter of law, has generated much controversy.

Finally, there is growing interest in de-centralizing education policy and other decision-making. Principals, teachers and parents at the local level are expressing increased support for local decision-making models.

Restructuring is needed within the school building as well. Principals have become building administrators rather than supervisors and leaders of teachers. The time of principals is often filled with administrative activities leaving little time for meaningful supervision and leadership. Even if such time is made available, however, many principals are inadequately prepared and supported to handle new roles and responsibilities.

Conclusion:

The organization of education, with multiple levels of governance, is not efficient nor conducive to education improvement. In some instances, there appear to be too many layers of administration with decisions being made at points too far removed from the actual delivery of education. More power to change is needed within the school building, but adequate training and support for this new function is also needed.

Recommendations:

- Strategies should be studied and implemented to reduce both the size of the over-arching education bureaucracy and the multi-agency requirements placed on school districts.

- Portions of the educational delivery system in Minnesota should be aggressively decentralized. If particular functions or requirements such as the core academic agenda are the same across the state, then management for those functions should be appropriately centralized. For those functions that require local determinations, the management should be decentralized.

- School site management should be encouraged in order to empower principals, teachers, parents and students toward enhanced performance. Appropriate support, technical assistance and training need to be given to teachers and principals to enhance school site management.

- Local superintendents and school boards should be provided with technical assistance and support to help them develop policies and strategies to facilitate the new roles and responsibilities of teachers and principals.

- Teachers with appropriate participatory leadership skills should be identified and encouraged to use those skills in school site management.

Implementation Strategy:

- The Department of Education should expand with legislative support the Minnesota Educational Effectiveness Plan which promotes and supports school site management.

- The Legislature should build on the work of the Task Force on Education Organization and enact legislation which reduces the number and levels of education bureaucracy at the state and intermediary levels.

- Minnesota business should support efforts leading to the reduction in the number of school districts so long as such efforts are premised on objective rationale and do not serve to jeopardize education quality.

- Minnesota business, working with school systems, should help develop and implement management and leadership training programs for superintendents and principals.



EDUCATION FINANCE

Education finance is a complex and emotional issue in the state. Many persons equate education success with the degree of funding per student. Unfortunately, there is no easy way to equate funding with performance. What is clear is that funding alone is not the answer to education quality improvement.

Gross comparisons of funding levels can be seriously misleading. The challenges facing school districts differ significantly across the state: the underlying set of characteristics about students and needs in Minneapolis are, for example, very different from those in Moorhead or Austin.

Instruction costs vary greatly from district to district, depending on such variables as the age of the buildings and the district's rate of growth. Also, the per student costs for the necessary learning readiness programs vary greatly. Finally, education quality is impacted by the varying degrees of property wealth within individual districts.

The funding roles for the state and local districts are not adequately defined. While most persons concede that school funding should be shared by both the state and local districts, there is no accepted rationale for the relative distribution of funding responsibilities. Nor is there recognition of how spending decisions should be made within school districts.

The current accounting systems for education also add to the problems. Because of inadequate systems, preliminary attempts to separate the "academic" and "social" costs in the schools have appeared to be an almost hopeless task.

Conclusion:

Adequate information about school and district expenditures is not available. However, the development of such information is crucial for quality measures and program delineation and re-design. More financial decisions should be made at the local levels. This will help to insure more accountability and will serve to improve education quality.

Recommendations:

- Enhanced expenditure information is necessary to allow for the intelligent re-direction of existing resources to high priority programs that will improve education quality.

- Significant reform of the current "UFARS" accounting codes should occur such that spending delineations and analyses can occur for curriculum instruction, learning readiness, capital, administrative, extracurricular, staff development, and technology costs.

- Meaningful resource allocation decisions should be allowed to occur at the school level. Principals and teachers should be provided training and support necessary to effectively act in such capacities. School boards and district offices should strive for a culture that supports and encourages school site management.

- The state's proportional share of education funding should be sufficient to insure the provision of a basic level of education for all Minnesota students. The social services portion of this basic level should involve participation by state and local public and non-profit agencies and by local businesses and other community-based organizations.

- The local share of the basic education formula should be used to supplement the basic level of education and/or to finance such activities as capital costs, administrative and co-curricular activity costs.

Implementation Strategy:

- The Commissioner of Education should initiate a reform of district financial accounting which is consistent with the recommendations held in the Legislative Auditor's Report on School District Spending (February 1990). The Legislature should provide the needed encouragement and resources to allow this reform to occur.

- The business community should offer its assistance and systems expertise in the financial reform process.

- The Legislature should enact initiatives which increase the state share of education funding and the equalization of levy referenda, and should develop a rationale for the distribution of funding responsibilities between the state and individual districts.



TEACHING

Many problems involving the teaching profession impede education reform.

Laws and practices providing for teacher compensation and job security inhibit quality improvement. On the one hand, it is often very difficult to remove teachers who are not qualified or not performing. On the other hand, it is difficult to adequately reward and compensate those teachers or groups of teachers whose performance is stellar.

Under the current system, teachers are compensated on the basis of their length of service and graduate school credits. Measures of school and teacher effectiveness do not affect compensation or tenure.

In part because of these problems, but for other reasons as well, high quality college students are not attracted to teaching as a career. Teacher training is often perceived as inadequate, and little effort is placed on the retraining of quality people from other disciplines to serve in the teaching corps.

Teachers are often encumbered with activities and programs that interfere with their ability to learn and teach and to participate in decision-making and policy-setting. Even in schools where class size has been reduced, too much of the time and energy of teachers is absorbed by meeting the unmet social and developmental needs of their students.

Teachers strive to do a good job, and yet few feel as if they are treated as professionals. Many feel underpaid, see no career paths, and have no time or resources for meaningful professional development.

Conclusion:

Many factors impair the ability of teachers to be full participants in education reform initiatives. Among these factors are our current practices providing for the compensation and development of teachers. Simultaneously, our systems hinder our ability to provide compensation and support for teachers as individuals and teaching as a profession. Teaching is not perceived as an attractive career path for the best and brightest students, especially in key areas such as science and math.

Recommendations:

- Differentiated staffing programs should be implemented which would encourage professional movement and advancement within the teaching profession.

- A system of peer evaluation of teachers should be developed which provides for effective evaluation of teaching performance. Teachers should be compensated on the basis of school or team performance.

- Private sector involvement with teacher development, especially in the areas of math and science, should be encouraged.

- Schools of education should consider combining social work education with teacher training to better equip potential teachers with the skills necessary for the job.

- Teachers should be freed from non-curricular responsibilities so as to be able to concentrate on their roles as the primary coaches of the academic agenda.

- Teachers should be provided training, technical assistance and on-going support so that they will be better able to assist in education decision-making as part of administrative de-centralization.

Implementation Strategy:

- Minnesota's business and community leaders should express strong support for teaching as a profession and for positive change in the support and development of the profession.

- The Minnesota Business Partnership and other major state employers should develop in-company programs designed to encourage teacher training and development.

- The Minnesota Business Partnership should collaborate with the Minnesota High Technology Council in the recruitment of math and science teachers.

- The Legislature should enact legislation encouraging districts and unions to implement peer evaluation systems for teachers.

- The State Board of Teaching should devise and the Legislature should support alternative certification programs for teaching.



CULTURAL DIVERSITY

The racial and cultural diversity of Minnesota classrooms are changing dramatically. Although these changes are occurring most rapidly in center-city schools, they will soon be felt throughout the state.

For some communities of color in Minnesota, our schools seem to be almost irrelevant. Pro-found cultural differences inhibit learning by many students.

The demographic and cultural changes occurring in Minnesota's population provide immense opportunity for positive improvement in our schools. However, we must have the systems, personnel and infrastructure in place to respond most effectively to these changes. It is important for the schools to strengthen their commitment to reflect this diversity. Schools, districts and the state must show a greater commitment to increasing the diversity of those in teaching and administrative positions.

An insufficient number of teachers of color are attracted to teaching, and too few are retained. Furthermore, many teachers and school administrators have not had opportunities to develop skills and attitudes to handle the increasing cultural diversity in Minnesota schools.

Conclusion:

Growing cultural diversity is an important feature of our schools and needs to be embraced.

Recommendations:

- Programs which recognize and support cultural diversity should be encouraged.

- Mechanisms which encourage students of color to enter the teaching profession should be developed, including a teacher and administrator recruitment program involving key colleges and universities and junior and senior high schools with sizeable enrollments of Hispanic, African-American, American Indian, and Asian students.

- The development of a richer, multicultural curriculum should be encouraged and supported. This effort is especially needed in many of our learning readiness programs.

- The state Department of Education's programs regarding cultural diversity should be supported.

- Initial teacher preparation programs, staff development programs, and selection criteria for all teachers and principals should include appropriate aspects of cultural diversity.

Implementation Strategy:

- The state's political, business and civic leaders should strongly encourage the state department and local school boards to aggressively pursue the planning, development and implementation of multicultural, gender-fair programs.

- The Department of Education, working in cooperation with minority groups, higher education and the business community, should implement a coordinated teacher recruitment program focusing on Minnesota's minority communities.



PARENTAL INVOLVEMENT

Schools need to improve and expand the opportunities they provide for parental involvement. Research has shown that when parents are involved in their child's education, the student will have a higher rate of achievement and is less likely to drop out.

Adequate parental involvement does not mean once-a-year attendance at parent-teacher conferences, nor does it mean monthly attendance at PTA meetings. Truly effective parental involvement is meaningful and consistent interaction throughout the school experience.

Increasing parental involvement is not an easy task. Many parents have demands and life circumstances that make this involvement difficult. Further, school logistics and timetables often fail to recognize parental realities.

Problems are especially acute for the growing numbers of pregnant and parenting students, and for single parents of all ages. (In 1988, 40.8% of births in Minneapolis were to unmarried women.) These and related problems are not limited to the center cities. They occur in every geographic location and at all income levels albeit to varying degrees.

School systems, along with many other social institutions, have not adequately responded to these changes in American life. It is not enough simply to call for increased parental involvement. Care must be taken to insure that the methods for such involvement will in fact accommodate these social realities.

Conclusion:

Parental involvement and support for student learning in the schools is lacking in far too many circumstances.

Recommendations:

- The role of the parent as the primary support for the student must be acknowledged and sustained. The parent's key "line" role in the achievement of learning readiness must be supported by schools.
- Parental involvement mechanisms must be restructured to reflect changing family realities. More attention must be given to the needs of pregnant and parenting students.
- Private sector programs (including business, civic groups, media, and churches) should be developed to encourage and allow adequate, positive parental involvement and promote student learning.
- Location of early childhood and school facilities on or near business premises should be promoted and encouraged.

Implementation Strategy:

- The Minnesota Business Partnership and other businesses should encourage all employers to voluntarily expand parent involvement programs and should support community-based programs to expand public awareness of the importance of parent involvement.
- Minnesota employers should be generous in providing paid leave for parent participation in school volunteer programs, and should give paid leave for parents to visit parent-teacher conferences.
- Businesses should consider establishing on-site school and day care programs, especially programs targeted to at-risk populations such as pregnant and parenting teens.



STUDENT EMPLOYMENT

Student employment is growing at very rapid rates. It is estimated that some 65% of Minnesota secondary school students who are eligible do in fact work. For many students, work is used as a way to generate disposable income; for others, it is an economic necessity.

No one clearly understands the impact of student employment on learning and academic achievement. Proponents of student work contend that it has social development value. Proponents also say that the income generated allows some students to stay in school who would otherwise be forced to quit in order to help support their families.

Opponents of student work contend that work often interferes with the requirements of learning; physically tired students simply cannot learn. In addition, work critics often contend that students working at "menial" jobs are not furthering their educational experience.

Few employers relate a student's academic performance to their work situation. Even fewer employers evaluate a student's school performance before making a hiring decision.

Conclusion:

Student work can be a positive experience for the student and an important part of the economic environment of the region. However, "excessive" student employment (as defined for each individual student) unquestionably hurts classroom performance.

Recommendations:

- Businesses should be encouraged to cooperatively and voluntarily establish guidelines for student employment which would limit the number of working hours so as to not impair the ability to learn. In addition, businesses should limit work eligibility to students whose academic performance is satisfactory.
- Employers should work cooperatively with local secondary schools in identifying positive work opportunities. Efforts should be made to find work situations that could simultaneously result in income and course credits for students.

Implementation Strategy:

- The Minnesota Business Partnership, along with other business organizations, should initiate the development of statewide voluntary guidelines to be used by employers in hiring student workers.
- Business organizations should also develop techniques and practices for the appropriate use of high school transcripts in hiring, and they should develop student work opportunities that have educational as well as financial value to students.
- The Legislature and the Departments of Labor & Industry and Education should refrain from enacting additional limitations on student work, but they should monitor student employment closely.



The Minnesota Business Partnership

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READINESS

Connecting
Education,
Employment,
Work, and Learning



A Report
of the
Learning
Readiness
Subcommittee

The Minnesota Business Partnership

December 1992
Updated July 1993



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Education Quality Task Force**

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Michael F. Walsh, Delta Dental Plan of Minnesota

Linda Ellwein, Group Health
Dick Green, Honeywell Inc.
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Bill Linder-Scholer, Cray Research, Inc.
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John Cairns, Briggs & Morgan
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Staff

Paula Pahl, Minnesota Business Partnership



JULY 1993 PROGRESS UPDATE

July 1, 1993

Citizens of Minnesota:

In December 1992, the Minnesota Business Partnership issued a report and recommendations calling for better connections between the various services which impact learning readiness of students and an improved system of school-to-work transitions for Minnesota. We based our recommendations on our studies and on surveys and other data which demonstrated that Minnesota employers are finding it increasingly difficult to find competent workers for entry-level positions.

After release of the report, the Partnership lobbied extensively at the Minnesota Legislature to achieve statutory implementation of our recommendations. We are very pleased and gratified that the 1993 Legislature chose to provide incentives for communities to coordinate local services for children, adopt standards guiding employment of high school youth, and establish a youth apprenticeship program. We believe these efforts signify the start of a comprehensive program designed to strengthen the readiness of Minnesota students to learn and to work.

We have reprinted the December 1992 report and added the following pages which summarize the highlights of these programs and key reforms from the legislation.

Dr. James J. Renier
Chair, Education Quality Task Force
Chairman of Executive Committee
Honeywell Inc.

David A. Koch
Chair, Readiness Subcommittee
Chairman and CEO
Graco Inc.



JULY 1993 PROGRESS UPDATE

KEY LEGISLATIVE ACTION RELATED TO *READINESS* REPORT

- A youth apprenticeship program is established to provide intensive work-based learning for sixteen to twenty year-olds in conjunction with basic core curricula at Minnesota schools. (see page 20)
- \$1 million is appropriated to fund pilot sites located throughout the state. Skills credentials committees are established in respect to those occupations for which apprenticeship program are established. (see pages 21-25)
- A Youth Works program is established to provide community-based and service-based learning for Minnesota youth. \$5 million is appropriated for wages and other costs for participants in the Youth Works program.
- Higher education institutions are encouraged to give credit and otherwise recognize students working in both the youth apprenticeship and Youth Works programs.
- An education-to-employment transition council is created to make recommendations to the Legislature on further systemic reform in this area and to coordinate the youth apprenticeship and youth works programs. (see page 23)
- A grant program is created to facilitate the development of family services and community-based collaboratives, integrating social and health services with education. (see page 3)
- Students are prohibited from working after 11:00 p.m. on school nights. This provision may be extended to 11:30 p.m. with parent approval. (see page 13)
- The Children's Cabinet is created in statute and its membership is specified. (see page 3)
- Funding is provided for the development of an integrated database for children's services.
- A study is initiated to develop a plan for the restructuring of state level governance and administration of children's services to foster better coordination and consolidation of service delivery. (see page 27)



JULY 1993 PROGRESS UPDATE

SELECTED LEGISLATION RELATED TO *READINESS* REPORT

A key recommendation from the Readiness Report enacted in 1993 is the creation of and state support for Youth Apprenticeship programs:

"The education and employment transitions council, with the assistance of the department of education, shall establish a comprehensive youth apprenticeship program to better prepare all learners to make transitions between education and employment." [H.F. 10, Section 3, subd. 1]

The youth apprenticeship bill stipulates that key stakeholders must be included in each local program's development:

"A comprehensive youth apprenticeship program must require representatives of secondary and post-secondary school systems, affected local businesses, industries, occupations and labor, as well as the local community, to be actively and collaboratively involved in advising and managing the program." [H.F. 10, section 3, subd. 3a]

The connection between academic instruction and work-based learning, is integrated in the Youth Apprenticeship bill:

"A comprehensive youth apprenticeship program must integrate academic instruction and work-related learning in the classroom and at the workplace. Schools, in collaboration with students' employers, must use competency-based measures to evaluate students' progress in the program. Students who successfully complete the program must receive academic and occupational credentials from the participating school." [H.F. 10, subd. 2a]



JULY 1993 PROGRESS UPDATE

SELECTED LEGISLATION, continued

In the Readiness Report, the Minnesota Business Partnership explored the connection between the state's economic competitiveness and quality education. In Article 4, Section 8, subd. 1 of the education omnibus bill, the legislature recognizes the need of state support for programs that prepare children to become better learners in order to develop a better-educated work force:

"The purpose of a learning readiness program is to provide all eligible children adequate opportunities to participate in child development programs that enable the children to enter school with the necessary skills and behavior and family stability and support to progress and flourish."

Another recommendation of the report is to integrate service delivery systems for children in the form of a "readiness continuum" to ensure that children get the support they need throughout their development. The legislature also supports this integration of services:

"A collaborative shall design an integrated local delivery system that coordinates funding streams and the delivery of services between existing agencies. The integrated local service delivery system may:

- 1) improve outreach and early identification of children and families in need of services and intervene across service systems on behalf of families;
- 2) offer an inclusive service system that supports all families within a community;
- 3) coordinate services that eliminate the need to match funding streams, provider eligibilities, or clients with multiple providers;
- 4) improve access to services by coordinating transportation services;
- 5) provide initial outreach to all new mothers and periodic family visits to children who are potentially at risk;
- 6) coordinate assessment across systems to determine which children and families need coordinated multiagency services and supplemental services;
- 7) include multiagency service plans and coordinate unitary case management; and
- 8) integrate funding of services." [H.F. 350, Article 4, Section 10, subd. 3]



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This report is one of three reports on education issued by the Minnesota Business Partnership in December 1992. The other two reports deal with education finance and transformation of the school system. Copies of all reports are available from the Partnership offices.

The Minnesota Business Partnership is an association of the Chief Executive Officers of 105 of the state's largest corporations. The Partnership was created in 1977 with the mission of promoting job creation. Our goal is to pursue public policy reforms that will attract new jobs to the state and allow us to retain the ones we have.

We pursue our mission while working cooperatively with Minnesota's public officials. In addition to education quality improvement, current Partnership focus areas include state fiscal policy, employment law, and health care.

For further information about the Partnership and its work, contact Tom Triplett, Executive Director, at (612) 370-0840.



Introduction

Increased productivity -- the real key to economic growth and success for any society -- hinges upon many interdependent variables. One critical variable is the ability of a well-trained workforce to adapt quickly to changes in technical and manufacturing advances. Our education system has contributed to productivity increases in the past. We search for ways to increase the capacity of the education system to meet the increasingly complex needs for a capable, adaptable workforce.

We know that, like any system, the quality of educational output is directly related to the quality of the input. Simply put, the student who is not ready to learn, will not learn. Increasing the preparedness of students to learn is critical in improving the capacity and quality of the education system.

This report chronicles the work of the Learning Readiness subcommittee and discusses two key issues related to readiness, both related to the connection between education and employment, learning and work. The first issue is the impact of employment practices relating to student employees on their readiness to learn. The second issue is the need to develop effective training options for students not bound for college through a revised system of technical and work-based learning.

HISTORY

In 1991 The Education Quality Task Force of the Minnesota Business Partnership released their report, "An Education Agenda for Minnesota: The Challenge to Our Communities and Schools." That report identified a key element in lagging educational attainment in our public school children -- the lack of what we called learning readiness.

In that report, we made an important distinction between preparing students to enter kindergarten and the kind of daily support and guidance which helps students prepare to learn throughout their formal education career. Learning readiness, in our expanded definition, encompasses both. Additionally, the lack of coordination of services to families and children to promote readiness in students presents a critical hurdle for the education system. Programs of the multiple governmental, non-governmental and private agencies which provide support to families and children must be aligned with the work of the schools to promote readiness. The schools cannot do this alone.

Our Subcommittee was formed to further the initial work of the 1991 report. Our charge is two-fold: continuation of work in the development of sound policies and practices which impact the readiness of students and additional study of learning readiness. Our critical questions included the following:



- How can learning readiness be further defined?
- Who are the key players affecting learning readiness in students?
- How can individual communities identify and enhance their role in the development of readiness in children and youth?
- How can businesses, individually and collectively, work to enhance the readiness of students?

WORK IN PROGRESS

The Subcommittee inherited a body of work concerning the development of practices and policies relating to readiness. The subcommittee continues to monitor, support, and participate in the work begun by the full task force and to monitor legislation which impacts readiness and communities' abilities to affect change. Of recent issue for the subcommittee is the legislation relating the early learning readiness programs funded by the state as well as projects begun at state and local levels to heighten learning readiness.

Among the projects, three distinct areas of continued attention deserve comment as they demonstrate different but interrelated methods of coordinating resources and efforts toward enhanced learning readiness and support of the mission of the schools. All three have demonstrated potential in mobilizing communities, government, and non-government agencies to realign services impacting readiness and, ultimately, learning:

Action for Children

The Action for Children Commission was formed by Governor Carlson in 1991, soon after our call for better coordination of programs targeted at children and impacting readiness. The actions of the Commission are a good example of the coordinating work necessary in the governmental sector. The Partnership as a whole, as well as individual members, continue to participate and guide the work of this group.

Of particular interest to the Partnership is the development of a Children's Cabinet of all state agencies with programs targeted at children and their families. Coordinating the multiple state programs holds great power in both avoiding service duplication and ensuring increased access. Even more powerful is the development of a Children's Budget which will link the funding of all state children's programs -- including education -- and will provide incentives for greater collaboration between the programs.



Another effort of the Commission, directed at the business community, is the development of a work-family award for Minnesota businesses. Many Partnership members have been cited for their "family friendly" employment practices, and we applaud their efforts. It is clear that families are the central pillar of learning readiness in youth; we need to find ways to support families at the same time we support employees. The development of such an award will help further the understanding of how to strengthen individuals' ability to raise their families. It is critical that all employers, large and small, public and private, participate in these discussions.

Learning Readiness Initiative

An equally impressive model of coordination of governmental and non-governmental services is the Learning Readiness Initiative in Hennepin County. The project brings together the Minneapolis Area United Way, Hennepin County, and public school systems to develop a long range, wholistic, service delivery system linking the efforts of the school, county, and community agencies. Focusing on children in kindergarten through twelfth grade, the project provides funding for the development of collaborations between service providers to:

- directly improve the school success of children and youth;
- improve and sustain collaborations between schools and social services;
- reduce the time school personnel spend meeting students' social and mental health needs;
- improve accessibility and ease the use of existing services for children.

