

Morton Bender

466-5821

John Schurr - Dept of Ed

401-3598

Nichole Palmer

Pauline Chernack

THE WHITE HOUSE

WASHINGTON

July 3, 1997

Mr. Lex Towle
AppleSeed Institute
2501 M Street, NW
Suite 515
Washington, D.C. 20036

Dear Mr. Towle:

Ann McCoy forwarded to me your letter about the recent activities of the AppleSeed Institute and its partnership with Washington D.C. in the Campaign to Rebuild Education in Washington. You have taken an important leadership role in improving the quality of education in the District of Columbia. As you know, the Clinton Administration supports charter schools. The President, in his call to action for American education in the 21st century, demonstrated his commitment to expanding school choice and accountability in public education by calling for the creation of 3,000 charter schools by the beginning of the 21st century. This is only one part of the Clinton Administration's commitment to improving the education system and making more learning exciting and challenging for students.

Best wishes in your important efforts to create charter schools and rebuild the public school system in cities across the nation. Please keep me updated on your efforts and successes.

Sincerely yours,



Jennifer Klein
Special Assistant to the President for
Domestic Policy



AppleSeed Institute

For Education Innovation

Jack McCarthy
Managing Director

607 Boylston Street, #400
Boston, MA 02116
TEL: 617-536-6033
FAX: 617-536-6409

2501 M Street, NW, #515
Washington, DC 20036
TEL: 202-775-5826
FAX: 202-775-8549

Jack -

I (sort of) hate to do
this... but if you're going
to be D.C. woman - wd you
call these people? Ann Meloy
fielded a call for HRC
from this person who
wants to be engaged

in D.C. education issues.

She said he's v. impressive.

Or maybe a letter
drafted by our new intern
on your signature?

| Nick



AppleSeed Institute
for Education Innovation

To: Nicole Rahner
From: Ann McCoy

March 12, 1997

M. Ann McCoy, Deputy Director of Visitors Office
The White House, Room 100 EW
Washington, D.C. 20502

Dear Ann,

For your information and to provide background for our meeting at 1030h on March 18, I have enclosed a variety of materials describing the recent activities of AppleSeed Institute and the Campaign to Rebuild Education in Washington.

Jack McCarthy and I look forward to meeting you.

Yours Sincerely,

Lex Towle
Managing Director

Two very enthusiastic young men - anxious to improve public education. Excited that the Clinton Administration is interested in Charter Schools.

Ann
3/18/97

607 Boylston Street, 4th Floor
Boston, Massachusetts 02116
Telephone: 617/536-6033
Facsimile: 617/536-6409

2501 M Street, NW Suite 515
Washington, D.C. 20036
Telephone: 202/775-5826
Facsimile: 202/775-8549



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Lex Towle

Managing Director

607 Boylston Street, #400

Boston, MA 02116

TEL: 617-536-6033

FAX: 617-536-6409

2501 M Street, NW, #515

Washington, DC 20037

TEL: 202-775-5826

FAX: 202-775-8549



AppleSeed Institute

For Education Innovation

SUMMARY STATEMENT - CAMPAIGN TO REBUILD EDUCATION IN WASHINGTON, DC

Public education in the District of Columbia fails to meet its basic obligations to the children it is charged with serving. From unsafe and unhealthy facilities, inadequate materials and supplies, ill-trained and ineffective teachers and administrators, to an ineffective bureaucracy that fails to address these problems, the District's schools are among the worst in the nation. However, General Becton is bringing administrative order to the system, and the city's charter school law offers substantive opportunities for creating schools that will meet our children's educational needs.

The Campaign to Rebuild Education in Washington (CREW) has embarked on transforming public education by fostering the development of schools based on sound academic content, clear standards of performance, effective means of assessment and high expectations for students and faculty. This will begin with the introduction of significant numbers of innovative schools which will provide real working demonstrations of the effectiveness of charter schools. To achieve its goals, CREW will undertake the following:

- **Introduction of Quality School Designs**

Through a partnership with New American Schools Development Corporation (NAS), introduce quality whole-school educational designs to charter school founders. (*NAS is a non-profit organization which supports development of innovative school designs.)

- **Facility Acquisition Support**

Identify or establish an entity to locate, secure, develop, lease, acquire or otherwise make available suitable property for housing charter schools.

- **Financial Lending Support**

Organize a consortium of sources, including banks, lenders, foundations, individuals and corporations to establish revolving loan funds for the extension of credit to chartered schools for facility renovation or construction or to meet working capital needs.

- **Financial Grant Support**

Organize a philanthropic consortium of individuals, corporations, banks and foundations to fund "seed capital grants" to meet school pre-operating expenses and to support key elements of the campaign's mission.

- **Advocacy and Public Awareness**

Initiate a long term charter school information and advocacy campaign to raise public awareness, gain city-wide community support and build relationships with neighborhood leaders to spur charter school efforts in all wards.

CREW ORGANIZATION AND OVERSIGHT

The Campaign is being undertaken by a group of local business and civic leaders committed to a vision of bringing vast improvement to schools. CREW has engaged the AppleSeed Institute for Education Innovation to direct the campaign and coordinate the four resources that have been deemed critical to the campaign's success: time, talent, people and capital resources.

APPLESEED MISSION

AppleSeed, a non-profit organization formed in 1996 to increase the supply of effective schools, will also monitor and assess performance of the schools supported through the CREW initiative and report its findings annually to the public. Among the measures to be used to assess the performance of these schools and provide accurate comparisons with existing District Schools will be: Standardized test results, student and teacher turnover rates, student and teacher absenteeism rates and community support as demonstrated by applications for admission. Longer term measures of performance will include graduation rates, college acceptance and graduation rates and the success of charter school graduates in the workplace.

Metropolitan Times

The Washington Times

Charter schools routed

Would include third of District's students

By Karyn Spellman
THE WASHINGTON TIMES

Business leaders, educators and others with an interest in the D.C. school system yesterday learned that students attending a network of charter schools proposed for the District would be prepared for advanced courses by the time they reach high school.

A group of business leaders in the city, with the help of the Boston-based AppleSeed Institute, are working to transform the troubled public school system through the District's fledgling charter school movement. Under their guidance, they would like to see as many as a third of the District's 78,600 public-school students in privately run charter schools in the next five years.

A presentation yesterday sponsored by AppleSeed and the Campaign to Rebuild Education in Washington (CREW) showed the design the group would like to use for such schools.

Schools chief Julius W. Becton Jr. and Bruce MacLaury, chairman of the board of trustees established by the D.C. financial control board, are scheduled to see a similar presentation tomorrow.