MINNESOTA 2000

A third example of collaboration and mobilization of communities is the work of many Minnesota communities through MINNESOTA 2000. A partner with the America 2000 project, MINNESOTA 2000 seeks to mobilize entire communities to support increased student learning and enhanced community collaboration. By using state and national education goals as a focusing agent, MINNESOTA 2000 communities have forged their own goals and action plans for improving education. Deviating slightly from the national aims, MINNESOTA 2000 carried an enhanced message about learning readiness, encouraging communities to inspect their systems which support schools and impact students' readiness to learn every day.



CONCEPTUAL FRAMEWORK

As the subcommittee reviewed its first critical question and its work in progress, it returned to past work of the Partnership and to the central mission of the Partnership -- CREATION OF JOBS. The Partnership's entry into the study of education policy began with the recognition of the critical link between education, a quality workforce, and the state's economic competitiveness. Our very ability to attract new jobs and increase the productivity of our current job base is dependent on the availability of well-trained and educated employees.

Returning to this central mission helped us further define the concept of readiness. Readiness is not simply readiness for kindergarten or readiness for classes everyday, it is also readiness for successful employment. Readiness is a continuum with various governments, social services, community agencies, and individuals interacting with the schools to prepare students for everyday and their next steps.

This readiness continuum begins with programs targeted to ensure healthy babies, prepare children for school, and prepare parents for their role in the full development of their children. As students move into formal school years, toward the middle of the continuum, readiness is impacted by a variety of family and social issues and structures, each affecting a student's ability to learn every day in school. Toward the end of the continuum is work readiness with the programs and school curriculums necessary for successful employment. Readiness is no longer a single point in time but rather a perpetual state of preparedness which allows continual learning and development.

Many facets of the community impact readiness along the full length of the continuum. Critical players include but are not limited to:

- the student;
- the student's family and extended family;
- schools;
- child care centers;
- churches;
- non-profit and social service agencies;
- city agencies;
- county agencies;
- state agencies;
- businesses and employers;
- criminal justice system.



Each of these players has policies and programs which directly or indirectly impact the readiness of students at all levels of the continuum.

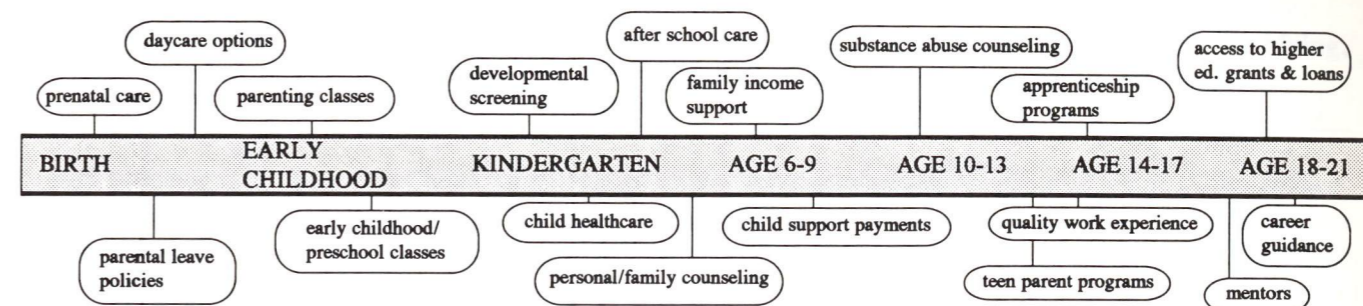
The continuum is illustrated on the next page and highlights how various players' actions impact -- or could impact -- the readiness of a single student.

Below the continuum is a grid which places individual readiness programs in the context of the entire community. By placing the players on the vertical axis of a grid with the age continuum (birth through adult) on the horizontal axis of the same grid, it is possible to see both the overlaps and gaps in any one community's collective programs related to readiness. This analysis demonstrates the importance of program collaboration across all sectors. Additionally, this system analysis allows a greater understanding of the actions required to continuously improve our readiness outcomes.

This model of viewing readiness is helpful to us in viewing both our own actions as they relate to readiness as well as viewing the collective policies and practices of communities and the potential impact on readiness. This model forms the basis for our review of business practices which impact readiness and is the model which guides our policy positions on state and local level programs related to readiness. The readiness continuum helped identify the two key areas of work for the subcommittee which are described in the remaining two sections of this report.



The Readiness Continuum



One child and her family's experience on the Readiness Continuum

	SCHOOL READINESS		LEARNING READINESS				WORK READINESS	
	PRE BIRTH	EARLY CHILDHOOD	KINDERGARTEN	AGE 6-9	AGE 10-13	AGE 13-16	AGE 17-20	AGE 20-23
CHILD								
FAMILY								
EXTENDED FAMILY								
SCHOOL								
CHILD CARE CENTERS								
CHURCHES								
NON-PROFITS								
COUNTY AGENCIES								
STATE AGENCIES								
BUSINESS	Maternal Health care; Parental leave policies	Parenting classes at business site; childcare referral or support	Parental leave, Corporate classrooms	Business - School Partnerships	Employee Assistance Programs	Youth employment programs, Mentor programs	Apprenticeship programs	On-the-job training, Higher ed. loans, grants
CRIMINAL JUSTICE								
CITY AGENCIES								



Guidelines for the Employment of Youth

We have always placed a high value on Minnesota's economic competitiveness. We repeatedly cite a strong education system as critical to a healthy business climate. We choose to live and invest in states where our children receive a quality education and where we can depend on top-notch employees. Yet most of us, as business leaders, fail to appreciate the connection between educational youth employment and future workforce quality.

One area of concern is our own employment practices as they relate to high school youth. This concern was echoed by many of the educators with whom we met in our initial analysis in 1991. In the eyes of educators, too many high school students arrive at school too tired from their part-time jobs to learn.

Indeed, Minnesota leads the nation on the number of youth employed in the workforce with 69.3 percent of Minnesota teenagers working an average of 24 hours a week. While employment may not be the only diversion from academic pursuits, it is clear that our high level of employment of youth provides a golden opportunity to connect learning with work.

The following guidelines for employers of youth begin to develop that connection. Employers play a key role in providing a first work experience--an experience which shapes the work habits of that student for many years. With that recognition, it is important that employers take their employment of youth seriously. An employer's next engineer or manager will bring to the worksite the skills and work ethic developed partially by their first job.

Through analysis of other states' initiatives to better coordinate student employment and student academic demands, the subcommittee drafted a set of "Guidelines for Employing Minnesota's Youth." Mindful that Partnership members are not significant employers of teenagers, we asked other employers in the state to comment on the guidelines. We also asked the Association of Minnesota Counselors to provide their comments.

The points listed on the following pages constitute the core of a set of guidelines for the employment of youth. We believe the development of such a set of guidelines can enhance youth employment programs which both meet the requirements of the current job and build future workforces of quality employees. We intend to discuss these suggested guidelines with other employer and education organizations, incorporate their comments, and solicit their partnership in carrying the message throughout Minnesota that academic performance today affects employment potential tomorrow.



Guideline #1

Require evaluation of students' school performance prior to hiring, using transcripts or other measures of student performance.

Employers must show students that academic performance, attendance, and deportment are all critical to employment success. That message can be conveyed by requesting a student's transcript during the hiring process.

Although transcripts vary by district, most include important information about:

- the student's attendance pattern at school
- the number and quality of the student's courses
- the student's academic performance--its consistent or improving quality
- the student's involvement in school activities
- teacher evaluations of the student's performance, attitude, and potential

To fully understand a specific school's transcript record, request a blank transcript. Many guidance departments will offer explanatory notes and other assistance to employers using transcripts. School guidance departments cannot furnish actual students' transcripts to employers. Students must be responsible for supplying transcripts when they complete employment applications.

Some youth, particularly those in high-risk situations, will demonstrate their employment readiness through measures other than grades. Employers might institute special programs for students whose enthusiasm, talents, or commitment to successful employment justify the employer's trust. Employers should discuss with educators and youth counselors possible means of identifying students whose grades alone might prevent them from applying for jobs.



What Employers Can Do:

- Request school transcripts from all applicants, students and graduates alike.
- Mention the transcript requirement in all job postings and employment advertisements.
- Encourage a diverse applicant pool by making clear the company's reliance in the hiring process on criteria other than solely grades. Transcripts should be supplemented with recommendations from adults who know the youth applicant well.

Guideline #2

Track academic performance during employment on a regular basis and provide rewards and consequences for positive and negative performance.

Students should be taught the importance of lifelong learning in the workplace: getting a job does not mean giving up learning. Youth employees need to hear regularly from employers that school achievement counts. To convey this message, employers should regularly evaluate both the academic and job performance of youth employees. Linking the two evaluations helps students see the connections between work and learning and may help in a student's academic or career planning.

What Employers Can Do:

- Monitor each student employee's academic success through transcript review or formal evaluation on a quarterly or semi-annual basis. Report cards are also useful tools for evaluation.
- Stipulate work-related rewards and consequences for positive or negative academic results.
- Provide formal job performance evaluations for students.



Guideline #3

Establish and communicate requirements for employment including formal job descriptions and employee policies.

Employers of youth hire students because they have a job to do, a customer to please, and a bottom line to meet. Every employee, even part-time youth, should understand their contribution to the company's continuing success. A formal job description for every position provides youth employees with educational information on their employer's operations and goals. Youth employees with formal responsibilities will more fully understand their contribution to the company team and thus work more diligently to maintain their position on that team.

Beyond the formal job description, it is important to communicate the other expectations of job performance. It is critical that new employees understand workplace decorum and accepted policies and procedures. These may range from the kind of dress expected to policies on personal phone calls. Make sure each student receives the same introduction to company policies and procedures that other employees receive.

What Employers Can Do:

- Develop formal job descriptions for jobs filled by youth.
- Provide students with the company's employment policies and procedures manual. Explain the company's expectations for youth employees to both the youth employees and to other staff.



Guideline #4

Provide trained supervision on every shift.

All student employees should work under the close watch of a trained supervisor or manager. Supervisors play a critical role in the development of a quality worker and can help students link what they learn in school to their work. Students need the credible and helpful feedback on their work that supervisors can provide. Finally, supervisors can act as an additional resource or referral for students who need help managing their multiple responsibilities.

Supervisors need to know the role expected of them and how to respond accordingly. Employers should train all supervisors of youth before placing youth employees on their shifts. These youth employment guidelines provide one important resource for that training.

Mentors also provide guidance to youth employees and create a link between company and employee, without having to formally evaluate the student's performance at work. The more informal give-and-take of a mentor relationship can greatly enhance a youth employee's work experience.

What Employers Can Do:

- Provide a trained supervisor for every youth employee.
- Train supervisors of youth so that they understand the responsibilities involved in managing youth employees.
- Employers might also assign a mentor to each student, to provide that student with a role model and guidance in the workplace.



Guideline #5

Limit employment hours. 20 hours per week while school is in session is a good benchmark for average students although the appropriate number of hours will vary in either direction for individual students. For many students the problem is not the number of hours but the lateness of hours.

In the past two years, in meetings with the Minnesota Business Partnership, educators, parents, and legislators have all shared their concern that students employed at jobs often arrive in the classroom unprepared, both physically and mentally, to learn. For some students, hours of employment, both in total number and in lateness, impact their school performance.

Any student commitment can impair that student's ability to function in the classroom and limit that student's chances for academic success. Employment, school sports, and television all consume time that students might otherwise commit to academic preparation. Yet employment, like sports participation, provides students with valuable skills, not the least of these being time management. Employers must work with students to create work schedules which meet the needs of both the employer and the employee.

What Employers Can Do:

- Discuss student employees' other interests and responsibilities. Employees might list their current time commitments to school, family, and other extra-curricular activities. Supervisors could suggest possible methods by which youth employees can more effectively manage their time.
- Limit the number of hours students work during the week. A good benchmark is 20 hours per week, although this number will vary for each student.
- Provide students with regular, posted schedules.
- Develop clear policies for shift trades, schedule changes, and special exceptions from those policies.



- Clearly describe the requirements of students working late shifts, especially on school nights. Limit the number of late shifts any student works.
- Recognize the inherent flexibility of a student's academic calendar. Discuss with student employees other ways in which unforeseen academic conflicts might be managed.

Guideline #6

Work with schools on the hiring of student employees and the development of additional school-to-work transition programs.

Cultivating a relationship with the "suppliers" of employees--the teachers and staff of the local schools--makes good business sense. Educators can assist businesses in their evaluation of youth employees; counselors can provide a two to three year perspective on a potential employee's abilities. In some districts, educators have even altered transcripts to be more "employer friendly."

Schools are eager to connect the world of work with the world of learning. Employers can provide schools with feedback on a student's work habits as well as the student's current preparedness for full-time employment. Making this connection helps close the information loop between the "suppliers" of employees and one of the customers of the school system.

Connections with schools range from formal business-school partnerships, to personal connections fostered between human resources personnel and specific teachers or counseling staff.

What Employers Can Do:

- Contact your local schools to discuss youth employment. Establish a regular school contact to whom you send information about youth employment.
- Ask students to supply the name of their school counselor on their employment application.



- Sponsor business-education programs that bring company employees into the classroom for business-related projects.
- Request school assistance with transcripts and youth employee assessments.

Guideline #7

Provide employment information for students to share with parents or guardians.

Parents have primary responsibility for their child's development; they play the pivotal role in guiding youth development. Businesses should therefore encourage parents to see youth employment as another learning experience for their child. Employers who communicate their employment opportunities and expectations to parents increase the likelihood that youth employees will receive the family support necessary to maintain their commitment to work.

Student employees come from a variety of family backgrounds. Employers should recognize and be sensitive to the challenges some youth face in their home lives. Youth employees from at-risk families can especially benefit from the discipline and self-esteem that employment provides.

What Employers Can Do:

- Provide job descriptions, work guidelines, supervisor information, and scheduling information for students to share with their parents.
- Encourage youth employees to discuss job description changes or schedule alterations with their parents.
- Include parents on the mailing list for employee publications.



Guideline #8

Award both academic and employment achievement with recognition programs and provide letters of recommendation for student employees.

The entire community should publicly recognize the achievements of students who successfully navigate the challenges of school and work. Businesses should participate in existing student recognition programs while creating additional programs to recognize the achievements of youth employees. Awards and honors programs might focus on those job skills necessary for successful employment at a sponsoring business.

Like all successful employees, students should expect to receive letters of recommendation from their employers. For students, recommendations can be a very important addition to applications for full-time employment and higher education programs. For higher education institutions, the employer's perspective highlights a student's ability to apply education to a different setting, to manage his or her time, and to establish priorities. Employers should encourage student employees to use letters of recommendation as further documentation of their achievements.

What Employers Can Do:

- Investigate how academic, extra-curricular, and athletic successes among youth are currently recognized. Develop similar recognition programs that recognize employment success. Many schools are willing to recognize student work achievement at the same time other recognition takes place.
- Work with other local businesses to develop a "student employee" award.
- Develop in-house recognition programs for youth employees that relate business goals and objectives to youth employment contributions.
- Inform students that good recommendations are important and that these letters of recommendation are available from their employers.



Youth Apprenticeships

As we discussed the impact of employment practices on student employees, the subcommittee kept returning to the value work can add to an educational experience. It was clear to us during the drafting of our suggested guidelines that how students are employed affects how they learn. It was also clear that what students learn and do in school and in their first jobs affects how they will be employed in the future.

Our discussions turned to the need to better connect what students learn in school to what students learn on the job. Specifically, we discussed how work-based learning could provide educational opportunities for students -- especially those students who are not bound for college.

THE TWO PROBLEMS

In the spring of 1992, the Partnership initiated with the Employers Association a survey of Minnesota employers. One of our main goals in the survey was to uncover hiring realities and experiences which provide insight into educational transformation.

We were somewhat surprised to learn that two hurdles prevent potential employees from being hired and that the two hurdles have almost equal weight with employers. Over 34% of Minnesota employers in both manufacturing and non-manufacturing sectors reject applicants most often because of a lack of basic skills. Equally important to employers is the work experience of the potential employee. 32% of the same employers cite lack of credible experience as a key factor in the rejection of potential employees. Clearly, employment decisions are a function of both basic education and developed skills.

While many employers are having difficulty finding skilled workers, many of our students -- who ordinarily would be looked to as a prime source of these employees -- are losing interest in and dropping out of school.

Today's dropouts are not the students who ordinarily would be going on to college. Rather, these are the students entering the 11th and 12th grades who are not bound for the four-year collegiate system. They are the ones most often at risk of dropping out of school and ending up with low-skill, low-wage jobs.

In our judgement, the workforce and the school dropout problems noted above are interrelated. Our traditional education systems are no



longer producing the corps of skilled workers needed by those businesses engaged in the technology-oriented, high-skill industries so essential to our economic future.

Targeting these 16-20 year-old Minnesotans for special effort at this critical period in their lives will not only help them, it will provide a superb source of skilled workers for our businesses for years to come.

THE MISSION

Our mission is simultaneously to solve both of the above problems by helping to create a new workforce development policy for the state. This policy will focus on those 16-20 year-olds who are at risk of leaving the education system and ending up with low-skill, low-wage jobs of little long-term economic value for them as individuals or for the state in general.

If we have been successful in our mission, the following outcomes will be achieved:

- Public acceptance of a new vision of education and work;
- Recognition by employers and workers of the need for a cooperative approach to workforce issues;
- A broader understanding of and more career options available to our young people;
- More hope and opportunity for those of our young people now excluded from many jobs;
- An integrated and efficient school-to-work transition system;
- A new occupational credentialing system and employer acceptance of the value of the credentials;
- More highly skilled persons employed in the jobs of the future;
- Higher skills, increased teamwork, greater flexibility and adaptability, and more work satisfaction in all our employees;
- Improved productivity and greater competitiveness in our employers;
- Systemic reform in our education and workforce training systems;
- A system of measures which will demonstrate progress toward the above outcomes and suggest how improvements could be made.

To accomplish our mission and achieve these specific outcomes, state government, business, labor and education must join together to implement a fundamental restructuring of our education and training systems. All of these institutions and constituencies must be involved in this joint enterprise; they all constitute the "we" used throughout the following discussion.



This restructuring must build a variety of existing structures and programs into an integrated system of related but discreet programs. A new Youth Apprentice Program will be the cornerstone of this system.

PRELIMINARY STEPS

Several important and difficult steps must occur before the state can fully establish a systemic reform having a strong Youth Apprentice Program as the core.

· First, we must inventory the industries and occupations that are likely to grow in the future, that build off Minnesota's economic and demographic strengths, that are projected to be high-wage, and that will help make us more competitive internationally.

We must undertake careful research and analysis using Minnesota-specific data bases that link to national and international projections of occupational sector growth. We can begin with the work already done by the Partnership in its recent industry-specific, state-specific analysis of industries having high-growth potential for the state.

· Second, we must define the skills needed for those industries and occupations. Credentialing systems need to be developed to inventory the needed skills and measure whether individual employees will have mastered the skills. An effective credentialing system will:

- guarantee a consistent standard of job competence,
- use national and world-class standards where available and appropriate,
- promote job portability, and
- employ valid testing and assessment mechanisms.

· Third, we must develop curricula and training methodologies that will be needed for students to achieve the credential. Some of these curricula have already been developed here and elsewhere. For others, the state must consult with national curricula experts and with employers and worker representatives employed in the focus occupations.

Curricula for these 16-20 year old students will not be "traditional." We have seen too often how traditional school-based curricula have proven ineffective for these students. These are the young people who tend to learn best through innovative curricula that combine relevant in-school teaching and work-based learning.



If properly developed and administered, these credentials and curricula will be recognized by employers throughout the state and region and, hopefully, soon by the entire nation.

YOUTH APPRENTICESHIPS AS THE CORNERSTONE

A variety of specific programs, some already in existence, can help meet the workforce training and education needs identified earlier in this section. Of all the specific programs we have studied, however, we believe a youth apprentice program offers the greatest potential of achieving our mission. We therefore recommend that a statewide youth apprentice program be the cornerstone program for the comprehensive systemic reform of our workforce development initiative.

A number of planning teams have been examining the possibilities for youth apprenticeships in Minnesota. These groups consist of representatives from the Partnership and other business organizations, organized labor, state and local government, and education institutions. While these activities may ultimately yield somewhat different recommendations, some basic common conclusions seem to be emerging. They include the following major components.

Reference to models from elsewhere: A variety of models for youth apprentice programs exist around the world. We have studied those in other states and in the countries of Denmark and Germany. All of these other systems have great value and components from them should be incorporated in our system. However, none of them is exactly right for Minnesota. We therefore recommend that a new, unique "Minnesota Youth Apprentice Program" be created.

Covered students: The new Youth Apprentice Program should make apprenticeships available to all Minnesotans, in all schools, who are aged 16-20 years. Generally, these students will have achieved a "certificate of initial mastery" evidencing their readiness to proceed with the apprenticeship.

Special recruitment and training efforts will likely be needed for those youth who are:

- at-risk of dropping out of school,
- female, students of color, or low-income, or
- otherwise standing to benefit substantially from a hands-on approach to learning.



Focus occupations: Each youth apprenticeship will be built around one of the focus occupation sectors for which curricula and credentials will have been developed per the above sections. An advisory group of employers, workers, research analysts and educators will recommend which occupations should receive focus.

Course of study: Each apprenticeship should combine quality work-based learning with in-school education. All of the apprenticeships should take advantage of the strengths of our secondary and technical college systems and will involve employers, labor, and educators working together to manage the program.

The division of time between in-school and work-based learning will vary according to the demands of the occupation. However, we anticipate that the majority of time for most occupation training will be spent at the worksite where students will be closely supervised by trained masters. The work-based learning component will include technical skills application and good work practices.

The in-school component will focus on personal development skills, basic academic education, and the technical skill theory associated with the selected occupation. Included within the basic academic curricula will be such courses as communications, applied math, civics, basic technology, and computer skills.

Student-employer relationship: The student and employer will have several forms of relationship: trainee-trainer, employee-employer, and advisee-mentor. It may be desirable to formalize these relationships through a written contract that clearly defines the expectations and resources to be provided by all participants.

Duration of program: The length of each apprenticeship will depend on the degree of education and training necessary for the occupation. Typically, they will range between two and four years in length. Upon successful completion of the program, the student will receive a transferable credential, a high school diploma and/or an associate degree from a community or technical college, and -- in the best of all worlds -- a job offer from the employer.

Accountability: Each of the major participants in the youth apprentice program will be assigned and will assume responsibility for ultimate outcomes.