The design, called Modern Red Schoolhouse, would let teachers help create a curriculum that would hold children to high educational standards. Students could be grouped by ability level instead of age or grade level to let them learn at their own pace.

The goal would be to have most students in advanced placement classes when they reach high school, said Sally B. Kilgore, director of Modern Red Schoolhouse.

AppleSeed and CREW want to use the Modern Red Schoolhouse model in the first charter school they help establish, and will encourage its use in the others, said Lex Towle, managing director of AppleSeed.

"This is all part of a learning process. Most people don't have much of a feel for what standards and assessments [of students] are about," Mr. Towle said. "Modern Red Schoolhouse is one way of doing it, but it's not the only way."



Don Reeves

Mr. Towle and one of his partners, Jack McCarthy, have opened an office in the District to work on setting up charter schools. They helped lay the foundation for the Boston Renaissance School, a charter school with more than 1,000 students from across that city.

AppleSeed and CREW plan to apply for a charter for their first school as soon as the D.C. Board of Education and a recently established charter board reopen the application process.

Last year, Congress passed a law allowing charter schools in the city. The school board approved charters for five of the publicly funded, privately run schools in August.

Two of the schools — Marcus Garvey and Options — are open now for fewer than 200 students.

The Washington Times first reported last week that a third charter school, High Road, was set to open in January but pulled out after complaining of bureaucratic inaction by school officials. Two other charter schools are expected to open by September.

But neither chartering authority will start accepting applications again until a new adviser to Gen. Becton clarifies the approval process and establishes how the schools are to be monitored.

Until that is done, school board President Don Reeves is skeptical that any major charter-school effort will take hold, especially one to put as many as one-third of public-school students in charter schools.

"There's nothing in the history of the District's charter experience up to now that says the District will be able to accommodate that many students in that period of time," Mr. Reeves said.

"We have very weak charters. Only two are open and of the others, we ran one of them out of town. That doesn't suggest to me that this is the wave of the future."

Directors of AppleSeed and CREW said they knew there would be hurdles for setting up any charter schools in the District, especially since the chartering boards are inexperienced.

"Once they get their ducks lined up, the process will happen," Mr. Towle said. "It would be a shame to let the process bog down the entire charter movement in D.C."

The Washington Times

WASHINGTON, D.C., MONDAY, MARCH 3, 1997 ***

Charter schools get boost in city

Business leaders plan big program

By Karyn Spellman
THE WASHINGTON TIMES

As many as a third of the District's 78,600 public schoolchildren could be learning in privately run charter schools within five years under a plan launched by business leaders and a nonprofit company.

The business leaders, with the help of the Boston-based AppleSeed Institute, are trying to drum up support and money from local officials, philanthropists and foundations to transform the beleaguered D.C. school system through the use of charter schools.

"We are passionate and hellbent on bringing a better school system through working with the business community," said Chris White, founder of the Campaign to Rebuild Education in Washington (CREW) and chairman of the Krisam Group, a D.C. company that generates convention business for hotels.

One of Mr. White's first steps was to recruit AppleSeed, a nonprofit group that laid the foundation for the Boston Renaissance School, a charter school with 1,000 students from across that city.

Jack McCarthy and Lex Towle, managing directors of AppleSeed, have set up an office in the District to work on the project.

Representatives of the two nonprofit groups say they are driven by a passion to give D.C. students a better education through choice.

CREW and AppleSeed want to open charter schools to all children, not just targeted students with specific abilities or handicaps. Their goal is to help parents and teachers convert neighborhood schools into charter schools by showing them how to develop a curriculum and how to raise money.

Parents apply to have their children attend charter schools, which are run privately with public money under locally approved guidelines.

Representatives from CREW and AppleSeed have met with Bruce K. MacLaury, chairman of the emergency board of trustees for the public schools installed by the D.C. financial control board. The trustees don't have the power to approve charter schools, but they are charged with overhauling the school system and are keeping a close watch on how charter schools develop, Mr. MacLaury said.

"If they can demonstrate they can set a high standard for the rest of us to emulate, so much the better," Mr. MacLaury said. "There's no one route to education success in the District."

Although the control board entrusted new schools chief Julius W. Becton Jr. and the emergency trustees to overhaul the public schools, the transformation could take years. Many see charter schools as an immediate way to improve education in the city.

The city's 158 public schools have sunk under low test scores, deteriorating buildings and management snafus, including an inability to keep track of employees or order books on time.

Calls for reform have put the District in a unique position among area jurisdictions. Maryland doesn't allow charter schools; Virginia lawmakers last month quashed Gov. George F. Allen's proposal to experiment with them.

One reason Mr. McCarthy and Mr. Towle embraced CREW's ambitions is the number of charter schools the District may authorize is virtually unlimited. Massachusetts' limit currently is 25 schools, and 22 are open.

In Boston, AppleSeed worked with the Edison Project, which now runs Renaissance, to secure financing to renovate a 13-story building in downtown Boston, establish the curriculum and hire teachers.

In the District, CREW and AppleSeed are plotting strategy. For now, they don't plan to apply to open charter schools next school year. Based on the experience of Mr. McCarthy and Mr. Towle with the Renaissance School, planning to open schools in September 1998 may be the best route.

"We're anxious to have the application period start as soon as possible. Ideally, we should apply this spring," Mr. Towle said.

The D.C. Board of Education and a recently named charter board are not accepting applications while they consider the best way to administer the program.

The school board approved five charter schools in August; it retained control over charter schools when it was gutted of most of its power when the control board created the board of trustees in November. Two of the schools, Marcus Garvey and Options, opened in September.

The Washington Times first reported last week that a third charter school, High Road, was set to open in January but pulled out after complaining of bureaucratic inaction by school officials. Two other schools are expected to open by September.

Unlike CREW's plan, the five approved charter schools target certain groups of children. Garvey has an Afrocentric curriculum; Options serves middle school students with behavioral problems. High Road was to teach special-education students. The other two schools will target teen-age mothers and artistically gifted children.

CREW's executive committee includes Jim Kimsey, the founder of America Online, George Kettle, former regional owner of Century 21, and Bob Pincus, chairman of Franklin National Bank.

The organization's goal is to sell business leaders on a commitment to finance and sponsor individual charter schools, then to help launch those schools, Mr. White said. A board of trustees would run each school, with AppleSeed acting as stewards and holding one seat on each board.

"Our pitch is 'Enough rhetoric, guys. Bottom line, let's just produce schools. We have the law. Let's get these schools running,'" Mr. White said.

The two groups are confident they will win community support.

"There's a demand in this city for schools that work," Mr. McCarthy said. "People are going to want to put their kids in these schools."



Bruce K. MacLaury

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UPDATE
Spring 1997



AppleSeed Institute
for Education Innovation

607 Boylston Street • Suite 400 • Boston, MA 02116
Telephone: (617) 536-6033 • Facsimile: (617) 536-6409

2501 M Street, NW • Suite 515 • Washington, DC 20037
Telephone: (202) 775-5826 • Facsimile: (202) 775-8549

AppleSeed Institute Formed

THE NON-PROFIT APPLESEED INSTITUTE FOR EDUCATION INNOVATION was founded in 1996 with a simple but profound mission: to increase the number of effective schools through innovation.

AppleSeed's founding group, comprised of Robert Gaudet, Jack McCarthy and Lex Towle, earned a track record for innovation and accomplishment through the successful organization, development, launch and expansion of Boston Renaissance Charter School.

AppleSeed Institute is prepared to act as a change agent where innovation can provide meaningful improvement in educational performance. Such is the case in the Nation's Capital, where AppleSeed is involved in a major public school restructuring effort.

Massachusetts is in the process of creating additional charter, pilot or experimental schools. AppleSeed's founders are exploring starting one or more new schools in the near future.

AppleSeed Institute is working closely with New American Schools Corporation and The Hudson Institute's Modern Red Schoolhouse to utilize their whole-school designs in the mission to increase the supply of effective schools through innovation.

Lessons Learned In Starting Urban Charters

Bob Gaudet and Jack McCarthy were founders of Boston Renaissance Charter School, the largest new charter school launched in the United States. Several lessons were learned as a result of that effort:

- ❖ Citizens can build new schools which are comprehensive in nature with scale.
- ❖ There is a demand among teachers to teach at innovative urban schools as evidenced by 800 plus resumes received for 40 positions.
- ❖ There is a strong demand among urban parents, transcending race and economic status, for innovative public education as evidenced by 2,200 applications for 630 seats.
- ❖ Business, government and civic groups can work effectively to innovate when efforts are focused on public policy priorities.



To AppleSeed Founders, Reading is Fundamental

Last Autumn, the three founders of AppleSeed Institute donated and presented gift certificates to students who had excelled at reading at the Boston Renaissance Charter School. The winning students had read the most books over the summer of anyone in the program. "Reading well is essential to success in school and life," said Lex Towle as he presented Barnes & Noble gift certificates to the winners. "We are happy to be able to contribute in this small but important way to encourage reading among young people."

Development Critical to AppleSeed's Success

As a not-for-profit, AppleSeed relies on philanthropic support from individuals, corporations and foundations for its operating expenses. AppleSeed's start-up, organization and development were underwritten by a small group of committed funders. Charter Members of AppleSeed Institute are funding our mission to increase the supply of effective schools through innovation. For information about how to become a Charter Member of AppleSeed Institute for Education Innovation, please call Betsy Lynch at (617) 536-6033 or Lex Towle at (202) 775-5826.



Boston Renaissance School
Development Office, 250 Stuart Street
Park Square, Boston, MA 02116
tel (617) 357-0900 fax (617) 357-0949



AppleSeed Institute
for Education Innovation

A Concept Paper

March 1997

AppleSeed Institute
for Education Innovation

Washington Office:
2501 M Street, NW - Suite 515
Washington, DC 20037

Boston Office:
607 Boylston Street - Suite 400
Boston, MA 02116

AppleSeed Institute: An Introduction

In the early 19th century, John Chapman (Johnny Appleseed) traveled from Massachusetts west to the Ohio River Valley planting apple seeds to grow and to provide sustenance for pioneers seeking opportunity in the agricultural-based westward expansion.

As the 21st century approaches, AppleSeed Institute for Education Innovation ("AppleSeed") is working from Massachusetts throughout the Northeastern United States planting different kinds of "AppleSeeds."

This education variety of AppleSeed consists of innovative schools, innovative education design and methods, innovative business management practices and commitment to civic reform by the thousands of citizens, teachers, civic leaders, policy makers, students and parents who participate in the formation and growth of these schools. Like John Chapman's plantings, these AppleSeeds will grow and provide sustenance for pioneers seeking opportunity in the knowledge-based economy of the future.

AppleSeed Institute was born of necessity. Like John Chapman's long treks west, there is much organization and development work to be done before these grassroots education reform efforts will bear real fruit.

The formative experience for the Founders of AppleSeed was the successful organization, development and launch of Boston Renaissance Charter School, the largest new charter school in America. As parents and citizen activists, we have been deeply concerned about public education. No one who cares deeply about this country and the people who comprise it could feel otherwise. Our conversations with parents, business leaders, teachers, civic leaders, policy makers, and philanthropic leaders over the past two and one half years convinced us to consider a way in which we might "leverage" the lessons we learned in starting Renaissance.

We don't presume to have all of the answers for success in furthering the case for bringing reform to public education. But we do know that we have demonstrated an ability to "think outside of the box" and to innovate in ways which others have not. This ability, blended with the passion we have developed from participating in Boston Renaissance, is a powerful "raison d'être" in the revolutionary arena of public education.

We want to get to work on a series of ground-breaking projects to launch five schools dedicated in every way to transform the systems in which they are located. We believe we have developed keen insights on how that might be accomplished better than it has been to date. The opportunity to take a position in the vanguard of reform is clearly at hand for those who can manage the possibilities of change as well as the limitations.

AppleSeed's mission is to focus the passion, experience and successful practices of education innovators to increase the supply of good schools--in the many forms they may take--through direct participation.

As a non-profit corporation, AppleSeed will assemble the resources of time, talent, people and money to grow five new schools, which will be centers of community life and civic reform.

The Problem of Education

Presently, our American civilization recognizes the extraordinary threat to our survival from within. We see record levels of drug use, violence and out of wedlock births in our cities. We feel the effects of our industrial-based economy lurching toward a knowledge-based economy. Almost instinctively we know that vast numbers of our citizens will soon be "casualties" unless we make serious corrective changes soon. Amidst the confusion, we are beginning to reach a consensus on essential fundamental elements of civilization which must be reaffirmed.

Virtually every parent, whether rich or poor, recognizes that a sound education is the only way their child has a chance to compete for a living wage and a better way of life. Most are willing to do whatever they can to make that opportunity available for their children.