- The student will be accountable for successfully completing his or her education and work-based training.
- The employer will be accountable for providing quality work-based training and advising, wages and other specified benefits and validating desired program outcomes.
- Educators will be accountable to provide instruction in basic academic courses and occupation-related theory.
- A central administering agency will be accountable for effectively administering the programs and for providing specified benefits and incentives.

OTHER NECESSARY COMPONENTS

Support programs: The Youth Apprentice Program will be the cornerstone of this comprehensive new system for development of our workforce of the future. Other programs that should also be encouraged if they:

- provide a broad range of opportunities for all youth,
- include or can accommodate work-based learning,
- permit easy movement between programs and "tracks,"
- can efficiently relate to other programs,
- produce skilled workers, and
- are consistent with national programs/trends.

Examples of such additional components include internships, mentoring programs, the new "Tech Prep" initiative of the secondary and technical college systems, and the newly inaugurated Sci/Math initiative to promote science, math and technology education.

Public support: Youth apprenticeships and the other individual program components of the new system will not succeed without substantial public understanding and support. All participants in education and workforce development must aggressively promote the idea that technical careers are just as valuable to American society as are careers for which college degrees are typically obtained. To achieve this goal, we must increase parent and public support for technical occupations through such activities as:

- public relations initiatives and programs targeted to parents, school counselors and others who play important advisory roles for students,



- creation of a "college degree" equivalent that would elevate the importance of work-based learning,
- easier transfers to other higher education programs, and
- special rewards and recognition for outstanding students and participating employers, schools and labor groups.

Career previews: From the perspective of the students themselves, we must broaden their understanding of career options beginning as early as elementary school. Specific activities might include early discussions of the concept of work and "career preview" programs.

As students progress through the middle school years, the career counseling activities should increase through more extensive career advising by school and volunteer counselors, 1-3 week quality experiences at work sites, and career mentoring and shadowing. In the 11th and 12th grades, all Minnesota students should be focusing on college preparatory work or the types of school-to-work transition programs discussed in this report.

Central administration: The new system being outlined in this document is not simply a collection of separate programs; it is a comprehensive, integrated system for educating and training a workforce for the jobs of the future. To achieve that mission, a new administrative structure in state government will be needed that is autonomous and that effectively integrates the disciplines necessary for quality school-to-work transition programs for our target audience. Simply providing a loose coordinating function will not be enough.

As we create a new structure, we must be sure to fold into it the wide range of existing activities which deal partially with this issue. Examples of such existing programs include:

- youth programs at Jobs and Training and Labor and Industry,
- cooperative and vocational education programs in the Department of Education,
- the Job Skills Partnership Board,
- JTPA and Private Industry Councils, and
- others identified by Minnesota Planning

We must also insure a productive relationship between the youth-focused system described in this report and the existing adult Registered Apprenticeship Program administered by the State Department of



Labor and Industry. The DOLI program must be distinct from the youth apprenticeship initiative, but it has many lessons to offer on effective work-based learning.

Funding: Given the state's budget problems, it is unrealistic and undesirable to assume major new funding for this initiative. More than enough money is already in the system. The major participants in the program should be assigned specific funding responsibility as follows:

- Participating employers will be responsible for youth wages and benefits and worksite training costs.
- Educators will be responsible for in-school education costs which can come from the basic education funding formulas (with needed changes), the Post-Secondary Enrollment Options program (for high-school age students attending a technical or community college), and tuition (for the older students).
- The new coordinating agency will be responsible for administrative costs, which might come from transfers from existing program funding, dedication of a portion of the dislocated workers program tax, and/or new federal grants or transfers from existing ones.

Implementation Assistance: All of the major participant groups will need assistance of specialized types to successfully implement the new system and programs. For example, employers will need education on the need for and operation of a youth apprentice program. They will also need tools such as a catalogue of available programs and resources, guidelines for employing youth (such as contained in the first portion of this report), and draft apprentice contracts. Finally, it may also be necessary to provide some employers with special incentives such as tax credits, relief from regulatory burdens, and enhanced access to customized training.

Educators will need assistance. Broad-based information sessions will be needed in order to attract school districts to participate in these programs. Classroom teachers will need to broaden their understanding of work alternatives, and this can be accomplished by businesses providing summer jobs, shadowing and other programs. Finally, assistance will be needed to facilitate K-12 partnerships with technical colleges.



Removal of Governmental Barriers: Current laws and regulations may inhibit the initiation of youth apprenticeships and various of the other program components mentioned above. Statutory and regulatory changes may be needed in such areas as:

- workers' compensation and health care coverage for the students,
- state and federal regulations covering such topics as child labor laws, OSHA, and federal Department of Labor standards,
- federal laws and regulations which may inhibit persons now receiving Medicaid and AFDC from continuing to receive them while engaged in the training,
- state Department of Education graduation and outcome-based education requirements,
- potential legal liability of participants and volunteers in respect to their various obligations.

Evaluation Systems: In recent years, many new education programs have been thrust upon our schools and educators. For many of these programs, it is unclear whether they have been successful in improving the output of our education systems. To make sure that this new system and the Youth Apprentice program do fulfill their missions, a system of feedback and continuous improvement must be implemented.



Recommendations

The following specific recommendations to business and state government leaders relate to the readiness issues discussed in this report and provide a summary of the many points included in the report.

1. **SUPPORT THE ADOPTION OF VOLUNTARY GUIDELINES FOR THE EMPLOYMENT OF YOUTH:**

As discussed above, we see the need to better coordinate our employment practices which relate to high school youth. Through this effort we know that we can both impact readiness and stress the importance of academic success. The Partnership intends to lead a campaign to build a coalition of Minnesota employers who pledge to require the use of school transcripts in hiring and review the youth employment guidelines suggested in this report.

2. **SUPPORT LEGISLATION RELATED TO THE DEVELOPMENT OF A YOUTH APPRENTICESHIP PROGRAM:**

As highlighted above, the Partnership sees a real need to develop this program and we pledge our support and participation. Legislation currently necessary deals with the elimination of current barriers to the development of such a program.

3. **SUPPORT THE REALLOCATION OF THE LEARNING READINESS PROGRAM APPROPRIATION TO EXISTING EARLY CHILDHOOD PROGRAMS:**

The Subcommittee reviewed the legislation passed in 1991, establishing a new program targeted at all four-year-olds in the state. The Subcommittee, while praising the effort by the legislature to enhance early education, failed to find research supporting the targeting to four-year-olds. In addition, fiscal restraints dictate that we target early childhood programs to those most in need. We advocate that a portion of the FY94-95 Learning Readiness appropriation be instead allocated to the state's current menu of early childhood education and development programs: ECFE, Head Start, and Way to Grow.



4. **SUPPORT THE DEVELOPMENT OF A CHILDREN'S BUDGET THROUGH THE WORK OF THE GOVERNOR'S CHILDREN'S CABINET AND THE ACTION FOR CHILDREN COMMISSION:**

The Partnership views the work of the Action for Children Commission as central to the development of a sound and coordinated set of state policies and programs related to children and their families. We view this as critical to the development of readiness across the continuum. We support the development of a children's budget for the state and view any initial costs as investments toward future savings.

5. **SUPPORT AND PROMOTE BUSINESS PARTICIPATION IN THE GOVERNOR'S WORK-FAMILY AWARDS:**

We acknowledge the role that employment policies, both formal and informal, play in families' lives. We agree that we need to strive to find family-sensitive policies and practices that are beneficial to both the employer and the employee. The Work-Family Award will help in promoting healthy dialogue on this issue.

The Minnesota Business Partnership

Chairman, William A. Hodder, Donaldson Company, Inc.

President, Roger L. Hale, Tennant Company

Corporations represented and the Membership

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Alliant Techsystems Inc., TOBY G. WARSON
American Crystal Sugar, JOSEPH P. FAMALETTE
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TRANSFORMATION

What Minnesota
Business
Needs from
Education



A Report
of the
Academic
Agenda
Subcommittee

The Minnesota Business Partnership

December 1992
Updated July 1993



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JULY 1993 PROGRESS UPDATE

July 1, 1993

Citizens of Minnesota:

In December 1992, the Minnesota Business Partnership issued a report outlining the knowledge, skills, and attitudes necessary for successful employment. The report also made recommendations for the development of educational goals and the transformation of the management structure which supports learning. We based our recommendations on our own membership's experience and on a survey of Minnesota employers' expectations of new employees.

Since release of the report, the Partnership lobbied extensively at the Minnesota Legislature to achieve statutory implementation of our recommendations. We are very pleased that the Minnesota Legislature chose to accelerate the development of a results-oriented graduation rule and to support the expansion of the Partners for Quality project geared toward school system transformation. We believe these efforts signify a strong commitment to enhanced learning for Minnesota's youth.

We have reprinted the December 1992 report and added the following pages which summarize the highlights of these programs and key reforms from the legislation.

Dr. James J. Renier
Chair, Education Quality Task Force
Chairman of Executive Committee
Honeywell Inc.

Dr. James L. Reinertsen
Chair, Academic Agenda
Subcommittee
President & Chief Quality Officer
HeathSystem Minnesota



JULY 1993 PROGRESS UPDATE

KEY LEGISLATIVE ACTION RELATED TO TRANSFORMATION REPORT

\$10 million is appropriated to the Department of Education to accelerate development of the State Board of Education's high school graduation rule. The new graduation rule will be results-oriented, focusing on necessary knowledge and skills rather than the current list of required courses. Funding is to be used as follows:

to fund assessment and standards pilot sites

to broaden public understanding of the rule through local public meeting and focus groups, citizen forums, and general communication activities

to continue to develop curriculum frameworks

to support ongoing state-wide assessment efforts

to develop system performance standards.

The Partners for Quality Project (see page 16), a project geared at pairing businesses and learning sites to work on the application of Continuous Quality Improvement theory (see page 19), is expanded with funding available to increase program coverage to over 200 schools throughout the state.

Opportunities to pilot systems transformation are increased through the expansion and clarification of the charter school provision. The State Board of Education may now charter up to 20 schools state-wide (increased from 8), and may release the schools from mandates if provision is made for the measurement of learning outcomes. In addition, up to three school districts may apply to operate district schools under charter-type provisions. (see page 18)

Innovations, such as the Sci/Math^{MN} project which seeks to develop and promote high standards for math and science education, were supported and funded. (see page 18)



JULY 1993 PROGRESS UPDATE

SELECTED LEGISLATION RELATED TO TRANSFORMATION REPORT

In the spirit of the Transformation report's recommendations for process reform in the state's education system, the legislature adopted provisions encouraging coordination and continuous improvement; for example:

"(a) A five-year pilot project is established to permit up to three project participants selected by the commissioner of education to develop and implement substantial changes in a school's educational program and operational structure. (b) The purpose of the project is to identify innovative educational strategies that effectively improve public education . . ." [H.F. 350, Article 9, Section 49, subd. 1]

In the Transformation report, the Minnesota Business Partnership listed the need for public awareness as one of the strategies for transforming education. In the 1993 education finance bill, the legislature created a coalition to pursue this strategy:

"The coalition for educational reform and accountability is established to promote public understanding of and support for policies and practices that help Minnesota students attain world-class education outcomes and succeed in the 21st century." [H.F. 350, Article 1, Section 35, subd. 1]

Another new provision in the bill states the education system's "commitment to excellence" and articulates many of the principles underlying the Transformation report's recommendations:

The mission of public education in Minnesota, a system for lifelong learning, is to ensure individual academic achievement, an informed citizenry, and a highly productive work force. This system focuses on the learner, promotes and values diversity, provides participatory decision-making, ensures accountability, models democratic principles, creates and sustains a climate for change, provides personalized learning environments, encourages learners to reach their maximum potential, and integrates and coordinates human services for learners." [H.F. 350, Article 7, Section 1]



JULY 1993 PROGRESS UPDATE

SELECTED LEGISLATION, continued

Echoing the report's support for improved math and science skills, the legislature appropriated \$3,000,000 over two years "to meet requirements for a proposal to the National Science Foundation for a systemic initiative in mathematics and science." [H.F. 350, Article 7, Section 28, subd. 4]

The bill also appropriates funds to accelerate the development of high school graduation rules:

"The appropriation is to be used to fund assessment and standards pilot sites; to broaden public understanding of the rule through local public meeting and focus groups, citizens forums, and other general communication; to continue development of curriculum frameworks; for ongoing statewide assessment efforts; and to develop system performance standards." [H.F. 350, Article 7, Section 27]



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This report is one of three reports on education issued by the Minnesota Business Partnership in December 1992. The other two reports deal with education finance and readiness of students to both learn and work. Copies of all reports are available from the Partnership offices.

The Minnesota Business Partnership is an association of the Chief Executive Officers of 105 of the state's largest corporations. The Partnership was created in 1977 with the mission of promoting job creation. Our goal is to pursue public policy reforms that will attract new jobs to the state and allow us to retain the ones we have.

We pursue our mission while working cooperatively with Minnesota's public officials. In addition to education quality improvement, current Partnership focus areas include state fiscal policy, employment law, and health care.

For further information about the Partnership and its work, contact Tom Triplett, Executive Director, at (612) 370-0840.



Introduction

The Minnesota Business Partnership, in "An Education Agenda for Minnesota: The Challenge to Our Communities and Schools," sounded a call for change in Minnesota's public education system. As detailed in that report, we recognize that it does little good to bash teachers, school administrators, school boards, state legislatures, parents, and students in the process of improving schools.

And yet many Minnesota students' knowledge, skills and attitudes no longer meet the world-class standards of our international business competitors. 64% of Minnesota employers said that the level of education produced by our education system 10 years ago is no longer good enough for today's business standards. The time has come to recognize the significant opportunities and requirements for improvement in our public schools. This report calls for nothing less than the transformation of the system of education. Among other things, we must focus on empowerment of the human resources of education, process improvement, higher expectations for content, and measurement en route to the final product. Our intent with this document is to raise awareness, provoke discussion, and generate the interest in joint ventures which can assist with that improvement.

The role of schools and the sheer scope of functions assigned to them have changed dramatically in all of our communities. Technological innovations have created a demand for new skills, knowledge, and attitudes among all students. These changes have coincided with sweeping social changes in students' lives: single-parent and dual-income families, increased student employment, television, drugs and alcohol, and a strong emphasis on sports.

Underlying much of this social change is a fundamental shift in values -- a shift away from investing time, effort, and dollars now for a future return, toward living for the moment instead. This shift in values has had a profound impact both on parental involvement in the schools and on students' perception of the relevance of academic activities.

Yet our schools look like they did in the early 1900's. At the same time the values and student backgrounds changed dramatically, schools and the school systems did not. We concur with previous MBP reports that the unsatisfactory educational performance of our schools and inadequate learning by kids go far deeper and wider than the school structure alone.



Our teachers and school administrators have an impossible job. We have said to them:

"Take our kids, prepared or not, nourished or not, fatigued from work or athletic practice, groggy from watching six hours of television, who have never had parental role models of reading, serious conversation, or lifelong learning. Give these kids a world-class education in the three Rs, in schools beset by violence, disrespect, and apathy. By the way, you must also fulfill these 508 state-mandated tasks, or we will not give you any money. And oh, one more thing. You must do all of this on an academic calendar based on an agrarian economy, with only 180 days a year, instead of the 210 to 230 days your international competitors get. Good luck, and God bless!"

A vast gulf lies between the actual performance of U.S. schools and the public's perception of that performance. The fact that most U.S. parents think their children's schools are doing a good job, despite overwhelming evidence of mediocre performance, suggests that one of the first tasks facing us is to change this public perception. It will do little good to advocate our change strategies for the public schools when too many parents and communities think the system "ain't broke."

And what if there were widespread public clamor for improvements in the school systems? What strategies would we recommend? What does the Minnesota Business Partnership wish to see as a "product" of our educational system? What are we willing to do as businesses to help implement these strategies, so that we'll get what we're looking for from the schools?

These are central questions that have occupied the Academic Agenda Subcommittee for the past seven months. Our process and thinking is summarized as follows.



The Business Rationale

We began by inspecting our own perceptions of new employees and the skills they currently bring to the workplace. In this process we were helped by information we gathered in conjunction with the Employers Association, Inc. of Minnesota. In the spring of 1992, 351 Minnesota businesses completed a survey on their recent experiences. In this survey of both manufacturing and non-manufacturing work-sites from across the state of Minnesota, employers cited the importance of the knowledge, skills and attitudes highlighted in the expectations which follow. Among the data collected in the survey we see the importance of:

BASIC SKILLS

52 percent of employers in the Twin Cities believe today's job applicants lack adequate basic skills (reading, writing, math). Between 30 and 35 percent of employers in the Twin Cities and Greater Minnesota, in both manufacturing and non-manufacturing firms, stated that they rejected applicants most often because of a lack of basic skills.

TECHNICAL QUALIFICATIONS

In the Twin Cities, 90 percent of employers in manufacturing firms and 80 percent of employers in non-manufacturing firms agree that technical qualifications are more important now than they were ten years ago. Outstate, 87 percent of employers in manufacturing firms and 73 percent of employers in non-manufacturing firms believe technical qualifications are more important now.

Two-thirds of Minnesota employers believe today's workers need a strong background in technology to succeed.

PROBLEM SOLVING SKILLS

In the Twin Cities and Greater Minnesota, 90 percent of employers in both manufacturing and non-manufacturing firms believe today's work environment demands greater problem solving skills. 47 percent of employers in the Twin Cities believe today's job applicants lack the thinking skills (decision making, problem solving) adequate to meet this changed environment.

PERSONAL QUALITIES

In the Twin Cities and Greater Minnesota, 80 percent of employers in both manufacturing and non-manufacturing firms cited a trend toward team-oriented organization requiring multi-skilled workers. 90 percent of employers in both manufacturing and non-manufacturing firms believe this changed work environment demands greater flexibility than ten years ago.



Furthermore, 54 percent of employers in non-manufacturing firms and 43 percent of employers in manufacturing firms in the Twin Cities believe today's applicants lack the personal qualities (responsibility, honesty) necessary for today's work environment.

BASIC COMPETENCY TESTING

Among manufacturing firms in the Twin Cities and Greater Minnesota, 42 percent of employers test job applicants' math/computation skills and 35 percent test keyboard proficiency. Among non-manufacturing firms in the Twin Cities and Outstate, 50 percent test keyboard proficiency and 35 percent test computer operation proficiency.

SCHOOL COMPLETION

Two thirds of Twin Cities companies have no jobs for people who do not have high school diplomas; in Greater Minnesota, only half the companies accept applications from high school dropouts. Even companies that hire high school dropouts have only a small percentage of positions available for them.

Job applicants who have only a high school diploma are eligible for only half the positions offered by Minnesota companies. The remaining fifty percent of all Minnesota jobs require some post-secondary education or training.

STANDARDS

90 percent of Minnesota employers in both manufacturing and non-manufacturing companies would like graduates to be certified as meeting a minimum set of standards; more than ninety percent of the employers also said they would be more likely to hire applicants who had been certified.



The Expectations

Recognizing the importance of developing world class standards for our education system, the Academic Agenda Subcommittee has developed a set of basic expectations for employees. These expectations are predictors of successful employment and may serve as a base for the development of educational outcomes.

These expectations are simply a reflection of what current work environments dictate and may not constitute "education outcomes" themselves. While these expectations also impact individuals' ability to live productive lives as active employees, parents, and citizens, the scope of our expectations is limited to what employers cite as most critical to successful employment.

These expectations are the product of the Minnesota Business Partnership. In developing these expectations, we drew on the work of the U.S. Department of Labor's SCANS reports and the current outcome-based education initiative in Minnesota.

The Subcommittee spent considerable time prioritizing expectations, realizing that many skills rely on the attainment of other skills and that the relationships between skills are critical to the development of the whole person. In addition, prioritizing of skills allows the education system to focus resources and energies effectively when devising outcomes related to expectations. The expectations, therefore, are organized into two priority groups. In each of the priority groups, the expectations fall into three distinct sections:

I. Knowledge

II. Skills

III. Attitudes

It is clear to us that quality schools and students will meet or exceed all of the expectations implied in these sections. These priority rankings are not intended to limit the focus of education.



CORE EXPECTATIONS

At the center of the expectations are core expectations that every employee must possess to be a productive member of a successful work team. The expectations in this group are:

I. CORE KNOWLEDGE

COMMUNICATIONS

Critical to a productive work life, potential employees must be able to communicate their thoughts, ideas, information, and messages in both written and verbal form. Common forms of written communication required of employees include letters, directions, manuals, and reports. In addition employees must be able to communicate information through graphs and flow charts. Verbal communication skills require the communication of ideas and concepts to work teams, customers, and fellow employees. Employees should be able to communicate in languages other than English.

ARITHMETIC/MATHEMATICS

Employees are required to perform basic computations and solve mathematical problems by using a variety of mathematical techniques. Central to the work place are the use of measurement systems, algebraic processes, spatial and geometric relationships, and the use of probability and statistical processes.

READING

All employees must be able to read, understand and comprehend written material related to their job and their employment. Common reading material includes schedules, manuals, reports, contracts, graphs, and charts.

SCIENCE

Employees are required to understand basic physical, biological and chemical functions. Most importantly, employees must understand and use the scientific process of formulating and testing hypotheses and collecting data through observation and experimentation.

II. CORE SKILLS

MONITORING SKILLS

Employees must have the skills to check and redirect their own performance on the job. They must also use those same monitoring skills to monitor the performance of the systems in which and with which they work.



PROBLEM-SOLVING SKILLS

Effective employees are able to recognize problems, to determine both the cause and potential remedy, and to develop a plan to solve the problem.

DECISION-MAKING SKILLS

Employees must be able to determine and use both personal and job-relevant goals to make decisions. Employees should be able to determine alternatives within the constraints given, weigh and measure the risks associated with each alternative and make a quality decision based on that analysis.

INFORMATION SKILLS

Employees must know how to access and acquire information from a variety of sources, to determine relevant information for their task and use the information in their work processes. Employees must be able to organize and maintain information related to their work and their work product. Employees will know how to use technology to acquire information and will have the necessary information technology skills, such as keyboarding, to adequately use such information.

LEARNING SKILLS

Employees must be able to learn new tasks and apply new technology and knowledge through a variety of learning techniques. Employees are able to teach others new skills.

III. CORE ATTITUDES

DIVERSITY

All employees must be able to work with and enhance the work of their fellow employees; they must be able to work well with men and women from diverse backgrounds.

LISTENING

Employees must be able to receive, interpret and respond to verbal information from fellow employees, team members, and customers.

CUSTOMER ORIENTATION

Employees must be able to understand their relationship with customers and they must be able to work to meet or exceed those customers' expectations about performance and product. Central to this customer orientation is the attitude which seeks continuous quality improvement and is never content with the status quo of product or process.



TEAM WORK

Employees must be able to work on a team, develop their own work as well as the work of their team members, and promote team rather than individual success.

HONESTY

All employees must be honest and ethical; they must act with integrity and expect honesty and integrity from those with whom they work. Honest behavior requires the willingness to make alterations in behavior as well as the courage to question others' behavior.

SELF ESTEEM

Quality employees believe in their own self-worth and maintain a positive view of self and their connection with others.

ENHANCEMENT EXPECTATIONS

Residing outside the core expectations is a set of expectations which either are implied by a core specification or build on the knowledge, skills and attitudes identified by core expectations. These enhancement expectations include:

I. ENHANCEMENT KNOWLEDGE SYSTEMS

Quality employees know how systems both inside and outside of their employment work and have the ability to adapt systems to meet both their personal and their work needs. This systems understanding extends to technological, social, and organizational systems. Employees also understand the interrelationships of systems. An understanding of cultural, political and economic systems is critical to functioning as both an employee and a citizen.

ARTS

Employees have an understanding of the principles of art, design, and composition and can use those principles adequately in their work. Employees will understand the impact that all the arts have on understanding and the power the arts have in communicating messages.



LANGUAGE/GEOGRAPHY/HISTORY

Successful employees know and can use a language other than English and demonstrate an understanding of geography and other cultures. Employees should also be able to place events within an historical context and can draw connections between history and the present. The ability to use a language is to be able to communicate to do work--to discuss projects, do transactions, and work with fellow employees.

II. ENHANCEMENT SKILLS

TECHNOLOGY APPLICATION SKILLS

Today's employees have an understanding of the capabilities, workings and applications of current technology. They have the ability to choose task-appropriate technology and tools and can operate relevant equipment. They also have the ability to update their technology related skills and can grow with technology changes and advances.

REASONING SKILLS

Quality employees are able to use reasoning to determine underlying rules or principles which govern the relationships between two or more items. They are able to use these rules and principles in problem solving and are able to test the principles in similar situations.

NEGOTIATION SKILLS

Employees will have the skills necessary to negotiate agreements within their work environment. They should be able to find agreements in which various interests and desires are reconciled. They will be able to negotiate in relation to both resources and individuals.

FISCAL SKILLS

Employees should be able to handle the money related to their employment. This entails the ability to prepare and use budgets and fiscal forecasts as well as use sound accounting and record-keeping procedures. Employees should be able to use these fiscal management tools to monitor their progress and to develop future plans.

CREATIVE THINKING SKILLS

Quality employees are able to apply their creativity to the work place and generate new ideas relative to their work and their product. Creativity is a critical addition to decision making, negotiation, management, problem solving, and teamwork as well as product design and development.



SYSTEM DESIGN SKILLS

Employees should be able to use their knowledge of systems to both design new systems for their work as well as modify and enhance existing systems to improve system and work performance.

TIME MANAGEMENT SKILLS

Desired employees have the ability to manage their time efficiently through the use of schedules, goals and objectives, and proper activity selection. Employees need to be able to apply these time management tools to their own work as well as the work of others.

III. ENHANCEMENT ATTITUDES

RESPONSIBILITY

All employees are expected to demonstrate a high degree of perseverance toward their work goals and a significant, constant effort in their work. This responsibility will guide employees actions through all segments of their life. Responsible employees will meet their commitments and are accountable for their actions.

MANAGEMENT OF OTHERS

Employees should be able to guide the work of others who work with them. Employees should be able to assess others in terms of their skills relevant to potential tasks. They must be able to provide feedback to others on tasks. Employees should be able to critique fellow employees and assist with process improvement.

LEADERSHIP

Quality employees will be able and willing to provide leadership in the work setting. This leadership capacity includes taking initiative on projects and with individual relationships, assessing necessary courses of action, and providing direction for work.

MANAGEMENT OF SELF

Quality employees have a good concept of their abilities and their weaknesses. They are able to translate that self concept into challenging personal goals and are able to make necessary adjustments to meet those goals.

SOCIABILITY

Successful employees are able to relate to their fellow employees and their customers. Their interactions demonstrate understanding, friendliness, adaptability, empathy, and politeness.



Strategies For Transformation

Our findings and observations about the current and projected expectations for successful employment indicate the need for transformation of both the content and, perhaps more importantly, the process of education. The Academic Agenda Subcommittee recommends the following overall strategy for improvement.

1. **CREATE PUBLIC AWARENESS:** The Minnesota Business Partnership should continue to focus on creating an accurate community perception of Minnesota's schools' performance results. Specific actions might include:

- A. Continue the steady public barrage of articles and news stories about U.S. comparative performance.
- B. Recommend that high schools no longer report "the percentage of graduates who went to college," but instead "the percentage of graduates who went to college and did not require remedial training to do basic college work."

We have learned that over half the freshmen in some Minnesota community colleges require remedial math. Their community high schools, however, proudly claim "90 percent college-bound" rates, while the public remains unaware that these so-called high school graduates are "unfit for use," in Dr. Deming's product terms.

- C. Adopt and adhere to the employment expectations outlined in this report. By setting world-class standards for our new employees, rather than just accepting a high school diploma, we will stop enabling Minnesota communities to produce substandard products.

We have learned from multinational Minnesota-based employers that Minnesota schools produce, after two years of technical and community college, roughly the equivalent of what Singapore, Japan, and Taiwan schools produce by high school graduation. This productivity gap of two years represents an enormous drain on student time and tax dollars.

2. **AVOID FINGER-POINTING AND BLAME:** We are all part of the educational problem. All of us -- parents, students, teachers, administrators, employers, regulators, and legislators -- must participate in the solutions. Individually, we cannot pretend to have all the solutions and



then force those solutions on others. Collectively, however, we must take responsibility for change and transformation of the education system as a whole and our own roles within that system.

3. **ADOPT A COHERENT, TRANSFORMING THEORY OF MANAGEMENT FOR OUR SCHOOL SYSTEMS:** The teachers, administrators, and employers in this state must make an intensive effort to learn the body of theory, knowledge, and skills called Continuous Quality Improvement. This cannot be accomplished in a superficial, half-day seminar. It will require courageous leadership from the legislature, teacher unions, school boards, the governor, the private sector and the schools, particularly school administrators. Many educational leaders have told us that they know that radical change is needed but they will lose their jobs if they "tell it like it is." We will never make progress in this fear-based environment. We must support those educational leaders who have the courage to advocate for a quality transformation.

We are impressed with the power of the Minnesota Quality Award to provide healthy incentives to learn and apply quality principles. We have reviewed the Partners for Quality project of the Minnesota Academic Excellence Foundation, the Minnesota Council for Quality, and the Minnesota Higher Education Coordinating Board. MBP endorses and supports further expansion of this project. These projects are two good examples of the many ways school systems can move toward continuous improvement of their processes. If businesses and schools can learn and apply quality principles together, we can all benefit. The existence of healthy competition for quality awards assessed by trained examiners should act as an important accelerator of this transformation.

4. **IMPROVE THE WHOLE SYSTEM, NOT THE PARTS INDIVIDUALLY:** A coherent theory of management for education would allow us to examine the whole system -- including financing mechanisms, performance assessments, public reporting and accountability, mandated special interest issues, learning methods, the recruitment and retention of teachers, parental leadership, and student involvement -- and ensure we do not create conflicting incentives, fear, or turf issues that pit one part of the system against another and therefore sub-optimize the performance of the whole.



5. **FOCUS ON THE PROCESS, NOT JUST THE RESULT:** Other nations have not achieved educational superiority by designing better outcomes assessments. No process is made better solely by inspection of the outputs. The process must focus on and have a built-in expectation of continuous improvement.

Similarly, the process of teaching and learning must improve if educational outcomes are to improve. Therefore the following ideas must be central to any movement toward an outcome-based education system:

- A. All individuals involved in the education process, including students, must change their mind-set to embrace the notion that all students can and need to be academically successful and challenged. Without this fundamental change in attitude, the necessary changes in process will not occur. **Without change in the process of education, scant additional academic success will occur.**
- B. **Outcomes must be met through real learning** and there must be adequate demonstration of that learning. Too often outcomes are met by altering the completion date or are met at the expense of some other critical learning endeavor. The only way to ensure that measured outcomes are used to improve the system is to make sure that fear is driven out of the system and focus is placed on continuous improvement. Furthermore, the outcomes established must meet world-class standards and be validated by customers--employers and higher education--rather than merely validate today's local norms.

Measurement must be used to move the entire system toward "best practices." To the extent that measured outcomes are used to rank, reward, and punish schools, we predict that outcome-based education will lead to sub-optimization of the system. This sub-optimization will occur because of fear, data distortion, and the achievement of OBE-mandated results at the expense of other important aspects of education. We have seen examples of this sub-optimization in business. This limitation on the use of OBE should not indicate that there is not responsibility to alter the process of education if less-than-satisfactory results are achieved.



- C. The **"partnership to educate youth" must be expanded** beyond the confines of the school. Real connections between students, parents, service providers and agencies, community members, employers, and educators must be created and maintained. All players must constantly focus on improving the level and quality of care and concern provided to youth and youth must be called upon in the crafting of solutions. Equally important, all players in the partnership of youth must be willing to transform their own programs to assist with the full development of children. No single actor can do this alone.
- D. **Outcomes must not be seen as an end goal** but rather a starting place. Any system improvement must seek to improve the entire continuum and not just the end product. Learning and academic achievement must be enhanced for all students and all students should be continually challenged by our educational system. Continuous improvement must be seen as on-going and over time and the target must always be world-class standards.



Specific Responsibilities for Change: What Business Can Do to Help

The Academic Agenda Subcommittee recognizes that business can and needs to be helpful in the process to transform education. As businesses, we have begun and progressed through our own individual transformations, increasing productivity and producing higher quality products. Through this we have learned about the power of continuous quality improvement. We have also learned about the transformation process itself. That knowledge can be useful to any system undergoing a similar transformation.

The following are suggestions for collective and individual action for the business community to further improvement in educational outcomes.

1. **ENDORSE PHASE II OF THE PARTNERS FOR QUALITY EDUCATION INITIATIVE:** Phase II of the project will expand the pilot to an additional 200 K-12 schools by 1995. Business should support this expansion by considering financial and in-kind support, providing technical transfer to school teams, and by adopting a pilot site for collaborative continuous improvement efforts.
2. **ENDORSE CREATION OF AN EDUCATION CATEGORY FOR THE MINNESOTA QUALITY AWARD:** Business should support recognition for tiered levels of achievement to encourage all K-12 participants on their quality journey. In addition, business should encourage individuals to become trained examiners for the Minnesota Quality Award and support the Baldrige comprehensive management stems approach to continuous improvement as an "umbrella" for education reform efforts.
3. **ASSIST EDUCATORS IN BEGINNING THE QUALITY JOURNEY:** Individual businesses can assist school systems in applying relevant quality theories and in differentiating the Baldrige approach and its relationship to other quality philosophies and techniques.
4. **EXPAND DISCUSSION OF "WHO IS THE CUSTOMER":** This discussion will be most productive with participants from both business and education. Central topics for the discussion should be a debate of the role of the student as product (demonstrating knowledge, skills and attitudes required for advancement), worker and customer. The discussion should focus on employers and higher education as customer, rather than the welfare or criminal justice systems.
5. **DEFINE A PROCESS TO LINK/VALIDATE WORLD CLASS OUTCOMES TO CUSTOMER REQUIREMENTS:** The most effective method to do this is to support the Partners for Quality in their work to define this process. Business can be helpful to that initiative by assisting



with the benchmarking of outcomes to ensure that world class standards are met or exceeded. This process should provide for continuous improvements to ensure standards continue to rise with global requirements. It should also ensure that outcome measurements address the "expectations" identified by the Academic Agenda Subcommittee of the Minnesota Business Partnership.

6. **ARTICULATE THE CHANGING REQUIREMENTS FOR MINNESOTA'S WORKFORCE IN TERMS OF THE COMPANY'S EXPERIENCE:** This would include evaluating new hires by reviewing their transcripts. For student employees, businesses should review transcripts for continuous attainment/improvement in academic performance. This topic is the subject of the "Guidelines for Employers of Youth" contained in the December 1992 report of the Readiness Subcommittee of the Partnership. In addition businesses should provide information for their own employees about the changing needs for the workforce and ensure employees recognize requirements for their own technical vitality and for that of their children.
7. **PARTICIPATE IN DEFINING KEY PROCESSES COMMON ACROSS EDUCATION SYSTEMS:** Businesses should encourage benchmarking to enable schools to determine best practices and to focus on continuous improvements. These common processes might include curriculum, instruction, student and faculty recruitment/retention/development, graduation outcomes, and placement.
Business can assist with this by identifying other "customer" groups who can contribute to world-class benchmarks for student outcomes and by endorsing the process of developing Minnesota Milestone measurements and to use those measurements to continuously improve learning across Minnesota.
8. **IMPLEMENT A CUSTOMER SATISFACTION SURVEY WITH FEEDBACK TO MINNESOTA SCHOOLS:** Businesses should assess the success of new employees on their demonstration of the knowledge, skills and attitudes cited in The Expectations above. This could be done by conducting a survey every two years and developing a model for further customer feedback to education. Business could also advocate for similar surveys to assess success of incoming freshman across higher education systems for success in "on grade" coursework, remedial requirements and completion of first year.



9. **REVIEW BUSINESS EDUCATION PARTNERSHIPS:** Businesses should discuss with each of their business/education partnerships the role continuous quality improvement might play in the effectiveness of the partnership's activities.
10. **DISCUSS PARTICIPATION IN SYSTEMIC QUALITY EFFORTS WITH SCHOOL ADMINISTRATION:** Businesses can start the process at a local level by beginning discussions which demonstrate the power of systemic quality transformation with local school administrators.
11. **DISCUSS THE "EXPECTATIONS" AND THE CRITERIA FOR THE QUALITY AWARD:** Through discussions with local schools, Minnesota businesses should highlight both the "Expectations" created by the Academic Agenda committee of the MBP and the criteria for quality for the proposed education category for the Minnesota Quality Award. In doing so, they should also understand their local school's baseline data relevant to these two documents.
12. **INFUSE CONTINUOUS QUALITY IMPROVEMENT IDEAS INTO OTHER EDUCATION PROGRAMS:** Business, through its other activities related to education, should include continuous quality improvement ideas in those activities. This would include programs such as MINNESOTA 2000, Math/Sci^{MN}, Minnesota Milestones, and Action for Children.
13. **BE SUPPORTIVE OF INNOVATIVE, NON-TRADITIONAL SCHOOLS:** Business should support the development of alternative education programs which offer opportunities to pilot the transformational ideas offered in this report. Examples include: alternative learning centers, contract schools, charter schools, and business education partnerships with non-traditional schools. The important consideration is that these alternative programs be accountable for the meeting of outcomes.
14. **BE AN EFFECTIVE EMPLOYER OF STUDENTS:** Businesses who already employ students should provide quality work experiences consistent with the recommendations of the MBP Readiness Subcommittee December 1992 report. All employers should consider offering one or more youth apprenticeships or other intensive experiences that provide work-based learning, assist with school-to-work transitions, and provide additional feedback to school systems.



Glossary

Imbedded in this report are terms which are central to the understanding of the theory of Continuous Quality Improvement. Below are general definitions of those terms.

Benchmarking - the process of measuring progress to determine best practices.

Baseline data - data collected, related to the key processes, which represents the current level of quality or the level of quality at the beginning of measurement and from which progress can be mapped over time and best practices can be determined.

Customer - the receiver of an output of a process. A customer could be a person, a department, a company, etc.

CQI - Continuous Quality Improvement - a system of management which aligns all systems and processes toward a common production goal. The process of CQI usually consists of four points -- Plan, Do, Check, Act. These are most often visualized as four points linked by quarter circles.

Optimization - the state in which all processes in a system are made as perfect, effective, or functional as possible for purposes of achieving the system's aims. Optimization of a system is not achieved through optimization of the processes individually. If a system is optimized, not all of the processes of that system will be optimized. Conversely, if all of the processes of a system are optimized, the system will not be optimized and will not reach its full aims.

Outcome - the degree to which outputs meet the needs and expectations of customers. Customers judge the outputs of a process, and that linkage of customer values and process outputs is called an outcome.

Process - a series of actions that repeatedly come together to transform inputs into outputs. Every process has three parts -- inputs, actions, and outputs -- and every process has one or more suppliers and one or more customers. Process outputs, when judged by customers, are called outcomes.

Quality Definition - achieving quality means the continuous improvement of services to meet the needs and expectations of the customer.



Sub-optimization - the state in which some of the processes in a system are as perfect, effective, or functional as possible but achievement of that level of perfection in some processes has precluded the system itself to achieve optimal level of perfection.

System - a network of processes that interact to form a higher level of output.

Transformation - a major organizational change from the present state to a new/preferred state in which the quality improvement process flourishes. The primary steps involved in moving and organization through a transformation are: primary state, unfreezing, transition state, refreezing, new/preferred state.

World-class standards - the level of achievement indicated by the highest accomplishment in the world. To be relevant, standards must be set in conjunction with and be validated by customer expectations.

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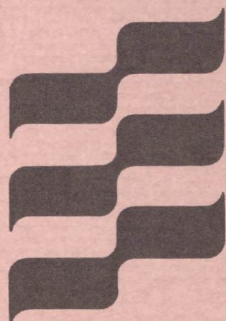
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BUSINESS AND EDUCATION:

A Necessary Partnership

A Catalogue of Minnesota Business
Partnership Member Support of Early Childhood
and K-12 Education in Minnesota

A Report of
the
Minnesota Business
Partnership



September
1991



Minnesota Business Partnership Education Quality Task Force

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The Minnesota Business Partnership is an association of the Chief Executive Officers of 96 of Minnesota's largest corporations. The Partnership was created in 1977, and its mission is to promote a healthy economic and social environment for all Minnesotans. Our goal is to create an environment that will attract quality jobs to Minnesota and that will permit us to keep the ones we already have.

In addition to education quality improvement, Partnership goals include: providing a favorable tax and spending climate for Minnesota government, controlling government-imposed costs on the workplace, promoting broad access to a basic level of health care for all Minnesotans, reducing the costs of civil litigation to Minnesota society, and helping Minnesota state government to become more efficient and productive in its operations.

For further information about the Partnership and its work, contact Tom Triplett, Executive Director, at (612) 370-0840.

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Acknowledgments

The Partnership gratefully acknowledges the assistance provided by the MBP member company staff persons who participated in the survey and who worked with MBP staff in the preparation of this document. Special thanks also go to school and educational organization leaders from around the state who contributed vital information about their programs.

Paula Prah, Director of Education Policy for the Partnership, served as the principal author of this report. Questions, comments and requests for additional information about the projects summarized in this report can be referred to Ms. Prah or directly to the MBP member companies.

Background

Quality education is vital to a strong nation. Education is the backbone of competitive success in an increasingly service and technology oriented economy; it forms the strength, fabric, and color of our communities.

Education—quality education for all our citizens—has historically been the hallmark of American society and the fuel for our economic engine. As that engine is re-tooled periodically to reflect changes in competitive forces, so too must our education system be re-tooled.

Minnesota has been blessed with continual rejuvenation of our education system. This constant improvement has kept us among the nation's top performing education systems. The indicators of our education achievement substantiate our success; Minnesota students outperform students in other states on most every objective measure.

Creative leadership for education improvement flows from many sectors—state and local elected officials, education leaders, business men and women, and committed citizens. This leadership is moving us to the national forefront on developing education which is truly outcome-based. It is moving us forward on the co-location of public services within schools. Finally, our "charter school" program provides us with another first in providing "choice" within public education for our citizens.

The Minnesota Business Partnership is proud to have been a part of education improvement in our state. Our Education Quality Task Force, organized in the early 1980's, led the campaign to promote excellence in education through the introduction of market structures in our school systems. With the full implementation of choice programs in our public schools in 1990, the Partnership focused on the remaining barriers to quality and innovation. Our 1991 report, "An Education Agenda for Minnesota: The Challenge to our Communities and Schools," identified key areas still in need of change and isolated a major barrier—the lack of learning readiness in many students. The report called for all segments of our communities, including businesses, to work together on a massive joint effort to resolve our remaining problems.

INTRODUCTION

The Minnesota Business Partnership is doing more than simply calling for increased business support of our schools. In cooperation with schools throughout the state, our member companies have initiated more than 125 separate programs intended to apply corporate resources to school improvement.

We believe, quite simply, that collaboration, sparked with a healthy dose of innovation and ingenuity, is the key to an education system that is responsive to the needs of society. We recognize business' role as a community member and a catalyst toward creative change. We want to be a constructive addition.



"Collaboration, sparked with a healthy dose of innovation and ingenuity, is the key to an education system that is responsive to the needs of society."

"Of the 96 members of the Minnesota Business Partnership, 85 have education support programs of some type."

The Minneapolis Public School Academy, a partnership between General Mills and Bethune School, strives to improve student performance by using commonly accepted improvement strategies: smaller class size, expanded teacher-parent communication and shared decision making.

We believe that every Minnesota business should directly assist in support of local schools.

There is no magic formula for successful school-business partnerships, but there are models that might prove useful. This report was prepared to suggest some of those models drawn from actual projects by Partnership companies.

By way of specific examples of on-going programs, and generalizations drawn from the more successful of these programs, this report seeks to assist Minnesota businesses and schools in developing partnership opportunities. We explore the wide range of collaboration occurring between Minnesota Business Partnership member corporations and the public education enterprise in Minnesota.

Of the 96 members of the Minnesota Business Partnership, 85 have education support programs of some type. These programs represent over \$20 million in direct annual contributions and over 4000 volunteers who contribute time, energy and excitement annually. A full one-third of the MBP membership has one or more established partnerships with individual schools.

We do not claim that all of these projects are totally successful; some probably need more development. In addition, we are sensitive to the fact that most of these partnerships tend to involve schools in the metro area where most of our member companies have their headquarters. It is our goal to develop more partnerships in Greater Minnesota and to encourage local businesses to do the same.

The following summaries cannot do justice to the depth of ingenuity or the strength of the individual relationships involved. We cannot emphasize enough the importance of people to the success of these partnerships. The finest plans will not work without the finest people working to implement them.

We have also identified five other critical components to successful partnerships:

- ONE) The climates within education and business differ. Often potential programs and connections fail to get off the ground simply because the differences frustrate both sides. An initial acknowledgement that the beginning of any involvement may be slow is necessary. Schools are often wary of business support—especially if it might disappear as quickly as it appeared. Businesses forget that education is a slow and cumulative process with few measures of change. Successful partnerships simply commit to some collaboration and let the evolving relationship dictate the particular elements.
- TWO) Business involvement is the strongest and most effective when it is focused along with the business' overall corporate giving strategy and general business goals. It is easier to make a long term commitment to programs and partnerships which have a direct correlation with the product or service of the business. In addition, such a focus hones the sense of mutual benefit.
- THREE) Both businesses and schools need to define parameters for the involvement. This is crucial in three areas: the resources available, the control and decision-making structures for the collaboration, and the expected outcomes. A sense of parity is critical.
- FOUR) Both education groups and businesses need to seek greater, systemic change rather than maintaining the status quo. Systemic change can happen in big ways in small venues and it is often small, single school ventures which pave the way for larger state-wide change. Collaborators need to find ways to chronicle their progress and paths. They also need to devote time to the potential replication of their efforts.
- FIVE) Evaluations are necessary. Too often this step is skipped, leaving disintegrating goals in the place of an evaluation. Evaluations between the collaborating parties need to occur for the program itself. Each group needs to individually evaluate their participation within the context of their situation.