There is a consensus in America that something is terribly wrong with our public schools. Academic performance everywhere has declined. Worse, this decline has continued over several decades. Many people and organizations are working at a number of approaches to turn this public education behemoth in the right direction. Observers ranging from Lester Thurow to William Bennett have sounded the alarm on the declining quality of public education and the dire implications for our civic and economic life. One of the best recent analyses of the condition of public education today was published in the September 1996 issue of Commentary by Chester E. Finn, Jr.

"Public education in the United States is a vast enterprise, involving some 45 million young people, or three-fifths of all Americans under the age of nineteen; 85,000 schools; 5 million employees; and a cost to taxpayers of more than a quarter-trillion dollars annually. Vast as this enterprise is, it is also increasingly precarious. The evidence is by now so familiar as hardly to bear repeating:

- In 1994, according to the National Assessment of Educational Progress (NAEP), six out of seven eighth graders were not "proficient" in American history, and 57 percent of high-school seniors registered "below basic" in this subject.

- In the same year, three out of four seniors were less than "proficient" in geography; 30 percent lacked even rudimentary understanding.

- Two out of five fourth-graders, including two out of every three black and Hispanic youngsters, can hardly read at all. Among high school seniors in 1994, only 36 percent were "proficient" in this most basic skill.

- Almost half the entering freshmen in the California state-university system in 1994 required remedial instruction in reading or math or both--the fifth straight year in which this number has been increased.

This ever-expanding catalogue of inadequacy and outright failure has led to a development full of significance for the future: a broad cross-section of America is losing faith in public education itself. In one 1995 survey, 72 percent of respondents voiced concern about drugs and violence in local schools, 61 percent complained of low standards, 60 percent of a lack of attention to "basics." In the words of the report summarizing the data, "support for public education is fragile and porous." Even Albert Shanker, president of the American Federation of Teachers, has declared that "time is running out on public education....The dissatisfaction that people feel is very basic." Or, in the recent words of David Mathews, a former secretary of the Department of Health, Education and Welfare, "Americans today seem to be halfway out the schoolhouse door."

Chester E. Finn, Jr.
Commentary 9/96

The Problems of Reformers

There are two approaches being employed by the main currents of education reformers: *systemic reform* and *fundamental change*.

Many *systemic reformers* argue that public school stake holders (which include teachers, administrators, unions and taxpayers among others) must all collaborate on incremental improvements and changes in pedagogy, curriculum, governance and school design. Most maintain that lasting school improvement is a long term proposal, requiring substantial commitments of additional resources and coordination at the central administrative level. *Systemic reformers* include everyone involved with public education today as part of the solution. Tens of millions of dollars have been spent in developing innovative methods and systems of instruction. Many recommended improvements and reforms are compelling, yet the systemic reform approach has faced real limitations.

Changing the existing cultures of public schools, of their administrative bureaucracies, and of the union leadership is difficult under the best of conditions and impossible under the worst. Getting stake holders to embrace change and feel personally "invested" is the greatest challenge this approach faces. In reality, building the consensus among such a disparate group is virtually unachievable because many of the stake holders blame each other for the failure of the system. Taxpayers are loathe to contribute more money to schools many feel have not spent money productively. As a result, successful implementation of large scale reform agendas has proven to be very, very difficult. Worst of all, thousands of children continue to pass through a system--short-changed--while planning and implementation continues.

Fundamental change advocates seek methods including vouchers, charter schools, privatization, home schooling and other such approaches to changing the delivery systems. Many of these reforms make considerable sense, creating a variety of possibilities within school districts and, ideally, enabling parents to choose among them.

But in the end this approach, too, faces serious constraints. *Fundamental change* initiatives tend to be isolated from the "mainstream" of the school district. Resistance from entrenched interest groups like the National Education Association and their state affiliates is great. The NEA's influence in legislative bodies ensures that experiments in fundamental change are limited, undercapitalized and subject to rules and regulations that would strangle most start up businesses.

Seldom has much real power--like the right to hire and fire teachers--actually devolved to district school systems as a result of examples of *fundamental change*. Innovative governance schemes have often deteriorated into bickering, paralysis or both. While most schools born from this kind of reform have competed effectively for students, there is a lack of "connectedness" to the broader movements of education reform. Finally, in the tens of thousands of schools across America, the number of educators with truly fresh ideas and the courage to take risks is too small at present for an approach like this to transform the entire enterprise.

While much time and money has been invested in both approaches, results have left a lot to be desired. The *systemic reformers* are coming to realize that leadership, commitment, talent and flexibility are not available in sufficient measure to render lasting improvement in broad school systems. The advocates of *fundamental change*, while pleased with the launch of hundreds of innovative schools, are undercapitalized, are struggling with the issues common to new ventures and are disconnected from other schools in the district. Their focus is inward by necessity, and lessons they learn are kept to themselves or not applicable to the efforts to bring meaningful change to the schools at large.

Again, Chester E. Finn, Jr. is instructive as he writes in the September 1996 issue of *Commentary*:

"The most common approach of the school-reform industry has amounted to piecemeal tinkering with the countless gears and levers of the existing educational machinery: upgrading teacher-training programs, stiffening graduation requirements, installing modern technology, revamping reading programs, shrinking class size, adding a period to the school day, and on and on through hundreds of variations and permutations.

Certainly, many such changes are worth making. Ample evidence exists, for example, that tougher graduation requirements impel students to take more challenging courses. Better training for teachers and modern information technology help, too, in their own ways. But piecemeal reform will not fundamentally alter the working of a system in such serious disarray."

America is in a dynamic period of experimentation in public education. Because so many of our schools are so clearly under performing, citizens are prepared to embrace a wide array of strategies for improvement.

The Founders of AppleSeed Institute for Education Innovation ("AppleSeed") are experienced citizen innovators. They were intimately involved in drafting the charter application, recruiting the enrollment, financing and managing the \$9,000,000 renovation of a 183,000 square foot building, and the launching of Boston Renaissance Charter School.

Renaissance is the largest new charter school opened in America. It is comprehensive in nature with scale (1,048 students K through 8) and is located in a 13 story office building in Downtown Boston. Renaissance features many of the kinds of changes in school design and adherence to high expectations which will result in a better educational experience for the inner city children who attend the school. It has a demographic mix of children from every neighborhood in Boston (52% African American, 25% Caucasian, 18% Hispanic and 5% Asian/Native American.)

We learn by doing. We understand and retain important lessons as a result of working through problems in a hands-on manner. Experience gives us the ability to teach others with conviction, with a common frame of reference that conveys information more directly and succinctly. Experiential learning is the key to retaining important lessons of life.

We believe that the means for connecting the innovative schools to the greater whole is to leverage those experiences through strategies to bring civic reform. Reform efforts must be connected to the greater system, but in a way in which they can influence the whole without being consumed by it.