"We believe that every Minnesota business should directly assist in support of local schools."

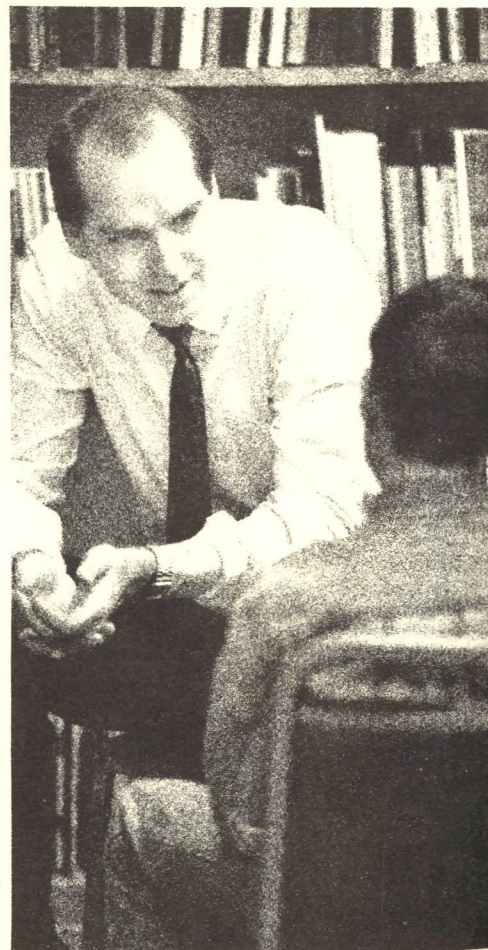
One-on-one connections are an important aspect of the partnership between Minnegasco and Washburn High School.



The following sections describing various kinds of support demonstrate the importance and effects of these five critical areas. The programs described vary greatly and are limited to those programs which affect early childhood and K-12 education.

Many corporations have additional programs which support critical needs in post-secondary and community education. These programs range from substantial scholarship support to adult literacy programs, all of which fall out of the scope of this report but speak to an even greater commitment to education than the one described here.

Viewed collectively, the descriptions in this report paint a picture of significant attention and creative community commitment to public education in Minnesota. Individually, these descriptions provide other businesses with a wealth of suggestions and examples of how change occurs at the local level.



BUSINESS-SCHOOL PARTNERSHIPS

Businesses throughout Minnesota have been active in education for many years. The 1980's, however, proved to be a growth period for corporate involvement in education and, in particular, corporate connections with individual schools. Many of these "partnerships" grew out of a desire to make a tangible, visible difference in schools, education and the lives of children. Often bolstered by employee enthusiasm and volunteer commitment, partnerships provide a considerable focus and concentration for corporate support. Instead of simply augmenting what tax dollars they already provide, corporations—and individuals within them—can help meet real school needs and participate in meaningful change. More importantly, partnerships break the barriers between education and business, schools and companies and between work and learning.

No one story captures the varied beginnings of the business-school partnerships described below. Some came from informal conversations—about mutual needs and potential resources—between corporate and education leaders. Some are the product of formal and direct cultivation by either a school or a business. Chambers of commerce in many cities across the nation now promote partnerships and often facilitate initial linkages.

"Bolstered by employee enthusiasm and volunteer commitment, partnerships provide a considerable focus and concentration for corporate support."

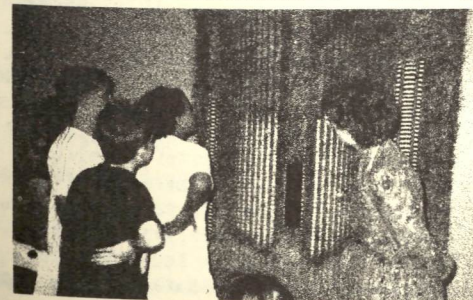
Regardless of the beginnings, successful partnerships are usually the product of careful and deliberate planning. Often initial expectations change and are transformed to fit the realities presented by both parties. Strong partnerships place heavy consideration on the planning and governance structure of the linkage—typically through the formation of a committee of equal representation between the two. Establishing specific goals, projects, and areas of focus often help to corral volunteers and insure meaningful collaboration. Annual evaluations are necessary to keep partnerships on track and, most importantly, to provide important data to maintain focus on change and innovation.

Roughly one third of the Minnesota Business Partnership member corporations have direct partnerships with schools. The partnerships, described below, demonstrate significant breadth in design of models of collaboration. Organized in categories based on original intent of the business-school partnership, many of these partnerships embody the goals of all three categories.

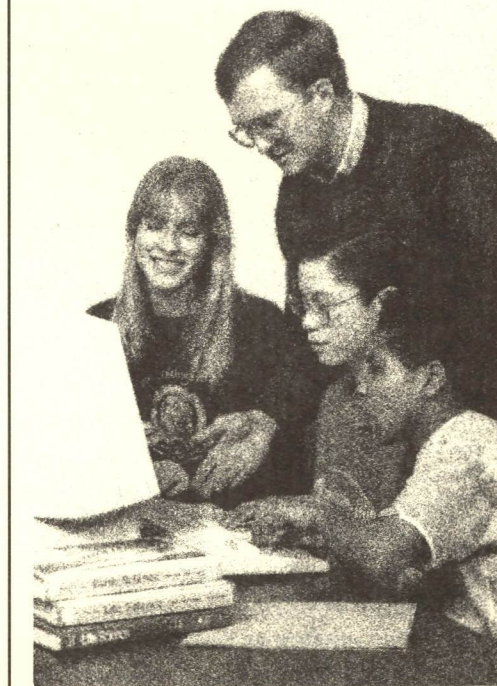
Attention from corporate volunteers is the focus of the H.B. Fuller/Murray Magnet Junior High partnership.



Developing skills for the future, like interviewing skills, is important for students. The Highland Senior High/Minnesota Mutual partnership program holds mock interviews to demonstrate the right—and wrong—ways to interview.



A tour through the corporate art collection, including a display of students' art work, was a part of the business-education partnership between Chiron Middle School and Piper, Jaffray & Hopwood.



A. GENERAL ASSISTANCE & VOLUNTEER FOCUS

Coopers & Lybrand

The partnership between Coopers & Lybrand and Minneapolis North High School began in 1991. The initial plan called for a limited partnership with a focus on the attainment of basic education skills and math skills in particular. Individual employees from Coopers & Lybrand are paired with designated at-risk students. The goal of these informal mentor relationships is to provide students with a consistent adult role model and to begin to make connections between school and work.

Grand Metropolitan/Pillsbury

Pillsbury's Employee Volunteer Program became interested in 1990 in a school partnership and built a connection with Wilder Elementary School in Minneapolis. The Employees Volunteer Program offers intense volunteer time to the various projects in which they participate. At Wilder, these volunteers are available for a wide variety of projects; many participate in tutoring of individual students and act as classroom aides on a regular basis.

Minnesota Mutual Life Insurance

Initiated through the St. Paul Area Chamber of Commerce, Minnesota Mutual began its partnership with Highland Park Secondary Complex (St. Paul) in 1989. The project is managed through a committee consisting of three teachers, the school principal and a company representative. The partnership provides a stipend for the teachers who participate in the development of partnership activities. The partnership has a broad focus with activities in five main areas: 1) classroom volunteers, 2) job and skill development, 3) stress management for staff, 4) chemical abuse, and 5) communication skill development. Minnesota Mutual's first interaction with the school was through a stress management workshop for teachers and staff. This provided a good foundation for relationships with the staff as well as provided a service not readily available in school staff development programs. This partnership is a model for basic ingenuity. The partnership committee's creativity resulted in an easy and effective communications skill program. In this project Highland English students were paired with Minnesota Mutual employees for a "pen-pal" business letter program. Throughout the semester students and corporate personnel corresponded about various topics and fine tuned their letter writing and communication skills.

Northern States Power

NSP has two partnerships—one in St. Paul with St. Paul Central High School and one in Minneapolis with Sanford Junior High School. Both partnerships began through the respective cities' chambers of commerce. The St. Paul Central project began in 1987 and the Sanford Junior High program began in 1989. Both partnerships focus on mentoring and tutoring. A particular focus is on work skills and school-to-work transition—especially for at-risk students. Many students are offered summer jobs through the partnerships. In addition, students are given priority status for summer science camps. NSP provides speakers and plant tours as well as teacher training programs at both sites. The Central partnership is governed by a task force which meets monthly while the Sanford partnership works with an executive committee of teachers and administrators.

H.B. Fuller Company

The partnership between H.B. Fuller and Murray

"Regardless of the beginnings, successful partnerships are usually the product of careful and deliberate planning."

Close interaction between students, their teachers, counselors and parents is the heart of the Mini School, part of the business-education partnership between NSP and Sanford Junior High School in Minneapolis.



Magnet Junior High School, in St. Paul, began its 12th year in the fall of 1991. One of the initial St. Paul Area Chamber of Commerce programs, this partnership places a heavy focus on one-on-one attention through a tutor program linking H.B. Fuller staff to both students and classrooms. Additionally, the company provides extracurricular and lab equipment and assists with PTA-sponsored events.

Dain Bosworth Inc.

Dain Bosworth's Volunteer Involvement Program provided the initial impetus for the partnership with Anwatin Junior High in Minneapolis. The partnership which is directed by a steering committee of equal representation between the corporation and the school began in the fall of the 1989-90 school year. The program is centered around 6 key projects: 1) academic support, 2) student development, 3) teacher and staff development, 4) marketing and PR, 5) supply and equipment needs, and 6) athletic and recreational activities. A subcommittee orchestrates the activities in each of the project areas; each subcommittee is co-chaired by both an Anwatin and a Dain Bosworth staff person. In addition to the six areas, Dain Bosworth also participates in a mini-grant program providing support for teachers and special projects as well as the donation of excess and used supplies and equipment for use at the school.

TCF Bank

Through the leadership of its CEO who had seen a similar program in another state, Twin Cities Federal linked forces with Minneapolis' Patrick Henry High during the 1988-1989 school year. The program began with a core group of teachers who, along with TCF staff, developed a roster of 10 projects for the partnership. Committees developed around each project are co-chaired by a TCF staff person and a Patrick Henry staff person. The Partnership hired a consultant which allowed for efficient and consistent information sharing between committees. The development of ten key projects provided focus and gave each group a feeling of accomplishment. In addition to work on committee projects, TCF participated in other activities: 1) a basketball program, 2) a math contest, 3) a choir project, 4) a teacher workshop on effective discipline, 5) a student trip to Washington, D.C., 6) teacher conference attendance, 7) guest speakers, and 8) an Anti-drug project. One key aspect of the partnership is to look at school-to-work transition and work readiness issues. TCF developed a teller training program for Patrick Henry students, many of whom secured summer and permanent employment through the program.

Minnegasco/Arkla Inc.

Minnegasco developed its partnership with Minneapolis Washburn High School in 1990. The employee involvement committee of Minnegasco wanted to expand their involvement in education and thought that a school partnership held the most potential. The focus for the partnership is divided into five main areas: 1) a mentor program, 2) a mini-grant program to enhance learning climate in classroom, 3) a creative writing contest (which includes the production of a final publication), 4) a scholarship & award program for students and teachers, and 5) a program to foster appreciation of the arts. The work of the partnership is guided by an advisory committee who meet quarterly to review progress and evaluate the program. When possible, the partnership attempts to include students from Minneapolis Ramsey Junior High School to make earlier connections with students and to develop a continuum of mentor relationships.

Piper, Jaffray & Hopwood

New in the 1990-91 school year was the partnership between Minneapolis Chiron Middle School and Piper Jaffray & Hopwood. The company's interest in education is growing, fueled by an employee survey on volunteer interests. A full one-third of the Piper, Jaffray & Hopwood employees surveyed listed education as a top priority. The partnership with Chiron is broad-based, assisting with projects as determined by both a corporate committee and school personnel. Piper Jaffray and Hopwood sponsors a Stock Market Game for students in many schools and held a special recognition ceremony for students who participated at Chiron. Additional projects include: training and recognition for teachers and staff, production training for students interested in communications, a book fair to build the Chiron library, and a school dance.

Robins, Kaplan, Miller

The law firm of Robins, Kaplan, Miller has a very focused partnership with Andersen Contemporary Middle School in Minneapolis. The goal of this partnership is to provide long-term role models for students of color. Designated attorneys work with individual classrooms and usually specific students who are in need of special attention. Each attorney works with a classroom on a weekly basis focusing on the development of a connection between school and employment, as well as tutoring individual students.

Lutheran Brotherhood

Lutheran Brotherhood has an established partnership with Folwell Junior High School in Minneapolis. The primary focus of their interaction with the school is on resource sharing and strengthening the sense of community within the school. Lutheran Brotherhood provides role models and tutors for students. Of particular interest are issues related to work readiness. The partnership sponsors activities which promote necessary "learner outcomes" for the work world and which provide a link between education and employment.

Ecolab Inc.

Ecolab's partnership with the Humboldt Secondary Complex in St. Paul has been ongoing since 1986. It was developed by both Ecolab and Humboldt employees initially, and currently a committee directs the activities of the partnership. Three initial objectives were developed for the program: 1) communication between education and business, 2) sharing of resources, 3) and preparation of students for school-work transition. A long list of projects have emanated from those objectives and the partnership has been recognized in multiple award programs. Current projects include:

- Career & Job Shadowing
- Speakers Bureau
- Communications project including a literary magazine
- International Studies program which links aspects of Ecolab's international business with Humboldt's world language teachers
- Teambuilding projects for staff
- Business education project linking curriculum to real world examples
- Science Project Club including a science club and research applications study at Ecolab.

Dayton Hudson Corporation

Dayton's partnership is between Dayton's Retirees in Volunteer Enterprise (DRIVE) program, current Dayton's employees and Loring Elementary School in Minneapolis. Initiated in 1989 by Loring Building

"Partnerships break the barriers between education and business, schools and companies and between work and learning."

Students at Bethune Elementary School in Minneapolis participate, play and build relationships with U S West volunteers.



Advisory Council, activities began in the fall of 1989. The program focuses on providing volunteers to classrooms, as well as out-of-school "special friends" and mentors. Often, students are paired with a particular volunteer to develop a long-term mentor relationship. Volunteers also help with special events (both financial and personal assistance); clothing donations, tutoring, library and classroom resource donations, and art appreciation workshops. The program is overseen by a group consisting of DRIVE members, Brookdale Dayton's employees and a team of teachers from the school.

General Mills, Inc.

The Anderson Open School project with General Mills, Inc. began with the 1990-91 school year. Initial focus areas include 1) student attendance—particularly students with high needs, 2) development of positive role models for students, and 3) connecting General Mills, Inc. employees with an inner-city school. The intent is to use human resources rather than financial resources to forge a strong partnership. The partnership began through a relationship between the principal and General Mills and is guided by an advisory council of the principal, teachers and GM employees. Two employee volunteers served on the group with Anderson staff which worked on attendance goals and issues. Significant positive change in student attendance at the school occurred in the first year which helped bolster the commitment to the partnership.

Fairview Hospital and Health Care Services

Fairview Hospitals has a partnership with the Edina School District, working on enhancement of work readiness of students. The "SKILLS 2000" program attempts to find relevant work experience and internships for students.

IDS Financial Services

IDS Financial Services is linked with both Edison and Roosevelt High Schools in Minneapolis. Connected with the Academies of Finance in both schools, IDS supports programs on finance and economic education. IDS provides speakers and materials for the programs. An additional Academy of Finance will open at Minneapolis Southwest High School in the fall of 1991.

Hubbard Broadcasting

Hubbard Broadcasting has two partnerships—one with the Stillwater School District and the other with Cherokee Heights Elementary School in St. Paul. The program with Stillwater is fairly open with specific projects changing from year to year. The Cherokee Heights partnership has a communications focus with students interacting with personnel from KSTP Radio and Television.

Jostens, Inc.

Jostens linked with South High School in Minneapolis during the 1990-91 school year. The partnership, which is with Jostens School Products Group, focuses on career development for students and also on cultural diversity projects in the school.

U S West Communications

During the 1990-91 school year, Bethune Elementary School in Minneapolis and U S West Communications developed a partnership for early grades. The partnership is aimed at improving the students' chances for academic success. Program components include a mentoring project and incentives programs designed to build positive self esteem for students kindergarten through third grade.



B. SPECIFIC CURRICULUM FOCUS

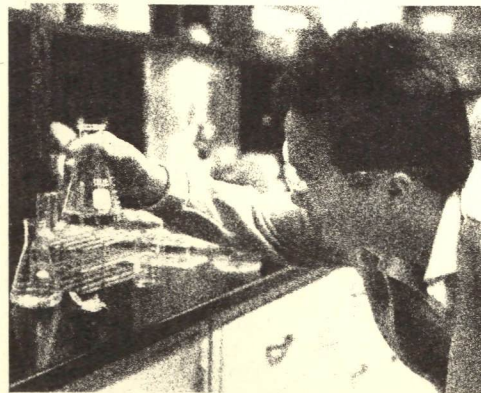
Cray Research, Inc.

Cray Research has two partnerships, each geared toward math and science curriculums. Both of Cray's partnerships—with Willard Elementary School in Minneapolis and with Saturn School in St. Paul—began in 1989. Both schools are math and science magnet schools for elementary students. Cray's key focus revolves around two areas: 1) to supplement the district's teacher support and staff development activities, and 2) to provide volunteers and resources. Those volunteers serve as classroom aides, technical experts, and science career role models—especially for females and persons of color. Projects vary yearly but focus is on programs which combine fun and science and which link elementary science skills with real world applications. One such program is "Duckie Days" at Willard, where Cray personnel and Willard students participate in math and science-oriented activities. Three levels of direction exist for the partnerships: 1) strategic planning with principal, 2) senior staff council for curriculum & staff development, and 3) a planning council.

Unisys

1990-91 was the 6th consecutive year for the partnership between Como Park High School in St. Paul and the Unisys Corporation. The major focus is on math and science enhancement within the school curriculum and encouragement of achievement and interest in math and science. The partnership is governed by a coordinating committee of faculty, Unisys employees and a partnership coordinator from both the school and Unisys. Unisys employees also participate in the site-based management team of the school. Projects for the partnership vary with each year. Annual projects include: "shadow" experiences for high school students interested in science careers, awards for student contests, hosting parent open houses, and providing professionals for school presentations. Unisys evaluates its participation annually and the partnership coordinating committee also conducts an annual review of partnership activities.

Unisys also has a partnership with three school districts in northern Dakota County. This partnership with Burnsville, Rosemount/Apple Valley/Eagan and West St. Paul districts is coordinated through the Northern Dakota Counties Chambers of Commerce. Unisys participates in the resource bureau and provides classroom speakers, advisory support, curriculum assistance and volunteer support to the three districts.



As part of the partnership between Ecolab and the Humboldt Secondary Complex in St. Paul, students study with scientists at Ecolab.

"Education is the backbone of competitive success in an increasingly service and technology oriented economy; it forms the strength, fabric, and color of our communities."

"Quality education is vital to a strong nation."

Norwest Corporation

A unique partnership began in the 1989-90 school year linking Norwest Banks, Franklin Junior High and Hall Montessori School. This partnership with the two Minneapolis schools focuses on tutoring. Franklin students act as tutors for Hall elementary students in math and reading. Coordinated by two teachers, the program relies on student participation. 35 potential tutors applied for the 7 spots and participated in an interview process. Tutors spent 1 hour each day at Hall working with classroom teachers and identified students. Additionally, students did bookkeeping for the partnership (payment of tutors, budget, etc.) and coordinated tutor schedules. In the partnership's second year the number of tutors was increased by pairing tutors of varying skill levels. Tutors are paid for half of their hours and volunteer the other time. Tutors were given course credit for their experience in the second year. A recognition ceremony concludes each year.

IBM and Mayo Foundation

This joint partnership with IBM, Mayo Foundation and Rochester area schools began in January 1991. The two main goals of the project are to promote improved performance and participation in math and science and increased interest in math and science careers. The partnership is unique in its initial agreement and its development of a working partnership board. The board formally approves all activities and requires clear definition of the potential outcomes of each activity. Projects attempt to augment classroom teaching with concrete, practical, "real world" examples of science & math in action. Both Mayo and IBM bring state of the art technology and math/science expertise to students and teachers as well as a clear communication of skills and competencies required for math/science careers. The partnership recognizes the national objectives held in the Education Act of 1990, which promotes math and science education as crucial to the U.S. quality of life and standard of living. Programs to date include mentorships, teacher training, speakers at schools, and teacher improvement programs.

Honeywell Inc.

The partnership between Honeywell and Minneapolis North High School is one of the oldest business-school partnerships in the city. Beginning in 1981 with the launching of the Summatech math/science magnet concept, Honeywell became active, participating in the development of the model and curriculum. Honeywell participates on an Advisory Board along with school staff, parents, students, and teachers. Programs include scholarships for students, Honeywell site field trips, mentor lunches and visits, and mentorship class. Honeywell assisted in the writing of a successful National Science Foundation computer system grant which was matched by Honeywell.

Honeywell also has two additional partnerships. The first is with Coon Rapids Senior High. This partnership focuses on Performance Management Training and links classroom learning to real world applications. The second partnership is with Galtier Magnet School in St. Paul. Here the focus is on minority students and building strong programs and career connections in science and technology fields.

3M

3M has a partnership with Eagan's Northview Elementary. The program focuses on science curriculum in the school. Joining forces with the Minnesota Zoological Society, the "Adventures in Global Science" program features site visits to the Zoo and special visits to classrooms by experts.

St. Paul Pioneer Press

The St. Paul Pioneer Press participates in two partnerships focused on "Newspapers in Education." One partnership is with the Webster Communications Magnet School in St. Paul. Fifth and sixth graders work on the "neighborhood page" for inclusion in St. Paul Pioneer Press. Students are given responsibility for production of the page from beginning to end including advertising. The St. Paul Pioneer Press staff provides assistance and guidance. The other partnership is entitled "Kids Comment on the News" and is being piloted in St. Paul's Saturn School. In this program students read news stories and produce comments for publication in paper. The project is co-sponsored with the Ryder Bus Company.

C. SCHOOL REFORM FOCUS

General Mills, Inc.

General Mills, Inc. entered into a unique partnership with the grade school program at Bethune School. Known as the Minneapolis Public School Academy, the main goal is to improve student performance using commonly accepted improvement strategies: smaller class size, expanded teacher/parent communication and shared decision making. Smaller class size is achieved without significant additional cost by removing all supplementary and compensatory programs. Teachers became responsible for all learning outcomes. The student to teacher ratio is 14-1. The initial year focused on 140 children in K-4th grade. Grades 5 and grade 6 were added in the following two years bringing total student population to about 200 students. Success of the program is measured by student performance on the California Achievement Tests and the school district's own benchmark tests. Classrooms are now equipped with telephones and answering machines. Parent contact, involvement, and satisfaction increased. Teachers participate in daily and weekly meetings, sharing collective expertise as well as decision making about management and fiscal matters of the school. General Mills, Inc. participated in design of program but did not focus on day to day operations.



Rochester area school students get "hands on" experience working with IBM and Mayo scientists and state-of-the-art equipment.

Chaska area teachers learn how to help students transfer learning from classroom to workplace through the "Teachers in the Workplace" program sponsored by The Instant Web Companies.

Cray Research, Inc.

Cray Research was first to become involved in the Chiron School project in Minneapolis. The project focuses on site based management, key school reform issues and teacher empowerment. Serving on the management council, Cray was active in the critical design issues for the school and its management. Cray played a critical role in convincing the school board, superintendent and unions of the potential and development of the project.

The Instant Web Companies

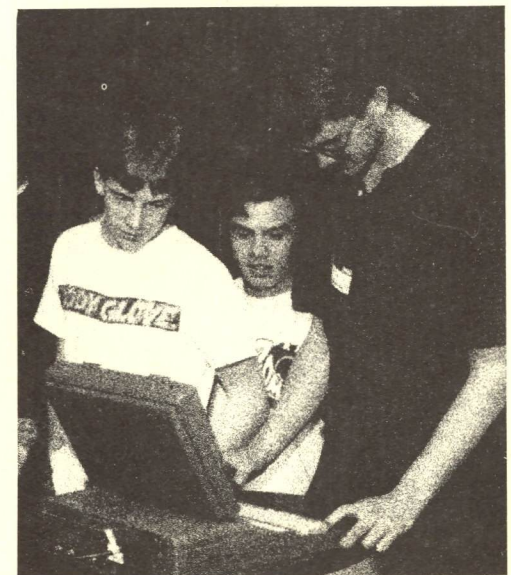
The Instant Web Companies have an extensive partnership focused on reforming the school-to-work transition with the Carver Scott Educational Center and Chaska Public Schools. The partnership is concentrated in three main programs:

Teachers in the Workplace Program. This program recruits teachers to participate in 3-week, paid internships within the Instant Web Companies. The project is linked with the MN Council on Economic Education and teachers can receive 3 graduate credits in secondary education. Primary goals are to provide teachers with first-hand knowledge about the workplace, allowing a better understanding of the educational needs of students. In this way, teachers can more effectively assist students in the transfer of learning from classroom to workplace. Teachers in the program rotate through departments, learning about specific skills necessary and how the substance of what they teach actually applies to the workplace. In 1991 five other companies in the Chanhassen/Chaska area joined in sponsoring a teacher in their company.

Work Readiness Video Project. Beginning their involvement with the school district, Instant Web initiated a project to capture on videotape, the crucial elements of work readiness—an understanding of jobs, skills, and interdependence of work and learning. Videotapes are used in high schools to assist in connecting classroom learning with potential work as well as career development tools.

Student internships. In this program students spend four weeks rotating through different Instant Web Company departments related to their Graphics Communications class. The program is also tailored for Teen Moms and high school returnees.

Facility tours and job shadowing programs also occur on a yearly basis.



CORPORATE CLASSROOMS

An emerging concept in corporate support of individual school districts is the so-called corporate classroom. Due to downsizing and the change in many corporate structures during the 1980's, many corporations realized excess office space which could be used by school districts for particular uses or for special populations.

Corporations have also seen a significant change in the composition of their workforce during the past decade, most notably the increase of women. As a result of the changes, many urban-based corporations found themselves with employees reluctant to leave their children near home as they traveled to cities for work. Accordingly, some office space has been converted to multi-purpose use, e.g., classrooms and day care facilities.



Students in the New Vistas School at Honeywell use individually tailored educational plans, bolstered by extensive computer use.

"Corporate classrooms do more than occupy extra space. Placing classrooms in what has traditionally been the domain of 'Corporate America' creates greater possibilities for collaboration between and redefinition of work and school, especially in urban life."

Corporate classrooms do more than occupy extra space. Placing classrooms in what has traditionally been the domain of "Corporate America" creates greater possibilities for collaboration between and redefinition of work and school, especially in urban life. Children and parents travel together in the same place. Employees volunteer in the classrooms. Students benefit from the proximity to field trips and cultural activities and make earlier and better connections between work and learning. For older students and at-risk populations, placement of a classroom in corporate space often provides an alternative setting much more conducive to learning and ultimate success.

As schools are redefined through the next decade, linking the myriad of social services necessary for learning, corporate classrooms provide additional breadth to the educational options for families and youth. Without question, the largest hurdles currently in the way of the placement of such classrooms are the code and licensing requirements for school space. While once logical for traditional schools, current requirements need revision to allow for creative solutions to educational problems. Continued review of requirements—whether state or local—is necessary.

The Minnesota Business Partnership member corporations have been leaders in the development of corporate classrooms. While many projects transform corporations and their buildings into learning environments, the following examples fit the narrow criterion—provision of space for a classroom on or near corporate offices—of corporate classrooms.

Northern States Power & IDS Financial Services

In 1991-92, IDS and NSP are sponsoring four corporate classrooms for 84 students in Minneapolis. These classrooms help achieve the Minneapolis Public School referendum goal of smaller class size. Corporate employees have priority attendance status in the classrooms although a full, one-third of the students registered for the first year are not employee children. The four classrooms will be located in the Baker Building. The program is a bilingual curriculum for kindergarten through second grade. The school follows an open grade concept but attendance indicates two kindergarten classes and single first and second grade classes. Both NSP and IDS are planning volunteer programs within the classrooms.

First Bank System

First Bank System opened a downtown St. Paul corporate classroom in the fall of 1989. The classroom, located on the first floor of the Pioneer building in St. Paul, is geared to four and five year olds. All students attend half day kindergarten with 5 year olds participating in extended kindergarten for the full day. Structured full day care is provided for 4 year olds. Day care is continued before and after school hours to coincide with the workday of parents. The program is modeled on a Dade County, Florida project and was initiated through the Superintendent of St. Paul Schools. First Bank provides the 3000 square feet of space occupied by the classroom and participates in classroom projects. The school district supplies the teacher, aides, supervision, and educational program. The school district also supervised and funded the renovations necessary for the licensing of the classroom. FBS employees' children have priority in enrollment but many of the students in the classroom have parents who work for state government or other downtown offices.

Dayton Hudson Corporation

In the fall of 1990, twenty six students entered a downtown Minneapolis school sponsored by Target Stores. The Mill City Montessori School houses classes for kindergarten through second grade with Target employees' children comprising many of the students. The project emanated from a desire to provide better connections for Target employees and a realization that early elementary school years are the most difficult for working parents. Target provides the space, necessary renovations, furnishings, maintenance, utilities and security. Target also provides a grant to the school district which allows for the hiring of one teacher. Initial discussions about the project occurred between Target senior management and the Superintendent of Minneapolis Public Schools. As the school opened, more communication occurred between the active parents council and the teachers. The Parents organization has numerous subcommittees which include latchkey care, curriculum, social, fund-raising, communications/PR and a Parent Advisory Board. The school shares a principal with other programs. The Mill City Montessori will expand to grades K-3 with 56 students, and will add two teaching assignments in the fall of 1991.

"As schools are redefined through the next decade, linking the myriad of social services necessary for learning, corporate classrooms provide additional breadth to the educational options for families and youth."

"Evaluations are necessary."

Honeywell Inc.

The New Vistas School arose out of discussions between the Superintendent of Minneapolis Public Schools and the CEO of Honeywell. The same conversation included a discussion of the extra space available at Honeywell's corporate headquarters and the problem of educating teen mothers in the traditional school setting. Focusing on the special educational and social service needs of parenting and pregnant teens, New Vistas, a creative approach to schools for special needs populations, was born. Honeywell provides the space—including substantial renovations—and some operating support for the school. The school district supplies the teacher and most educational materials. Honeywell plays an active role in the school, assisting with management, program direction, and often helping to coordinate local social services to assist in the program. Part of the program is a linked day care facility for the students' children, facilitating the parent education portion of the curriculum. The program focuses on flexibility. Curriculums are individually tailored with schedules ordered around actual needs of students rather than traditional school schedules. The program has added a school to-work-transition program where students intern in Honeywell offices with some students continuing to work through the summer in the corporation's credit union.

3M

3M is the sponsor of a corporate classroom in St. Paul. Located in the Metro 94 Business Center, the 3M Workplace Kindergarten was designed to meet both educational needs of students and the day care needs of parents. The Workplace Kindergarten has both a kindergarten program for five year olds and an extended day care program for four year olds. All students participate in kindergarten classes for part of the day with five year olds participating in a longer program. The school first opened in the 1990-91 school year with one teacher. A second teacher has been added for the 1991-92 school year and more students will attend the programs. 3M employees have priority enrollment in the classroom.

The Instant Web Companies

Instant Web developed and runs the Early Beginnings child care center which is located on The Instant Web Companies main campus in Chanhassen. The center has programs available for infants, toddlers and preschool students. Open to the community at large, Early Beginnings gives priority status to Instant Web employees who also receive a reduced fee schedule for the services.



The proud first graduating class of First Bank's downtown St. Paul kindergarten.

4

COMPANY-RUN EDUCATION PROGRAMS

Long before corporations linked themselves with specific schools or opened their doors to the permanent placement of classrooms, corporations initiated and operated their own educational programs for school students. Corporate education programs, those which are produced and run by corporate staff, run the gamut with respect to focus, target population, size, and breadth. These programs can be as simple as structured tours of facilities or as elaborate as state- or nation-wide competition programs.

Many of these programs began as simple ideas and evolved into comprehensive, annual programs. Often programs emanate from a need to communicate particular information, e.g., safety or health, to young people. Other programs emerge from a desire to promote or recognize a particular facet of education, e.g., teachers or curricular areas. Programs may also seek to fill a wide-spread perceived need in education.

Successful programs in this category are those which have a particular focus. Often that focus helps provide the measure by which the program is evaluated. Because these programs are not automatically linked to specific schools or districts, simple usership and participation statistics are often the first tool in evaluation. But successful and long-running programs are usually more carefully scrutinized and aimed at making a difference in the education provided in schools and the lives of students.

The following examples—loosely placed in topic categories—demonstrate the breadth and ingenuity of MBP member corporations' educational programs.

"Successful and long-running programs are usually carefully scrutinized and aimed at making a difference in the education provided in schools and the lives of students."



A. HEALTH & SAFETY PROGRAMS

Health One Corporation

United Hospital co-sponsors with the Ramsey County Medical Society the "Road to Wellness" program for 3rd graders which is a Mini-Health Fair utilized by St. Paul Schools.

All Health One hospitals offer hospital tours for both elementary and secondary students.

Mercy and Unity Hospitals (flagship hospitals within the Health One system), along with Health One, offer the "Teddy Bear Clinic" program for elementary students which aims to dissuade fear of emergency hospitalization.

Northern States Power

Curriculum: NSP provides 2 week curriculum units developed for each grade. Over 200,000 students participated in 89-90.

Safety Calendar Poster Contest: NSP runs an annual safety poster contest for kindergarten through sixth grade students with 13 winners' art work featured in school calendars distributed to classrooms statewide. 7000 students participated in 1990.

The St. Paul Companies

Juvenile Crime Prevention Curriculum: The Saint Paul Companies sponsors this curriculum in both St. Paul and Minneapolis schools. The program is 9-12 weeks in length for 8th and 9th grade social study students. During this "hands on" civics program, students are given an opportunity to study the effects of juvenile crime on the consumer, the victim, the community and the juveniles themselves. Peer teaching is an important element of the program with 8th and 9th grade students making presentation to 4th and 5th grade classrooms. The program began in St. Paul schools twelve years ago and now operates throughout Minnesota as well as nationally.

Minnesota Power

Minnesota Power created and provides a 30-minute live theater production. "Small Change Theater" is seen in over 110 schools in northern and central Minnesota. The focus of the productions is on general safety information and education on electricity and electric power.

Jostens, Inc.

Jostens co-sponsors "The Best of America Say 'NO' Campaign" with the Golden Key National Honor Society. This nation-wide program focuses on drug-use prevention and runs an annual contest for the best promotional material ideas.

B. CURRICULUM PROGRAMS

Northern States Power

NSP conducts a summer day camp program for secondary students called "Earth Core." Focusing on environmental and conservation issues, the camp utilizes the Minnesota Valley National Wildlife Refuge and the Minnesota Zoological Society.

Unisys

Unisys is one of the main sponsors and coordinators of the State High School Mathematics League. Their participation includes providing scholarships and awards for winners and hosting award dinners. Unisys is also a major supporter for the state math tournament, a main event within the Mathematics league.

Summer Math Institute: Unisys is a key supporter for this program; matching a grant from the Minnesota Academic Excellence Foundation to the same program. Unisys provides an employee to coordinate the project. Unisys is active in the development of curriculum using business applications of math principles. This curriculum is a key component of the summer institute.

Unisys is a co-sponsor of the annual Challenger Math/Science Awareness Day in local schools.

Taylor Corporation

Math Camps: Taylor Corporation sponsors three week math camps for ninth graders in 2 school districts. The camps' program is targeted toward high achievement students with a focus on non-traditional curriculum and practical application of math concepts. The key curriculum areas include new areas in math, problem solving skills, and cooperative work in math. Students are selected via their classroom teachers and the camps use a team concept.

3M

3M sponsors many programs geared toward developing strong math and science curriculum and encouraging the study of math and science.

Wizard Program: The 3M "Visiting Wizard" program enriches science education in elementary classrooms. 3M employee volunteers have taken 3M-developed science kits into elementary schools. More than 20,000 students have seen lively demonstrations on scientific subjects.

Women in Science: 3M coordinates Twin Cities' school visits by women employed in the technical sciences to discuss careers in the areas of math and science.

Science Technology Encouragement Program (STEP): This program is geared toward five inner-city St. Paul high schools assisting minority youth interested in the technical sciences. The program offers mentoring by 3M staff, scholarships, and summer employment.

Richard Drew Creativity Program: A high school recognition program for students and teachers of math and science noting creativity in the classroom.

Science Student Recognition Day: Selected science students are invited to 3M headquarters for a recognition ceremony and a tour of 3M's Technology Center.

Science/Math Teacher Intern Program: Twenty K-12 science and math teachers are selected to participate in an internship program focusing on work experience in 3M labs.

"The indicators of our education achievement substantiate our success; Minnesota students outperform students in other states on most every objective measure."

Norwest

Norwest provides two programs designed to help students understand money and banking.

Moneywhys: This is Norwest's program for high school students. Norwest community bankers teach the program to tenth graders throughout the state. The program focuses on money choices, savings and personal finance tips and banking know-how. The program is delivered in six one-hour time blocks and course materials are provided.

SuperSavers: This program for elementary students focusing on smart savings, smart spending and money is also taught by Norwest local bankers. Norwest prepares the course materials and training materials for teachers.

Boise Cascade Corporation

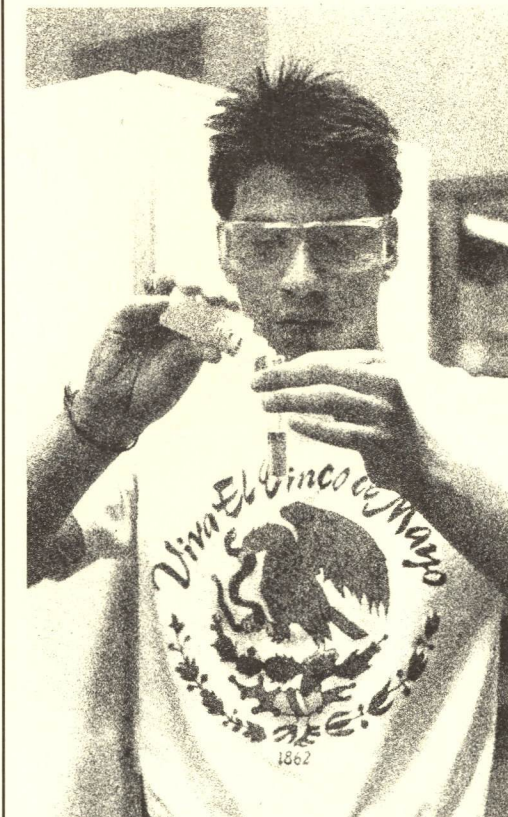
Ready to Read: Boise Cascade sponsors a county-wide program for elementary students, focusing on reading and provision of books for libraries.

Red Wing Shoe Company

Red Wing Environmental Learning Center: Red Wing Shoes plays a major role in this program of environmental education for students age thirteen to eighteen. Red Wing Shoe personnel provide much of the administrative support for the center as well as volunteer for the programs.

Blandin Paper Company

Blandin Paper sponsors two educational programs on ecology and forest industry information. Project Learning Tree has both an elementary and a secondary curriculum focused on ecology. Teachers are trained through accredited workshops and use materials provided through the program. The Minnesota Forest Industries' schools program distributes curriculum materials and classroom aids (paper making kits, posters, slide programs, and brochures) to teachers of Kindergarten through sixth grade. The focus of the materials is on the forest industry.



Science and math is the focus for many MBP companies' programs.

C. TEACHER SUPPORT, RECOGNITION AND TRAINING PROGRAMS

Northern States Power

Teacher Workshop: NSP conducts an annual workshop on energy and environmental issues for K-12 teachers. Over 100 teachers attend yearly. The Program uses university professors and local experts as instructors. The main curriculum is structured for teachers of all grade levels, however time is allowed for idea sharing and collaboration among teachers within specific grade levels.

Teacher Mini-grants: NSP co-founded this program which provides annual grants for K-12 teachers. Subject areas of focus are energy, math and science.

U S West Communications

Teacher of the Year Program: U S West recognizes 6 outstanding teachers each year with \$500 cash awards. A finalist is chosen, who is awarded a \$5000 cash award and competes in U S West's national competition with 13 other state finalists for 1 of 3 year-long paid sabbaticals and an additional \$5000 award.

Minnesota Power

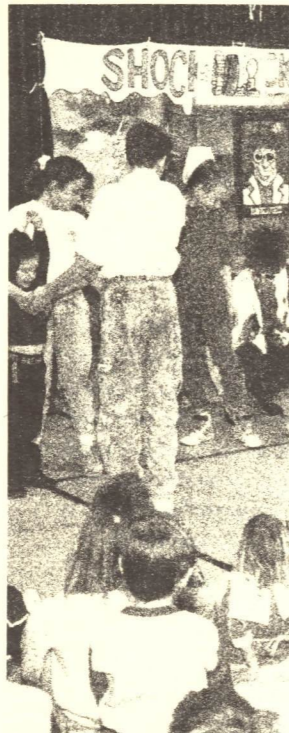
Mini-grant program: Minnesota Power provides grants to individual teachers who implement creative approaches to energy, math, science, and technology education in the classroom.

Terrific Teachers: Minnesota Power is spearheading a major teacher recognition program in northern Minnesota. The project will give recognition for teaching excellence as well as provide grants for innovative teaching ideas. The project organizes area companies who have made a commitment to the project for five years.

Ecolab Inc.

Quest for Excellence in Education: This program sponsored by Ecolab focuses on two main goals. The first is to recognize teaching excellence through provision of curriculum materials to teachers. The second goal is to demonstrate corporate support for education. The program offers a series of mini-grants of up to \$2500 each to teachers in the following curriculum areas: English, speech, foreign languages, library/media center, natural/physical sciences, and social studies. Guidelines limit funds to curriculum materials not funded through traditional sources and grant-seekers are encouraged to find matching funds.

"Small Change Theater," a part of Minnesota Power's education program, is seen in schools throughout northern and central Minnesota.



Bringing technology to teachers and the classroom is part of the focus for many of IBM's education programs.

IBM

Train the Teacher: This IBM created program uses one and two week workshops to provide training for teachers in the use of computers as tools for classroom work. Over 150 teachers participate annually in MN.

Summer Business Institute/Teacher Sabbaticals: This program provides alternative employment for teachers during the summer months. K-12 teachers choose work in their own area of interest and are linked with professionals in that area. The program is flexible and lengths of sabbaticals vary from a single week to one year.

Technology in Education Grants: IBM supplies grants to support teacher preparation and innovative uses of instructional technology. The grants also provide services and equipment to support the project.

Honeywell Inc., Alliant Techsystems Inc., and Medtronic, Inc.

Honeywell Teacher Academies: Initiated by Honeywell, this program now links teachers and students with scientists at Honeywell, Alliant Techsystems and Medtronic. Participants work on individualized projects of their own choice with scientists and staff. Goals are to provide a chance for individualized study, enhancing problem solving skills, contact and exposure with science and math careers, and a time for renewal and refreshment of skills. Academy students usually participate for 2 weeks during the summer and are provided with a stipend. Thirteen metro area schools participated in 1990.

D. RESOURCE PROVISION PROGRAMS

Northern States Power

Film Library: NSP provides a film library service for schools across the state. Films available to borrow have titles in the following subjects: the natural sciences, energy and safety.

Minnesota Power

Minnesota Power provides both speakers and facility tours for schools and groups. Topics include electric safety, careers in utility industry, production of electricity, utility economics and lobbying.

Minnegasco

Education Services Department: Minnegasco acts as a lending resource for curriculum materials to schools. Energy information is the focus of the available materials.

3M

Speakers Bureau: 3M operates an active speaker bureau featuring both technical and business people.

IBM

Visiting Scientist and Professional Program: IBM professionals give presentations in high school classes on a variety of topics.

Technology Assistance to the Disabled: IBM assists with the provision of information about and demonstration of technology which is available to enhance access to learning by disabled students.

RISE Technical Gifts Program: IBM provides materials, furniture and equipment to over 45 elementary and secondary schools in Minnesota.

Faculty Loan/Community Service Loan Program: IBM staff are made available on loan for up to 1 year to support elementary and secondary educational programs.

E. TUTORING, MENTORING AND CAREER INFORMATION PROGRAMS

Arthur Andersen & Co.

Arthur Andersen employs five students from 1-5 pm weekdays and full time during the summer, in a mentoring/work readiness program. Focus for the program is on 7-10 inner city schools and disadvantaged youth. Youth participating in the program are provided with mentors from outside of their department. The company also operates a job issue workshop. Permanent employment is a possibility for students.

Cargill, Inc.

Cargill Summer Jobs Program: Cargill runs an annual summer job program linking high school students with potential mentors.

U S West Communications

Business Partners Program: Over 35 U S West employees participate in mentorship programs with local school students. The mentorships are designed to enhance summer job and shadowing experiences.

Campbell Mithun Esty

The advertising firm provides speakers (creative and account personnel) to area schools to provide information about advertising careers and the advertising industry in general.

Group Health Inc.