Many of the efforts to create "islands of excellence" satisfy the parents of the children who attend them or the educators who create them, but the civic reform piece is missing. There is no catalyst for causing change of the system.

The Promise of a New Premise

AppleSeed Institute for Education Innovation's goal is to increase the supply of good schools. We have been formed in an era where there are opportunities but real limitations to the scope and methods available to those who seek to increase the supply of good schools.

Limits impose restraints, but also create possibilities. The experience of starting Boston Renaissance, a first generation charter school, brings an understanding of the possibilities, as well as a humble appreciation of the limitations on having an impact on reform.

We have discussed the two education reform approaches used to date: *systemic reform* and *fundamental change*. We propose that a new premise of "**system transformation**" is a third possibility. The concept of transformation is familiar to scientists in genetic research:

system: A group of interacting, interrelated, or interdependent elements forming a complex whole.

transformation: *Genetics.* Alteration of a cell by introduction of DNA from another cell or from a virus.

We define *System transformation* as the improvement of a school system by the introduction of innovative schools whose education, business and civic reform elements illuminate and introduce the benefits of effective schools to the community at large.

System transformation is a hybrid of the approaches of *systemic reform* and *fundamental reform* utilizing legislated opportunities. Creating new schools offers the opportunity to educate thousands of people from a variety of walks of life with regard to effective school practices. Each is a campaign for public opinion which extends beyond the enrollment of the school. In the many decisions a founding group makes, there are a myriad of opportunities to introduce elements to transform the surrounding school systems. AppleSeed schools will be built with an eye toward leveraging these opportunities.

Three Components of Innovative Schools

We have learned that there are three components of reform possible in the development of any new school: the *education* component, the *business management* component and the *civic reform* component.

As participants in starting an innovative school and as colleagues of citizens who have started other schools, we've had a ring side seat at the revolution. We are students of education reform by necessity and choice. Our unique perspective and research allow us to understand the strategies and resources needed for the organization and development of new schools.

The Education Component:

The education component provides answers to the questions: How do we organize our time, talent and people (school design)? What are our goals for the educational program (standards)? How do we plan to get there (curriculum)? How will we know how many of our children got there (assessments)?

AppleSeed Institute has studied the efforts to create effective standards, curricula and assessments over the past several years.

The Modern Red Schoolhouse, a pedagogy created by the Hudson Institute, offers the greatest potential for innovative schools to secure and implement an educational program with high expectations and accountability. This project was funded by the New American Schools Development Corporation which in turn received a major portion of its funding from the Annenberg Challenge.

Modern Red Schoolhouse's design is based on six pillars which are embraced by AppleSeed Institute's founders:

1. All children can attain high standards in core academic subjects. Children simply vary in the time they need to learn and in the ways they learn best.
2. Schools should help transmit a common culture that draws on the traditions and history of our democracy. At the same time, children should understand other nations and people as well.
3. Principals and teachers should be free to organize and manage their schools.

4. Schools should have greater flexibility to meet their goals while being held accountable for their performance.
5. Advanced technology is critical to attaining high-quality education in cost-effective ways.
6. Students and staff will attend Modern Red Schoolhouse by choice, not by assignment.

What is vital about this design is: it is implemented locally through a process of professional development of the school staff. Modern Red Schoolhouse presents a well-thought-out set of standards and assessments and provides the teachers with the opportunity to develop their school's curriculum based on their personal knowledge, experience and best practices.

From our analysis, this education component provides the tools and training for community-based schools to provide a superior education to its children. It offers synergies for the business reform and civic reform components as well. Schools need not contract with third party education management organizations to have access to a coherent education program which prepares students to be responsible citizens leading successful lives in the 21st century.

Furthermore, Modern Red Schoolhouse has the flexibility, accountability and potential for ongoing adaptability. We see Modern Red Schoolhouse as an example of high-quality reform of the education component which was developed by the systemic reform movement and which can be implemented successfully using fundamental reform tactics.

The Business Management Component:

The business management component provides innovative answers to the questions: How can we allocate resources of time, talent, people and capital resources more efficiently and effectively to support our educational program? What other resources in the form of private investment and philanthropic capital, volunteer time and talent, and synergies in the form of partnerships, alliances, internships, fellowships, parental and community involvement can we bring to the mission to support our educational program?

Innovative schools face two opportunities (or challenges) for reform within the business component: allocating operating dollars more effectively and securing dollars for pre-opening expenses and capital budgets in order to provide the requisite size or scale of school.

Yet, in fairness to those students who attend innovative schools, and to those who accept the responsibility and opportunity to start new schools; credit and capital should be made available to provide "lifeblood" for pre-opening expenses, capital budgets, working capital and growth capital. These resources will augment public spending.

The founders of AppleSeed in their experience as founders of Boston Renaissance were successful in innovating to obtain capital financing sufficient to renovate a facility which could house a charter school with scale (over 1,000) inner city children. We secured a credit facility providing for working capital requirements.

In the first year of operations, we raised well over \$800,000 from individuals, corporations and foundations at a cost of under \$130,000. These contributions provided an additional 15% of our operating budget serving as a reserve account to secure our construction mortgage. We also provided extra funds for cultural enrichment, after school programing, and an Outward Bound orientation and assimilation program for over 300 students joining Renaissance through our second phase of expansion.

AppleSeed Institute continues to develop strategies for bringing private capital and credit to innovating schools, to provide for the financial needs of the emerging education market. One of the major obstacles schools face in gaining access to capital and credit is educating those providers about the management of risks by education innovators.

Traditional public schools benefit from favorable capital finance programs provided by the states in which they are located. Innovative schools, by and large, are excluded from these programs by legislative design. We will act as an intermediary to arrange or provide facilities for lease or purchase by innovative schools.

AppleSeed is developing relationships with the goal of establishing a credit facility for innovative schools through program-related investments, bank credit, and grants. Predictable access to capital will liberate time and talent at innovative schools and focus those precious resources on improving the education component of reform.

In AppleSeed schools, we will structure financing arrangements to provide quality facilities, and management of those facilities, while utilizing public and private sources of credit and capital including: *historic tax credits* for renovation of older buildings and *community reinvestment act credits* for community banks providing credit.

The Civic Reform Component:

Finally, the *civic reform component* answers the questions: How can schools regain positions as centers of community life and civic reform? How can innovative schools leverage professional development opportunities to teach and influence teachers from other schools? How can schools which utilize technology effectively teach other schools which acquire technology to utilize it? How can schools involve parents and communities meaningfully in their children's education? How can schools prepare their students for the responsibilities and opportunities for citizenship? How can schools provide a bridge to the graduate schools of education which train teachers?