Group Health employees volunteer as speakers for high schools, vocational/technical institutes and colleges. The primary focus is on health career information and relevant training needs.

LifeSpan, Inc./Abbott Northwestern Hospital

Roosevelt Health Careers Magnet: Lifespan through Abbott Northwestern Hospital participates within a consortium of medical organizations in the Twin Cities. In addition to providing advice and direction via the school's advisory board, Abbott Northwestern is involved in an 11-week mentorship program for students. Each student is paired with an employee mentor and also participates in five weeks of exploration in five general areas of health services. As a follow-up, each student spends four weeks focusing on a chosen health career track.

3M

Business Student Recognition Program: A 3M sponsored program to honor and recognize the achievements of business students from area secondary schools.

Clerical On-The-Job Training: 3M sponsors an on-the-job training program for students interested in clerical work. Senior high school students from area schools participate in the program for twenty hours a week. Participants are then offered permanent positions within the company.

3M Tutorial Program: This program is a major volunteer program for 3M employees. Over 225 tutors work with students every week of the school year. The volunteers, who participate on company time, help students with reading, math and science. Special language tutors teach English as a second language.

"The finest plans will not work without the finest people working to implement them."

"There is no magic formula for successful school-business partnerships."

Jostens, Inc.

Renaissance Program: Jostens instituted this program in 1987. The program focus is on improvement in student performance, attendance and staff morale. Through substantial corporate support, the program became the Renaissance Education Foundation in 1990 and offers seminars in Minnesota and across the country to administrators and teachers.

IBM

Edison Day: IBM sponsors an annual day for job shadow experiences with IBM employees.

Problem solving Project Mentors: IBM mentors assist students on student-identified projects which require up to 60 hours of research. Mentors help guide work and provide resources necessary for problem resolution.

Cowles Media Company

Urban Journalism Workshop: Cowles Media sponsors this program which links Twin Cities high school students of color with working journalists. Held annually, students learn about print and broadcast media firsthand through undertaking story assignments.

F. STUDENT RECOGNITION AND COMPETITION PROGRAMS

U S West Communications and the St. Paul Pioneer Press

Citizen Bee: This co-sponsored event is a state-wide competition focusing on America's heritage and democracy. Students participate in regional, state, and national competitions. The program, which is open to all students in grades 9-12, begins in the classroom with teachers initiating the competition and teaching from source books. Student teams are formed and move through levels of competition. Scholarships are awarded for state and national winners.

Piper, Jaffray & Hopwood

Stock Market Game: Throughout Minnesota students play Piper, Jaffray & Hopwood's Stock Market Game. Augmenting PJ&H's interest in economic and business education, the program is designed to demonstrate, first hand, how the stock market works and how trading is done. Students compete individually as well as in teams.

Cowles Media Company

Minnesota Spelling Bee: Cowles Media is a major sponsor of the state-wide spelling bee which leads to national competition. Thousands of Minnesota students participate annually.

U S West recognizes an outstanding Minnesota teacher annually.



G. AT-RISK STUDENT AND YOUTH DEVELOPMENT

U S West Communications

Choices Program: U S West fully funds, directs and runs this program for 9th graders, provoking thoughts about their futures. The program runs one hour on 2 consecutive days and uses U S West employees as speakers and facilitators. U S West employees are trained, on the job, to be presenters. Efforts are underway to tailor the program to include special-needs students. Each presentation is evaluated; evaluations are used to measure the success of the program and assist presenters. A modified version is available for teen parents. Approximately 85,000 Minnesota students have heard the seminar since U S West began the program in 1987.

Lutheran Brotherhood

RespecTeen Program: Lutheran Brotherhood annually sponsors a program aimed at positive youth development. The program is available in Minnesota and nation-wide.

Ecolab Inc.

Lifeline for Children at Risk: This Ecolab sponsored program has two goals: to provide assistance to at-risk children in middle grades (5-9) and encourage them to become productive members of the community and to provide resources for teachers, counselors, social workers and psychologists who work with at-risk students in this age range. The program operates as a mini-grant fund with grants available up to \$5000 for each idea. Projects must be aimed toward at-risk students, encourage family and community involvement and provide materials which are not funded in any other way.

IBM

Student Pennant Race: IBM co-sponsors, with the Minnesota Twins, this annual program for at-risk junior high youth and their chosen mentors. Participants are hosted a Twins game with pre-game activities held at a local college.



Proving that math is not just problem solving alone, this student takes a chance with a math magician at the Summer Math Institute co-sponsored by Unisys.

"Systemic change can happen in big ways in small venues and it is often small, single school ventures which pave the way for larger state-wide change."

"The climates within education and business differ."

H. NEW IDEAS

Jostens, Inc.

Jostens sponsored, with the National Association of Secondary School Principals and The University of St. Thomas, a series of dialogues between education, government and business leaders on the challenges and issues facing education. Programs are broadcast nationally and video tapes are used in over 20,000 high schools nationally. Initial dialogues were held in Minnesota.

American Crystal Sugar

Parents Center: American Crystal Sugar sponsors a center for parents and children in the Moorhead Public Schools. The focus of the center is to provide access to information and a connection point with the school system.

3M

Parent Education Program: 3M promotes positive parenting through regularly-scheduled parent education seminars and parenting classes. Seminars—frequently held over brown-bag lunch periods—offer an opportunity for employees to increase their parenting skills and ease work and family conflicts. Licensed parent educators from the St. Paul School District are utilized as facilitators in the sessions.

Child Care Information Service: 3M runs an on-going child care information service as well as a bi-annual Working Parent Resource Fair. The focus is on both early childhood and extended day care.

Lifetouch, Inc.

Lifetouch co-sponsored, with the National Association of Elementary School Principals, a series of publications regarding public education. Titles include "Standards for Quality Elementary Schools," "Proficiencies for Principals," and "Effective Evaluation in America's Elementary and Middle Schools." In addition, Lifetouch is a partner with the American Student Council Association which provides leadership training for both elementary and secondary students in Minnesota and nationally.

Blandin Paper Company

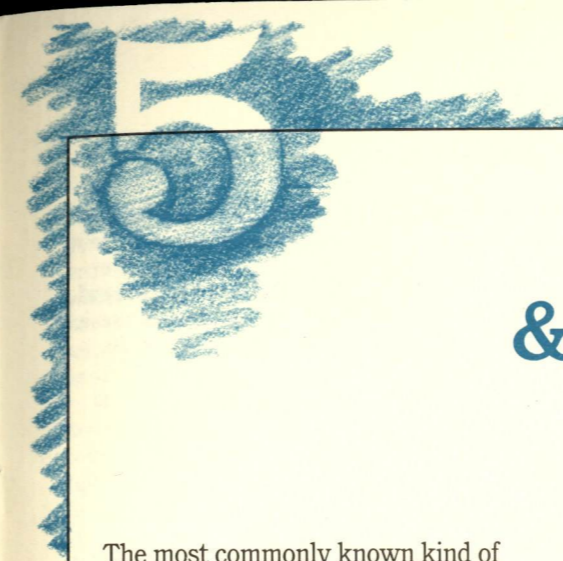
Blandin Paper Company, through the Blandin Foundation, funds the Center for School Change based at the University of Minnesota's Humphrey Institute of Public Affairs. The Center focuses on initiatives which produce significant, measurable improvements in Minnesota's public schools. With a concentration on rural youth and families, the Center awarded its first grants in May of 1991. Grantees include school districts in: Cyrus, Morris, Fairmont, Little Falls, Morris, Blackduck, Brainerd, Crosby, Pequot Lakes, Cass Lake-Bemidji, Delavan, Fulda, Hanska, Nerstrand-Fairbault, Ortonville, Proctor, Randall-Little Falls, Rothsay, Virginia, Wadena, and Winnebago.

U S West Communications and Minnesota Power

Parenting for Education: Developed by the U S West Foundation, this program for employees is geared to encourage positive parent development. The seminar gives parents the skills and tools they need to help their children develop a lifelong interest in learning.

Grand Metropolitan/Pillsbury

Begun in the fall of 1991, Grand Metropolitan/Pillsbury produces two national education initiatives. One is geared toward elementary students to help them become familiar with the world of work. The second initiative is for high school students, focusing on work readiness and employment training issues.



FINANCIAL & VOLUNTEER SUPPORT

The most commonly known kind of corporate support for education is a simple donation. Although donations most frequently come in the form of grants and annual giving pledges, corporations also donate extensive quantities of staff volunteer time, merchandise, materials and supplies for school use. Minnesota Business Partnership companies have a long history of financial, in-kind, and volunteer support of education organizations, individual schools, social service and cultural agencies.

The financial and volunteer support reported by MBP member corporations is far reaching. It is clear that corporations provide on-going annual support for programs as well as provide needed "one-time" support for special events, emergencies, and capital improvements. It is also clear that volunteer commitments, though not universally reported, follow many donations. The following sections demonstrate the rich diversity of groups supported by MBP member companies which affect education and the success of students. Because of the changing nature of both financial and volunteer support, these sections should be seen as only a snapshot—and not exhaustive—of the kind of support provided by Minnesota Business Partnership member corporations.

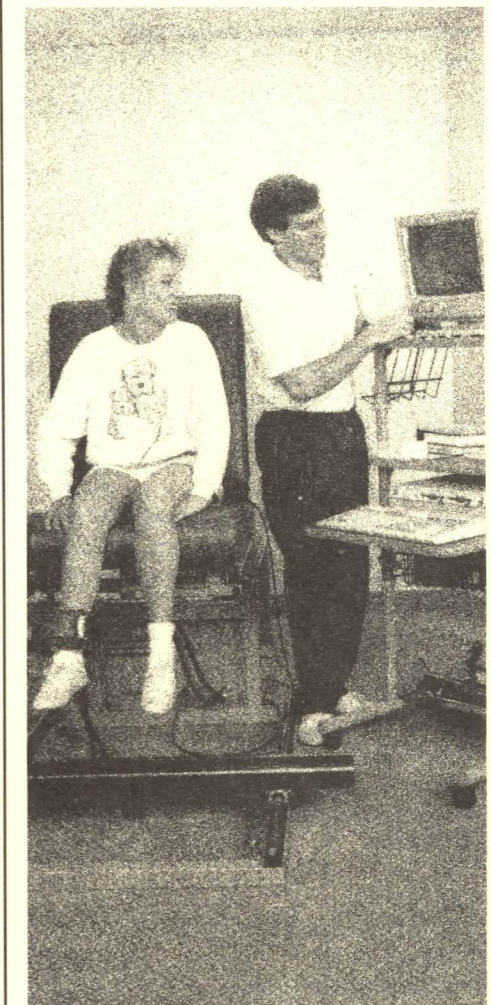


"Corporations provide on-going annual support for programs as well as provide needed 'one-time' support for special events, emergencies, and capital improvements. It is also clear that volunteer commitments, though not universally reported, follow many donations."

A. EDUCATION SUPPORT ORGANIZATIONS

This section focuses on the volunteer and financial support provided to organizations designed to be direct supporters of schools and education. Their programs are largely educational in nature, usually identifying a critical area of need—from school-to-work transitions to curriculum extension. The first group of organizations receive support from many Minnesota Business Partnership organizations. Because of this extensive support, descriptions of the programs, with MBP participants listed, are provided. Following those descriptions is a list of organizations, which are not described, which also receive extensive support but simply from fewer MBP member corporations.

Health One provides athletic trainers to local school districts.



1. MINNESOTA ACADEMIC EXCELLENCE FOUNDATION (MAEF)

By charter from the Minnesota Legislature and through private sector partnerships, this organization is the primary advocate for promoting and recognizing the importance of academic excellence among Minnesota's elementary and secondary students. MAEF activities are for all students — "late bloomers," honor roll students, and students who need encouragement to achieve — and for teachers, parents, and others who help children excel. MAEF provides assistance to the private sector in creating partnerships to deliver activities which encourage the vigorous use of the mind.

MAEF directly delivers many programs, including:

THE MINNESOTA ACADEMIC EXCELLENCE LEAGUE: facilitates participation by K-12 students in academic challenges and competitions by assisting member schools in establishing programs and teams and by aiding the academic challenge coordinators in delivering a statewide, accessible event that meets common standards.

ROBERT C. BYRD HONORS SCHOLARSHIPS: enables high achieving students to attend post-secondary institutions by awarding a \$1500 scholarship to be used during the freshman year.

MATH MASTERS: challenges teams of fifth grade students to use higher order thinking skills, problem solving abilities, and math concepts. The program also encourages and recognizes students who participate at the school, district, and regional levels.

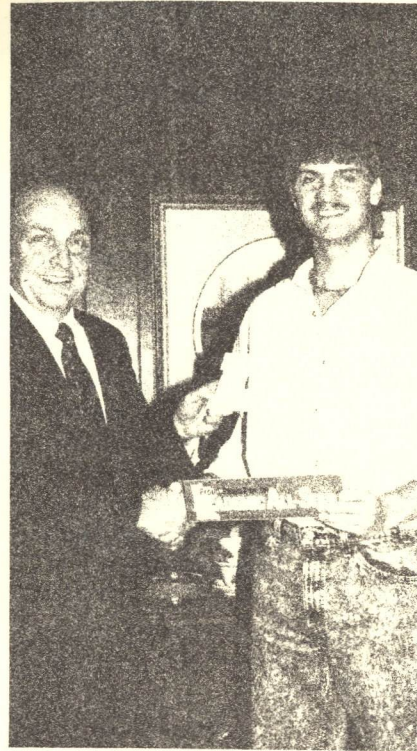
MAEF co-sponsors numerous activities, including:

THE SUMMER MATH INSTITUTE: a three-week residential institute for mathematics students entering grades nine, ten and eleven.

LETTERING FOR EXCELLENCE: recognizes selected graduating seniors who are either recent achievers (students who have made a turn-around in their academic careers) or consistent achievers. The program promotes the recent-achiever model to students who might be a "late bloomer" or at-risk to encourage academic involvement.

ADC Telecommunications
American Crystal Sugar
Arthur Andersen & Co.
Blandin Paper Company
Control Data Corporation
Cray Research, Inc.
Dain Bosworth Inc.
First Bank System
General Mills, Inc.
Honeywell Inc.
IBM
The Instant Web Companies
Jostens, Inc.
3M
Medtronic, Inc.
Minnesota Mutual Life Insurance
Minnesota Power
National Computer Systems

Northern States Power
Northwest Airlines
Park Nicollet Medical Center
Piper, Jaffray and Hopwood
Red Wing Shoe Company
The St. Paul Companies, Inc.
Unisys



Academic All-Stars, a MAEF program, are recognized for their recent academic achievement.

"Virtually every MBP member corporation reported some kind of support of schools and districts throughout the state."

"Many organizations—from churches to neighborhood and non-profit groups to cultural organizations—provide programs and services which lend both texture to the fabric of education and support to children as they move through school."

2. THE BUSINESS ECONOMICS EDUCATION FOUNDATION (BEEF)

is a non-profit organization dedicated to providing a diversity of Minnesota youth with practical knowledge needed for their futures in our economic system, and to furnish educators with the resources to achieve this goal. Diversity of background, race and gender is an integral part of its values.

BEEF offers statewide programs:

SCHOOL YEAR PROGRAM helps supplement and reinforce classroom theory with real world experiences. Participating teachers receive help developing curriculum and are provided supplementary materials. A sample of topics covered include Minnesota's economy, consumer economics, sales and marketing, distributive education, office education, business management and home economics. Programs are tailored to fit each teacher's individual needs, giving teachers flexibility while insuring that curriculum objectives are met.

MINNESOTA BUSINESS VENTURE is a week-long summer residential experience that brings 600 high school students and 75 teachers together with representatives of business, labor and government to explore our economic system and various issues facing our society. Students meet their peers from across the state, discover career opportunities and develop management and leadership skills that give them a head start on their futures.

BUSINESS ADVENTURE is a summer program that introduces children in grades two to five to the world of business, banking and personal economics. Students participate in a fictional economy as well as develop and market their own businesses.

ADC Telecommunications
Blue Cross/Blue Shield
Cargill, Inc.
Dain Bosworth Inc.
Deluxe Corporation
Donaldson Company
Ecolab, Inc.
First Bank System
General Mills, Inc.
Graco Inc.
Grand Metropolitan/Pillsbury
Honeywell Inc.
IDS Financial Services
International Dairy Queen
International Multifoods
Jostens, Inc.
KPMG Peat Marwick
Lifetouch, Inc.
Lutheran Brotherhood
3M
Medtronic, Inc.
Minnegasco/Arkla Inc.
Minnesota Mutual Life Insurance
Minnesota Power
Norwest Corporation
Piper, Jaffray & Hopwood
Red Wing Shoe Company
Rosemount, Inc.
Super Valu Stores, Inc.
Tennant Company
Unisys
Valspar Corporation

3. YOUTH TRUST

helps young people succeed. It is an umbrella organization which brokers the personal involvement of working adults to provide guidance for youth as friends, mentors, tutors and activity group leaders. And, it recruits employers to provide hands-on work experience for needy youth.

The following example demonstrates how YOUTH TRUST works: Dung Hua was considered at-risk due to family and emotional problems. A year ago, Dung entered the Youth Work Internship Program as a very shy, quiet young lady. She was matched with a mentor at Pillsbury and worked last summer as a Food Technician in their R&D unit. During her senior year at Southwest High School, Dung received guidance in planning for career and post-secondary education from Jean Lang, an Administrative Training Consultant for Minnesota Mutual Life and a Career Beginnings volunteer. Now Dung is planning to attend the University of Minnesota, majoring in computer science.

As a broker, the YOUTH TRUST does not operate programs but instead connects resources from 160 member employers, schools and youth-serving agencies. Last year, for example, the YOUTH TRUST recruited more than 500 volunteers like Jean Lang and developed more than 1,000 summer job listings.

The YOUTH TRUST operates with three principles: 1) keep it simple and personal; 2) build on what's there, rather than reinventing the wheel; and 3) maintain quality standards. The YOUTH TRUST has focused community attention on the necessity of preparing our young people for the opportunities of lifelong learning and the challenges of tomorrow's jobs.

ADC Telecommunications
Arthur Andersen & Co.
Briggs & Morgan
Campbell Mithun Esty
Carlson Companies, Inc.
Cargill, Inc.
Coopers & Lybrand
Dain Bosworth Inc.
Dayton Hudson Corporation
Deloitte & Touche
Donaldson Company, Inc.
Faegre & Benson
Fairview Hospital & Healthcare Services
First Bank System
General Mills, Inc.
Golden Valley Microwave Foods, Inc.
Graco Inc.
Grand Metropolitan/Pillsbury
Group Health Inc.
Health One Corporation
Honeywell Inc.

IBM
IDS Financial Services
International Dairy Queen
Jostens, Inc.
KPMG/Peat Marwick
LifeSpan Inc.
Lutheran Brotherhood
M.A. Mortenson Company
Midwest Communications
Minnegasco/Arkla Inc.
National Computer Systems
Northern States Power
Northwestern National Life Insurance Co.
Norwest Corporation
Onan Corporation
Opus Corporation
Park Nicollet Medical Center
Piper, Jaffray & Hopwood
Robins, Kaplan, Miller
Cowles Media Company
Super Valu Stores, Inc.
TCF Bank
U S West Communications
Valspar Corporation

4. JUNIOR ACHIEVEMENT

consists of four programs designed to bring the business world to fifth through twelfth graders:

BUSINESS BASICS: INTRODUCING BUSINESS TO YOUNG PEOPLE delivers practical information about business and the private enterprise system to fifth and sixth grade students in their own classroom. A structured program, Business Basics consists of four, 45-minute presentations on organization, management, production and marketing. The series is presented by college students, small business owners, retired executives, and other business people.

APPLIED ECONOMICS: PREPARING YOUNG PEOPLE FOR THE WORLD is a course offered for credit to eleventh and twelfth graders in area high schools. Under the direction of a professional economics teacher and a business consultant visiting the class once a week, students learn practical economics and gain a basic knowledge of the American free enterprise system. Classroom activities include operating and managing a company, a computer simulation and instruction on micro and macro economics.

URBAN OUTREACH PROGRAM helps inner city and "at-risk" youths grades five to twelve explore entrepreneurship, career options, and basic business concepts. A resource person from the urban community meets with students to share his/her first hand knowledge of business, but most importantly, to provide students with a positive role model.

PROJECT BUSINESS: MAKING BUSINESS COME ALIVE is a dynamic program which makes the world of business come alive for eighth and ninth graders, increasing their awareness of the role business plays in their daily lives. A resource person from the business community meets with the students to share his or her first-hand knowledge of business.

ADC Telecommunications
Arthur Andersen & Co.
Bemis Company
Blue Cross/Blue Shield
Campbell Mithun Esty
Cargill, Inc.
Briggs & Morgan
Carlson Companies, Inc.
Control Data Corporation
Cowles Media Company
Cray Research, Inc.
Dain Bosworth Inc.
DataCard Corporation
Deluxe Corporation
Donaldson Company
FMC Corporation
Faegre & Benson
First Bank System
General Mills, Inc.
Graco Inc.
Grand Metropolitan/Pillsbury
Health One Corporation
Honeywell Inc.
IBM
IDS Financial Services
International Multifoods
Jostens, Inc.
KPMG/Peat Marwick
Land O'Lakes, Inc.
Lifetouch, Inc.
Lutheran Brotherhood
3M
MSI Insurance
Medtronic, Inc.
Minnegasco/Arkla Inc.
Minnesota Mutual Life Insurance
Northern States Power
Northwestern National Life Insurance Co.
Norwest Corporation
Onan Corporation
Opus Corporation
Park Nicollet Medical Center
Piper, Jaffray & Hopwood
Rosemount, Inc.
St. Paul Pioneer Press
The St. Paul Companies, Inc.
Super Valu Stores, Inc.
TCF Bank
Tennant Company
Unisys
U S West Communications
Valspar Corporation
Waldorf Corporation



5. EDUCATION VENTURES INC. is a non-profit organization operating programs for business involvement in public education. EVI is modeled after a mutual fund company, operating a family of funds or programs through which investors can pool resources for greater impact, yet still choose investment vehicles that suit their priorities and/or location. Two particular programs are central to EVI's work:

THE TEACHER VENTURE FUND is a mini-grant program designed to involve business in recognizing and supporting the creativity of teachers. The Fund offers up to \$500 on a competitive proposal basis for innovative classroom projects, strategies or curriculum.

Examples of imaginative projects include:

"What Are We Doing to Our Lakes?" The students learn about the effects of acid rain on the environment via the aquarium and terrarium.

"Flags: Symbols of Culture" introduces students to the historical use of flags by governments and the symbolism they represent.

"Architecture and the Built Environment" teaches students the socio-economic aspects of the built environment as well as the design and structural parts with speakers from the community.

ALL PARENTS TEACH is designed to encourage parental involvement in children's education. The program focuses on low-to-moderate income families. By soliciting, recognizing and publicizing useful "teaching" strategies, the program builds confidence and recognition in over-stressed parents that their role really is valuable to their children's success at school.

ADC Telecommunications
Alliant Techsystems Inc.
Cargill, Inc.
Control Data Corporation
Cray Research, Inc.
Dain Bosworth Inc.
First Bank System
Graco Inc.
H.B. Fuller Company
Honeywell Inc.
Jostens, Inc.
Land O'Lakes, Inc.
Lifetouch, Inc.
Lutheran Brotherhood
Medtronic, Inc.
National Computer Systems
Norwest Corporation
Rosemount Inc.
The St. Paul Companies, Inc.
Super Valu Stores, Inc.
Unisys

6. THE MINNESOTA INDEPENDENT SCHOOL FUND (MISF) is a voluntary association of 32 accredited, private secondary schools throughout Minnesota. MISF was formed in 1976 to promote excellence in education and to solicit funds for member schools from corporate, business and foundation communities.

Cargill, Inc.
Donaldson Company
First Bank System
General Mills, Inc.
Graco Inc.
Grand Metropolitan/Pillsbury
Hutchinson Technology
Jostens, Inc.
Lifetouch, Inc.
Northern States Power
Northwest Airlines
Opus Corporation
Piper, Jaffray, & Hopwood
Rosemount, Inc.
The St. Paul Companies, Inc.
Super Valu Stores, Inc.

7. INROADS develops and places talented minority youth in business and industry and prepares them for corporate and community leadership. The INROADS college internship consists of up to four years of rigorous academic, professional, and personal coaching and training, combined with summer employment at a local sponsoring corporation.

Arthur Andersen & Co.
Campbell Mithun Esty
Cargill, Inc.
Cray Research, Inc.
Dain Bosworth Inc.
Dayton Hudson Corporation
FMC Corporation
First Bank System
General Mills, Inc.
Honeywell Inc.
IBM
IDS Financial Services
KPMG Peat Marwick
Land O'Lakes, Inc.
3M
Mayo Foundation
Medtronic, Inc.
Minnesota Mutual Life Insurance
Northern States Power
Norwest Corporation
Piper, Jaffray, & Hopwood
Rosemount Inc.
The St. Paul Companies, Inc.
Super Valu Stores, Inc.
U S West Communications
Unisys

8. MINNESOTA AGRICULTURE IN THE CLASSROOM (MAITC) offers a variety of resources to help teachers successfully integrate agriculture into their classrooms and enhance the learning experiences of students. Materials produced by MAITC include: Minnesota Agriculture Magazine and Teacher Guide Series, Model Learner Outcomes and Program Planning Guide for Integrating Agricultural Awareness in Grades K-12, and Minnesota Guide to Educational Resources About Agriculture. MAITC also offers awards and mini-grants as well as an outreach program.

American Crystal Sugar
Bemis Company
Cargill, Inc.
General Mills, Inc.
Geo. A. Hormel & Company
Harvest States Cooperative
International Multifoods
Jostens, Inc.
Land O'Lakes, Inc.
Norwest Corporation
Super Valu Stores, Inc.
U S West Communications

9. THE MINNESOTA COUNCIL ON ECONOMIC EDUCATION (MCEE) is a non-profit educational organization that works to complement the education process by mobilizing resources as a supplement to the training teachers receive and the materials schools provide. MCEE brings the expertise of professional economic educators and committed community leaders to teachers, helping them understand basic economic concepts and relationships, while also giving them practical applications from the real world. MCEE recognizes the vital role of teachers and concentrates its efforts on providing them with the critical tools for preparing their students to make economic decisions, to allocate their time and resources, to choose and prepare for careers, and to analyze and evaluate economic and business issues.

ADC Telecommunications
Arthur Andersen & Co.
Campbell Mithun Esty
Cargill, Inc.
DataCard Corporation
Deluxe Corporation
Donaldson Company, Inc.
First Bank System
General Mills, Inc.
Graco Inc.
Honeywell Inc.
Geo. A. Hormel & Company
IBM
International Multifoods
The Instant Web Companies
Jostens, Inc.
Lutheran Brotherhood
Mayo Foundation
Minnegasco/Arkla Inc.
3M
Minnesota Mutual Life Insurance

Northern States Power
Northwestern National Life Insurance Co.
Opus Corporation
Grand Metropolitan/Pillsbury
Piper, Jaffray, & Hopwood
The St. Paul Companies, Inc.
Super Valu Stores, Inc.
TCF Banks

10. PREPARE SAINT PAUL is a business and education partnership organized by the Saint Paul Area Chamber of Commerce. It was established to improve the quality of the entry-level workforce. The program is comprised of three targeted programs. The first is a workforce readiness program which trains resource teachers for a specific curriculum, enrolls students in the year-long development program, and identifies and secures priority hiring commitments from employers. The second program focuses on establishing incentives for at-risk students who reach Prepare Saint Paul goals. The final program is the development of business and school alliances.

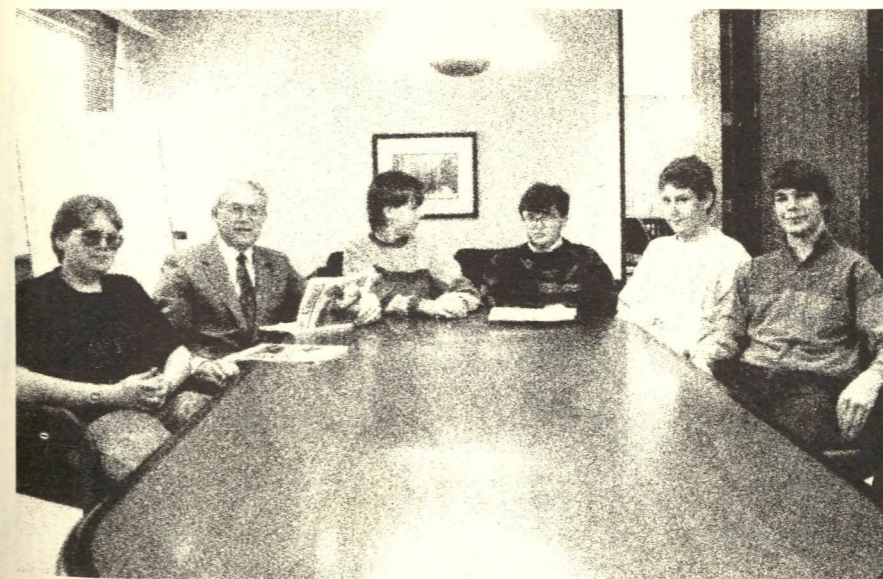
Blue Cross/Blue Shield
Briggs & Morgan
Cowles Media Company
Cray Research, Inc.
Ecolab Inc.
Ernst & Young
First Bank System
H.B. Fuller Company
Honeywell Inc.
IBM
KPMG Peat Marwick
Midwest Communications
Northern States Power
Northwest Airlines
Norwest Corporation
Radisson Hotel, St. Paul
St. Paul Pioneer Press
TCF Bank
The St. Paul Companies, Inc.
Unisys
U S West Communications
Waldorf Corporation

11. ST. THOMAS TEACHER INTERNSHIP PROGRAM is a program for elementary, secondary, technical school and college teachers. Through seminars and work experience, the internship introduces teachers to the daily operations of business, industry, and non-profit organizations. The summer internship begins with an intensive week-long seminar in economics and decision making and is followed by a seven-week internship at a participating company. Selection of teachers is based upon their interest in expanding their awareness of business and economics, their desire to incorporate what they learn and experience in their classroom instruction and the specific needs of the participating organizations.

ADC Telecommunications
Arthur Andersen & Co.
Control Data Corporation
Ecolab Inc.
FMC Corporation
General Mills, Inc.
Graco Inc.
H.B. Fuller Company
Honeywell Inc.
Hubbard Broadcasting
IDS Financial Services
Medtronic, Inc.
Minnegasco/Arkla Inc.
Minnesota Mutual Life Insurance
National Computer Systems
Northern States Power
Norwest Corporation
Opus Corporation
The St. Paul Companies
3M
Twin City Federal
Unisys
U S West Communications
Waldorf Corporation

Many other educational programs receive funding from MBP companies. The following is a list of organizations providing education programs—or the programs themselves—cited by members. Members who supported these organizations are designated in the index by an #.

ASSOCIATION FOR WOMEN
IN COMPUTING
BAKKEN LIBRARY FOR ELECTRICITY
IN LIFE
CENTER FOR THE EARLY LEARNING &
LIVING OF SCIENCE
CHALLENGER CENTER
CLOQUET EDUCATION FOUNDATION
CLOSE-UP FOUNDATION
COUNCIL FOR AID TO EDUCATION
EDUCATIONAL COOPERATIVE SERVICE
UNIT OF TWIN CITIES
EDUCATIONAL COOPERATIVE SERVICE
UNIT OF SOUTHEAST MINNESOTA
FAST CONFERENCE
(College of St. Scholastica)
INDUSTRIAL TECHNOLOGY PROJECT
(Minnesota Department of Education)
INSTITUTE FOR MATHEMATICS
AND ITS APPLICATIONS
INSTITUTE FOR THEORETICAL PHYSICS
INTERNATIONAL BACCALAUREATE
LEARNING CENTER FOR ECONOMICS
LEARNING DISABILITIES ASSOCIATION
MATHCOUNTS (Minnesota Society of
Professional Engineers)
METROPOLITAN TEACHER CENTER
MINNEAPOLIS CITIZEN COMMITTEE
ON PUBLIC EDUCATION
MINNEAPOLIS FEDERATION OF
ALTERNATIVE SCHOOL, INC.
MINNESOTA ACADEMY OF SCIENCE
MINNESOTA ENVIRONMENTAL
SCIENCES FOUNDATION
MINNESOTA FUTURE FARMERS
OF AMERICA FOUNDATION
MINNESOTA FUTURE PROBLEM
SOLVING PROGRAM
MINNESOTA HIGH TECH FOUNDATION
MINNESOTA HISPANIC
EDUCATION PROGRAM
MINNESOTA INTERNATIONAL CENTER
MINNESOTA LITERACY COUNCIL
MINNESOTA MINORITY
EDUCATION PARTNERSHIP
MINNESOTA MINORITY OUTREACH
MINORITIES IN NEW DIRECTIONS
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NORTHERN MINNESOTA REGIONAL
SCIENCE FAIR
PAGE EDUCATION FOUNDATION
WILMAR PARTNERS IN PROGRESS
PROJECT TECHNOLOGY POWER
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ROCHESTER PUBLIC SCHOOL
FOUNDATION FOR ACADEMIC
EXCELLENCE
SOUTHEAST MINNESOTA SCIENCE FAIR
SUMMER SCIENCE INSTITUTE
(St. Paul Technical College)
TALENTED YOUTH MATHEMATICS
PROJECT (University of Minnesota)
TWIN CITIES URBAN MATHEMATICS
COLLABORATIVE TEACHER TRAINING
TWIN CITY INSTITUTE FOR TALENTED
YOUTH (Macalester College)
YOUTH IN SCIENCE PROJECT
(St. Thomas University)



Arrowhead region students, here recognized for their achievement, won a recent regional "Battle of the Brains" competition.

B. SCHOOLS AND SCHOOL DISTRICTS

Individual schools and whole school districts are often the recipients of Minnesota Business Partnership member corporation volunteer and financial support. The support reported varies greatly from company to company and from year to year within each company. Virtually every MBP member corporation reported some kind of support of schools and districts throughout the state. The following examples give the flavor of the diversity of the support provided. Corporations providing programs and support to local school districts are designated in the index by an *.

□ Geo. A. Hormel & Co., in Austin, made a \$2 million dollar pledge to the Austin school district for renovation of the local high school. The local bond issue was consequently reduced and the referendum was passed by the voters. In addition the company donated engineering expertise to the project, further reducing the costs to the district and taxpayers. Hormel also participates in the Community Homework Project which provides a "hotline" for area school students.

□ U S West Communications provided funding to the Fond du Lac Education Division for the start-up and implementation of a networking and telecommunications project between the Fond du Lac Ojibway School and the Harvard University Graduate School of Education.

□ Health One Corporation provides behavioral health consultation, in-service training, task force and board representation in Osseo/Brooklyn Park, Anoka Hennepin, Fridley, Spring Lake Park, Columbia Heights, Mounds View, Monticello, St. Michael/Albertville, Buffalo, St. Francis, Elk River and Princeton. Health One also provides athletic trainers to schools at a reduced fee.

□ The Potlatch Corporation has a close relationship with the Brainerd and Cloquet School Districts. Assistance varies annually and is responsive to changing needs. In the past year, Potlatch sponsored the "Excellence in Education Awards," a student trip associated with the Close-Up Foundation, the International Baccalaureate Honors Program, and talented and gifted enrichment programs.

□ Medtronic, Inc. sponsors a matching gift program for its employees which includes gifts to elementary and secondary schools. Over half of the gifts matched annually go to kindergarten through 12th grade education. In addition Medtronic, Inc. provides substantial support for school district projects—particularly in science and math curriculum and teacher recognition. The teacher recognition program they support in four northern suburban communities is unique in that it is one of very few recognition programs where students and parents—the "consumers" of education—select the teachers to be honored.

The following school districts received financial and/or volunteer support from MBP member corporations:

Albany	Edgerton
Albert Lea	Eden Prairie
Anoka-Hennepin	Edina
Austin	Elk River
Bemidji	Esko
Bird Island	Fairmont
Bloomington	Faribault
Braham	Foley
Brainerd	Forest Lake
Breckenridge	Fridley
Brooklyn Center	Glenville
Buffalo	Glenwood
Burnsville	
Caledonia	
Cambridge-Isanti	
Carlton	
Cass Lake	
Chaska	
Chatfield	
Chisholm	
Clinton-Graceville	
Cloquet	
Cold Spring	
Coleraine	
Columbia Heights	
Cook County	
Detroit Lakes	
Dilworth	
Duluth	
East Grand Forks	

Grand Meadow	Osseo
Harmony	Owatonna
Hawley	Pine City
Hibbing	Pine Island
Hinckley	Pipestone
Hoffman	Preston-Fountain
Holdingford	Princeton
Humboldt-Vincent	Redwood Falls
Hutchinson	Renville
International Falls	Richfield
Ivanhoe	Robbinsdale
Jackson	Rochester
Kasson-Mantorville	Rockford
Kelliher	Rosemount-
Kerkoven-Murdock-	Apple Valley-
Sunburg	Eagan
Lake of the Woods	Roseville
Lake Superior	Royalton
Lamberton	Rush City
Litchfield	St. Anthony-
Little Falls	New Brighton
Little Fork-Big Falls	St. Charles
Mabel-Canton	St. Cloud
Mahtomedi	St. Francis
Maple Lake	St. Louis Park
Marshall	St. Michael-
Medford	Albertville
Melrose	St. Paul
Milaca	Sauk Centre
Minneota	South Washington
Minnetonka	County
Monticello	Spring Lake Park
Montevideo	Spring Valley
Moorhead	Staples
Moose Lake	Stewartville
Morris	Stillwater
Morristown	Storden-Jeffers
Mounds View	Tracy
Mountain Iron-Buhl	Virginia
Minneapolis	Wabasso
Nett Lake	Wadena
North Branch	Walnut Grove
Northfield	Warroad
North St. Paul-	Waseca
Maplewood	Wayzata
Ogilvie	West St. Paul
Oklee	White Bear Lake
Olivia	Willmar
Ortonville	Winona



"Governor's Scholars" participate in an intensive leadership training workshop sponsored through MAEF.

C. SOCIAL SERVICE & CULTURAL AGENCIES

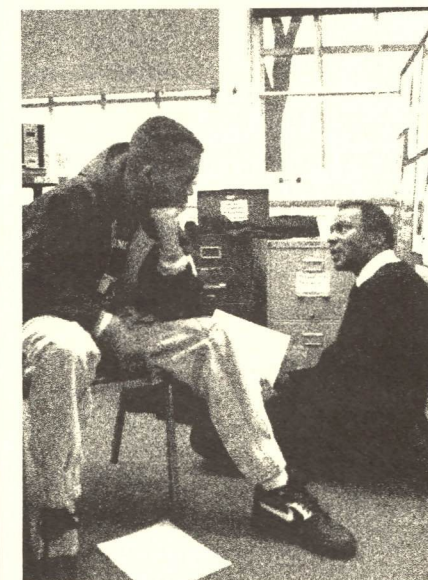
In today's changing society, education needs increasingly do not end at the school house door. Many organizations—from churches to neighborhood and non-profit groups to cultural organizations—provide programs and services which lend both texture to the fabric of education and support to children as they move through school.

As family structures change, students carry greater needs to school, especially in becoming ready to learn. Often teachers and schools fill the gap of learning readiness in many of today's school students. Increasingly, though, community organizations are addressing the issue. Early childhood education, latch-key care, tutoring, youth development programs, and family support are just some of the critical programs which support education and, more importantly, children in school.

The following organizations, which provide extended opportunities and vital resources to schools, families and children were cited by the Partnership's members as receiving financial support from them for specific education or support programs. This list underrepresents the support of MBP companies to community, cultural and social service agencies.

AFRICAN AMERICAN PARENT ADVOCATES (University of Minnesota)
 AMERICAN REFUGEE PROGRAM
 AMIGOS DE LAS AMERICAS
 ASSOCIATION FOR THE ADVANCEMENT OF Hmong WOMEN IN MINNESOTA
 AUSTIN COMMUNITY EDUCATION PROGRAM
 BIG ISLAND RENDEZVOUS & FESTIVAL
 BIHA WOMEN IN ACTION
 BOY SCOUT ORGANIZATIONS (state-wide)
 BOYS & GIRLS CLUBS (state-wide)
 BUSINESS PROFESSIONALS OF AMERICA
 CENTER FOR COMMUNITY ACTION
 CHEROKEE PARK UNITED CHURCH
 CHILDREN'S HOME SOCIETY
 CHILDREN'S MUSEUM
 CHILDREN'S THEATER
 CITIES IN SCHOOLS, INC.
 COMMONWEALTH THEATER COMPANY
 COMMUNITIES OF COLOR PROJECT
 COMPAS
 CONFIDENCE LEARNING CENTER
 COUNCIL OF THE CAMPFIRE
 DRUG ABUSE RESISTANCE EDUCATION—DARE PROGRAMS (state-wide)
 DULUTH DISCOVERY CENTER

EDINA ABC FOUNDATION
 FAMILIES' AND CHILDREN'S SERVICES
 GIRL SCOUT ORGANIZATIONS (state-wide)
 GREATER MINNEAPOLIS DAY CARE ASSOCIATION
 GREATER MINNEAPOLIS COUNCIL OF CHURCHES
 GREATER TWIN CITIES YOUTH SYMPHONIES
 GUTHRIE THEATER
 HALLIE Q. BROWN COMMUNITY CENTER
 HEAD START PROGRAM (state-wide)
 HEALTH STATE, INC.
 H.E.A.R.T.
 HEART OF THE EARTH SURVIVAL SCHOOL, INC.
 HISPANOES IN MINNESOTA
 HOPKINS SENIOR COMMUNITY SERVICES
 ILLUSION THEATER
 INDIAN HEALTH BOARD OF MINNEAPOLIS
 ITASCA ORCHESTRAL SOCIETY
 LAO ASSISTANCE CENTER OF MINNESOTA
 LORING NICOLLET-BETHLEHEM COMMUNITY CENTER
 MINNEAPOLIS A CHANCE TO GROW PROJECT
 MINNEAPOLIS CRISIS NURSERY
 MINNEAPOLIS FOUNDATION
 MINNEAPOLIS INSTITUTE OF ARTS
 MINNEAPOLIS PUBLIC LIBRARY
 MINNEAPOLIS URBAN LEAGUE
 MINNEAPOLIS YOUTH COORDINATING BOARD
 MINNEAPOLIS YOUTH DIVERSION PROGRAM
 MINNESOTA ALLIANCE FOR ARTS IN EDUCATION
 MINNESOTA ENVIRONMENTAL SCIENCES FOUNDATION
 MINNESOTA HISPANIC EDUCATION PROGRAM
 MINNESOTA HISTORICAL SOCIETY
 MINNESOTA HUMANITIES COMMISSION
 MINNESOTA OPERA
 MINNESOTA ORCHESTRA
 MINNESOTA PUBLIC RADIO



MINNESOTA RESOURCES FOR ARTS EDUCATION
 MINNESOTA SCIENCE MUSEUM
 MIXED BLOOD THEATER
 NIIBIN SUMMER SCHOOL
 NORTHSIDE CHILD DEVELOPMENT CENTER
 NORTHSTAR LEARNING AND DEVELOPMENT CENTER
 NORTHWEST SUBURBAN YOUTH SERVICES
 ORDWAY MUSIC THEATER
 OUR SAVIORS LUTHERAN CHURCH PACER CENTER
 PARK AVENUE URBAN PROGRAM & LEADERSHIP FOUNDATION
 PARK SQUARE THEATER
 PASSAGES CHILD CARE
 PAYNE-PHALEN FAMILY SUPPORT PROJECT
 PHALEN AREA COMMUNITY COUNCIL
 PHYLLIS WHEATLEY COMMUNITY CENTER
 PILLSBURY UNITED NEIGHBORHOOD SERVICES
 PLYMOUTH CHRISTIAN YOUTH CENTER
 PLYMOUTH MUSIC SERIES
 PROJECT FOR PRIDE IN LIVING
 RAMSEY COUNTY OPPORTUNITIES INDUSTRIALIZATION CENTER
 RED WING ENVIRONMENTAL LEARNING CENTER
 RIVER BEND NATURE CENTER
 ROCHESTER AREA FOUNDATION
 ROCHESTER BETTER CHANCE FOUNDATION
 SMART START PROGRAM
 SOCIETY OF Hmong AMERICANS QUEST FOR ADVANCEMENT & SUCCESS
 SOUTHSIDE FAMILY SCHOOL
 STOREFRONT YOUTH ACTION
 ST. DAVID'S SCHOOL FOR CHILD DEVELOPMENT AND FAMILY SERVICES
 ST. JOSEPH'S HOME FOR CHILDREN
 ST. PAUL CHAMBER ORCHESTRA
 ST. PAUL FOUNDATION
 ST. PAUL GOSPEL MISSION
 SUCCESS BY SIX
 SUCCESS DYNAMICS
 SUMMIT UNIVERSITY EDUCATION CONSORTIUM
 SURVIVAL SKILLS INSTITUTE
 TENTMAKERS YOUTH MINISTRY
 THE CENTER SCHOOL, INC.
 THE CITY, INC.
 TWIN CITIES OPPORTUNITIES INDUSTRIALIZATION CENTER
 TWIN CITIES PUBLIC TELEVISION
 TWIN CITIES UNITED ARTS
 UNITED WAYS (state-wide)
 UN PRIMER PASO PROGRAM (College of St. Catherine)
 WALKER ART CENTER
 WASHBURN CHILD GUIDANCE CENTER
 WOLF RIDGE ENVIRONMENTAL CENTER
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Corporations represented and the Membership

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