Civic reform is the most important component of the innovative school. Understanding the power an innovative school has to bring system transformation is the key to making the innovative school live up to its promise.

AppleSeed Institute is committed to developing schools which are "living centers of education reform." In other words, to effectuate civic reform, schools need to embrace the mission of educating a universe far broader than the students enrolled. They must be virtual laboratories of innovation.

Opportunities exist for professional development of staff from district schools to observe more effective practices which can be implemented at innovative schools and which should be implemented at district schools.

Innovative schools must teach district schools how to acquire and utilize technology, and how to involve parents in a meaningful way in their children's education. Innovative schools can become a bridge to graduate schools of education, involving students and familiarizing them with the flexibility and possibilities available.

Innovative schools need to form and develop 501(c)(3) supporting foundations to market themselves aggressively in the communities they serve. Innovative schools have an obligation, as well as an opportunity, to educate philanthropists, foundations, individuals and corporations.

Most important of all for civic reform, innovative schools through their educational program, should instill in their students an appreciation of the culture and history of our American democracy and prepare them for the responsibilities and opportunities of citizenship. AppleSeed schools will do so.

Background of the Founders

Our core group is comprised of three individuals who have had experience in the various disciplines of starting schools.

Robert "Bob" Gaudet is a veteran of 10 years of parent school activism. As President of the Horace Mann Foundation, he wrote the application for Boston Renaissance Charter School and managed the community outreach campaign which attracted 2,200 applications for 630 seats. Gaudet led the founding group in their successful effort to launch the city wide school. He has consulted extensively on education and curriculum with law enforcement officials and district attorneys in Massachusetts. Gaudet wrote a history of education reform in Massachusetts and also published an analysis of the relationship between per pupil spending and academic achievement in the 351 cities and towns of Massachusetts. He is the father of two girls who attend public school.

William "Jack" McCarthy was recruited to serve as Treasurer of Horace Mann Foundation and subsequently the Boston Renaissance Charter School. In that role, he led the founding group's efforts to finance the \$9,000,000 renovation of a 13 story building in Downtown Boston. He established banking relationships and lines of credit for the school. McCarthy also led the efforts to raise over \$800,000 from individuals, corporations and foundations to meet the lender's requirements for securing the loan. McCarthy was Vice President of Boston Bay Capital, Inc. a firm which sponsored development of historic properties for commercial and residential use. He is a father of two boys who attend public schools.

Alexis "Lex" Towle joined the founding team during the pre-opening phase to raise funds to meet the lender's requirements for securing the loan and to fund cultural enrichment programming. Towle serves as a member of the Education Committee for the NSFRE. As Director of the \$800,000 plus "Campaign for the Renaissance," he was successful in cultivating several major gifts which were crucial to meeting the schools' goals in a timely fashion. Towle serves as a Trustee and Treasurer of the Ipswich Montessori School. Lex has a 25 year background as a Trust Officer, Investment Advisor and entrepreneur. He is the father of two preschool boys.

AppleSeed Institute benefits from the interest, advice and participation of numerous citizen innovators who founded innovative schools. We also benefit from professional relationships with nationally-recognized educational experts who have consulted to organizations seeking both *systemic* and *fundamental reform*.

Our Methods and Approach to System Transformation

Our hands-on strategy is to have citizens teach other citizens to build and rebuild schools that work. Community-based teams of educators, parents and policy-makers, as well as civic and business leaders will grow new schools with us as "dynamic public process tutorials." Knowledge will be shared and the supply of innovators will grow.

Our initial efforts are focused in Massachusetts and Washington, DC, places with which we are familiar, where innovative schools can have a transforming effect.

Innovative schools launched by AppleSeed Institute by definition are demonstration projects and leadership institutes in their own right. From this unique approach to professional development, the lessons of bringing fundamental reform to education can be presented to a wide audience. Every participant becomes an "AppleSeed" or an advocate.

AppleSeed Institute organizes schools around four core principles:

1. Schools for the public are centers of civic and community life.
2. Good schools establish cultures with clear standards, high expectations for staff, students, and those in governance, high flexibility and strong assessment and accountability tools.
3. Good schools organize teachers and students as unified teams working toward the common goal of a high quality education. Teachers are coaches with diverse backgrounds and levels of life and educational experience, but all share a common vision.
4. Children learn best when significant adults take a personal interest in their success. Schools for the public educate best when significant community leaders take a personal interest in their success.

AppleSeed Schools are autonomous local schools (as public schools should be), managed by local principals and governed by local leaders. They will be committed to common civic cultures with high expectations for all.

Friendly competition, leading by example, and application of high quality school practices will provide more tools, incentives and reasons for parents, policy makers, educators and administrators to cause system transformation for larger school systems.

We recognize from our experience that creating new, effective school cultures is faster and easier than changing existing school cultures.

Our plans and programs are not proprietary. That is by design. A knowledge-based economy recognizes the value of human capital in the form of experience, skills and passion. Sharing and building the sense of mission, philosophy, pedagogy, standards, curricula, teaching methods, assessments, governance methods, and management strategies is the critical task for these new schools in competition with the district schools.

Growing AppleSeed Schools will illustrate how to build effective schools--not because civic leaders don't know how--but because there are too many limits on flexibility including: restrictive union contracts, unwieldy central administrative procedures, or unsatisfactory school cultures.

These schools will be governed by Boards of Trustees chosen for their commitment to the responsibilities of governing schools which innovate in education, business management and civic reform. A critical responsibility of Trustees is to be influential advocates in their communities for innovative schools. They, too, are "AppleSeeds".

AppleSeed Institute will maintain a permanent seat on the boards of the schools we grow. This is to provide for a continuity of purpose and leadership at the governance level.

AppleSeed Schools will share the following program characteristics:

1. A longer school day and academic year.
2. A facility dedicated to serve as a center of civic and community life which is open and available beyond traditional school hours.
3. A recognition that children learn in many different ways and at different rates which requires flexibility in instruction and organization.
4. A school culture of high expectations, accountability, civility and civic responsibility.

5. An emphasis on reading mastery through a phonics-based curriculum in grades K through 2 that recognizes that children who cannot read cannot learn.
6. Small classes with an appropriate number of adults in each room.
7. Parents as respected partners in their children's education.
8. Student assessments which evaluate progress and provide feedback to improve individual teaching and learning.
9. Different roles and salaries for teachers, based on merit, with opportunities for professional development, leadership and advancement.

Effective schools are characterized by strong leadership, clear and high academic goals, truly professional teachers, team-like cooperation and a strong connection to the community they serve. These qualities tend to flourish only when schools are given substantial autonomy from outside control.

How AppleSeed Will Develop Schools

As citizen-activists, our interest is to be involved in a day-to day, hands-on fashion with the projects we choose. With regard to launching our five new schools, AppleSeed's relationship will span the following forms of relationship.

Managers of the Pre-opening Stage

AppleSeed will file for the charter in Washington and will form the "critical mass" of the founding group. Our priority and purpose for filling this role is to ensure that the three reform components: *education, business management and civic reform* are present and functioning as they should to maximize the impact of the school. We will oversee the recruitment and training of the key individuals for the school: the headmaster, the business manager and the foundation director.

Our fund raising plans call for us to raise our operating costs as well as a \$700,000 surplus at the AppleSeed level during the first year. These surplus funds are intended to finance most of the pre-opening costs of the first year including: legal, accounting, curriculum development, architectural, down payments, costs of the community outreach campaign and working capital leading up to the opening of the school. We will raise and advance those costs, on an as-needed basis. AppleSeed will manage the process of financing the purchase and renovation of a suitable property, recruiting a board, a headmaster, a foundation director, and a business manager for the school. Many of these costs will be treated as advances from a revolving loan fund. To the extent that they can be repaid by the school over the first five years of the charter, they will be available for reinvestment in other charter schools.

Working in conjunction with the Modern Red Schoolhouse team of the Hudson Institute and the leadership of the school, AppleSeed will coordinate the development of the school's curriculum based on the standards and assessment tools provided by Modern Red Schoolhouse.

We will participate in the professional development of the staff and will lead the community outreach campaign to recruit the requisite enrollment of students for the school. We will bring together the resources to support and implement a system of management and financial controls to ensure solid financial management reports, compliance with federal and district requirements. Coopers & Lybrand has developed a superb set of financial reporting systems for public schools. We would expect to implement their reporting guidelines at our school.

AppleSeed will launch the school as well as a supporting foundation which qualifies for 501(c)(3) status which will subsidize the operating budget until the political process provides an adequate per pupil funding figure.

Stewards of the Start-up

AppleSeed will retain a presence on the Board of Trustees. After the school opens, AppleSeed will begin a five-year relationship of “stewardship” of the school with an eye toward “impact” on the surrounding schools. While not managing the actual day-to-day operations, AppleSeed will have a close relationship of supporting the management and the board in the start-up. We expect there will be significant growing pains as the school works to establish its high quality curriculum, solid management practices and financial controls, as well as a firm base of support for its mission in the community. Our role is to leverage our experience to assist the leadership of the school in managing those problems effectively. We will evaluate and assess the progress of the school on an annual basis, and we will assemble a committee of “critical friends” to aid that process. We will seek to take the lessons learned from starting each school and make them available to the body of research on innovative schools.

Affiliates

When the five year start-up phase has completed, and the charter is renewed, the relationship of the school to AppleSeed will be one of affiliation. Our goal for the school is for it to be an independently-managed, self-sustaining, center of civic and community life. As AppleSeed matures in our own development, we will continue to be an important conduit of professional development resources for the school. We will also continue with a role in the governance of the school at the board level to ensure continuity and adherence to the founding mission of the school.



AppleSeed Institute

for Education Innovation

Lex Towle

Managing Director

607 Boylston Street, #400

Boston, MA 02116

TEL: 617-536-6033

FAX: 617-536-6409

2501 M Street, NW, #515

Washington, DC 20036

TEL: 202-775-5826

FAX: 202-775-8549

The Modern Red Schoolhouse
DESIGN DOCUMENT
Version 1.1

and

STANDARDS
Primary, Intermediate, and Upper Levels
April 1996



A Project of
Hudson institute
Indianapolis, Indiana

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THE MODERN RED SCHOOLHOUSE

DESIGN DOCUMENT

Version 1.1

A Project of the Hudson Institute

in cooperation with
Bartholomew Consolidated School Corporation
Beech Grove City Schools
Community School District Twelve, The Bronx
Eastern Howard School Corporation
Indianapolis Public Schools
Kayenta Unified School District
Metropolitan School District of Lawrence Township

funded by the
New American Schools Development Corporation

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Preface

In 1991, President George Bush challenged some of the country's largest corporations to invest in America's children. The leaders of American business responded. They created the New American Schools Development Corporation, one of the most ambitious attempts ever undertaken to improve how public schools educate children. By investing funds, technology, and creativity and by working to reduce the constraints that make it difficult for educators to teach with inspiration, the New American Schools Development Corporation (NASDC) is building schools that can lead America's children to success. In the fall of 1993, President Bill Clinton, appreciating the potential contribution to American education, endorsed the initiative.

When it first began, NASDC received 676 proposals for "break the mold" school design projects. The applications came from academic consortia, "think tanks," and local community-based groups. From these applications, NASDC selected eleven projects for funding and the Hudson Institute's design—the Modern Red Schoolhouse—was one. A team led by William J. Bennett, former U.S. Secretary of Education, designed the project with the participation of superintendents from eight school districts representing a broad range of demographic and social characteristics.

The Modern Red Schoolhouse project has three phases. Phase one began in 1992 and culminated with the completion of a detailed project design. Phase two is a two-year implementation period that started at elementary sites in the fall of 1993 and incorporated intermediate and secondary sites in the fall of 1994. During this phase, the design will be implemented and refined at school sites in our participating districts. In Phase three, scheduled to begin in the fall of 1995 and to last two years, we will continue implementation while working to disseminate the design beyond the original sites.

We began with a simple goal: to "raise the bar" of academic standards for all children. To help us breathe life into the design which NASDC funded, we assembled experts from across the nation. Some were teachers and administrators within the eight school districts which joined the initial stage of the Project. Others were experts in fields such as curriculum, organizational structure and change, academic standards, assessment and testing, technology use in the school setting, and professional development. Some represented urban points of view, others had a suburban or rural perspective. Some taught diverse student populations, while others came from schools that were more homogeneous. The aim was to create a design that would work for students in any school.

But each member of our team understood that the vision of this Project was much more complicated than simply requiring better test scores or addressing local or regional issues. The world has radically changed over the last three decades, requiring commensurate changes in what students are expected to know and be able to do regardless of where these students live geographically or the environment in which they mature. The skills needed to compete in the marketplace of today and the next century are grounded in technology; the skills that were adequate during most of this century are insufficient today. Not only does the information-age marketplace today require much more of its participants, but information-age democracy today requires much more of its citizens. Numbers, percentages, and rates bombard people, who must in turn be able to distinguish the relevant from the irrelevant, the reality from the propaganda. People need an appreciation of historical and scientific evidence so that they can evaluate the performance of elected officials and the complex options faced in securing the public good.

Visit a modern, successful automobile plant and the knowledge and thinking skills needed by today's students become evident. Workers need to understand and apply statistical evidence, principles of energy, scale and structure, and systems theory. Managers and employees must have well-developed communication skills because diagnosing and solving problems is a collaborative venture. This knowledge base and skill level were not needed at the automotive plant forty years ago.

Educating every student, so that he or she has the knowledge and skills to succeed in the information age, is an imposing challenge. It is asking educators to do more than they have ever been asked to do. Most importantly, it is asking them to do what they do best—teach. We know that educators are up to the job. They just need the right kind of help and the right tools. We believe that the Modern Red Schoolhouse provides both.

This document introduces the Modern Red Schoolhouse project. It is intended to help faculty and principals acquire an understanding of the design and, for those who have decided the design is appropriate for them, the document describes the steps needed to begin planning for implementation. Parents and members of a community, reflecting on whether the design addresses their concerns and priorities, will also find it useful. The Modern Red Schoolhouse design provides a challenging agenda for school reform. Here, we provide the "nuts and bolts" of what change is anticipated by that design and how it will be accomplished.

The first chapter provides the reader with an overview of the essential elements of the design. The reader will find that it is a comprehensive design that will affect almost every aspect of schooling. It is a design amenable to almost any configuration of an elementary or secondary school. Chapters 2 through 7 provide an in-depth discussion of each of the core elements of the design—standards and assessment, curriculum, technology, organization and finance, professional development, and community involvement. In Chapter 8, we provide an overview of the steps that a school would need to take in planning for the implementation of a Modern Red Schoolhouse and the type of assistance that the design team can provide to implementing schools. Chapter 9 introduces the reader to the members of the design team.

Readers will note that the design is guided by a set of principles that are intended to inform the decisions that faculty and principals make in their journey to becoming a Modern Red Schoolhouse. Although the design team helps schools identify viable options at each step of the journey, many of the critical decisions are made by the school. Throughout the text, we describe certain desirable practices or technology. If we consider the practice or technology desirable, but not essential, we use the term "should" or "may."

Faculty and principals from each of our participating sites gave us critical advice along each step in developing this design. This document is no exception. They are the experts who have given the design the power to transform the children they serve. We express special appreciation for their care and attention to this document and their commitment to "raising the bar" for all their students.

Sally B. Kilgore, Ph.D.
Director, Modern Red Schoolhouse

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National Center for Effective Schools

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Publications Manager

Chapter 1

AN OVERVIEW

Building Upon the Little Red Schoolhouse

The little red schoolhouse of yesteryear was a place that drew people together for common purposes. It led them to set priorities by working out their differences, finding universal values in their different backgrounds, and sharing in one of the most important responsibilities of any community—readying the next generation to take its place in that community by socializing the young, transmitting the culture, and equipping future workers, citizens, and parents with essential knowledge, skills, and habits.

When it worked well, the little red schoolhouse did all those things and more. But it never worked well for everyone. Lots of people dropped by the wayside, most didn't learn a great deal, and only a handful learned enough to prepare for higher education or leadership roles. That may have been serviceable in a time when the U.S. didn't need vast numbers of highly educated people, but it will not suffice now.

The Modern Red Schoolhouse takes the virtues and principles of the little red schoolhouse and makes them work in today's diverse, complex society. The Modern Red Schoolhouse takes the expectations for achievement and community support embodied in its predecessor and infuses them with technological and informational resources.

Though daring in many respects, the Modern Red Schoolhouse is a common sense concept. Its values reflect the noblest goals of its community. Its curriculum includes the history and many traditions that make up our society and will be understandable by average citizens. Its expectations for individuals—students, parents, teachers, and others—are high but not overwhelming. Its methodology will take advantage of the soundest knowledge and most powerful tools, but a taxpayer walking through the school will not be confused by what he or she sees.

The Modern Red Schoolhouse makes the American tradition of excellence relevant to every student. It is designed for communities of the twenty-first century; its graduates will be well-prepared to meet the challenges of the future.

Six Pillars of Reform

The design for the Modern Red Schoolhouse rests upon six basic tenets.

- All children can learn and attain high standards in core academic subjects. Children simply vary in the time they need to learn and the ways they learn best.
- Schools should help transmit a common culture that draws on the traditions and histories of our pluralistic society and the principles of liberal democratic government that unite us all. At the same time, other nations and peoples should also be understood by all children.
- 3. • Principals and teachers should have considerable freedom in organizing instruction and deploying resources to meet the needs of their students.
- 4. • Schools should have greater flexibility in deciding how best to accomplish their mission and, at the same time, should be held accountable through regular assessments of student progress.
- Advanced technology is a critical requisite to attaining high quality education in cost-effective ways.
- 6. • Schools should be places where students and staff choose to belong.

These six tenets imply substantial changes in the practices and resources within schools. They require shifts in the uses of time, expectations, parental responsibilities, and much more. The Modern Red Schoolhouse design strives to help educators and parents make these shifts occur.

The following discussion explains the six basic tenets that underlie the Modern Red Schoolhouse design:

All children can learn and attain high standards in core academic subjects. Children simply vary in the time they need to learn and the ways they learn best.

The Modern Red Schoolhouse is a place where *all* children attain high achievement standards. Of course, all children do not—and at the Modern Red Schoolhouse they do not—learn in the same way, in the same time, or at the same pace. However, they *do* learn. In the Modern Red Schoolhouse, mastery of subject matter is the only acceptable goal, regardless of the child's background, learning style, or pace.

Graduates of a Modern Red Schoolhouse will have the knowledge and skills they need to succeed in adult life. They will, for example, understand the essential elements of statistical evidence and the energy involved in chemical reactions. They will have read classical Western literature as well as literature from non-Western traditions. They will know how to evaluate historical evidence and to determine matters such as the effects of technology on migration.

Some suppose that high standards should apply only to "gifted and talented" or "college-prep" students. This is defeatist thinking which, not surprisingly, breeds defeat in many students. If given the proper tools, appropriate learning experiences, high expectations, adequate time and encouragement, *all children*—with very rare exceptions—can meet high academic goals.

During the design phase of this effort, we collaborated with participating school districts to establish "world-class" academic standards. Using Advanced Placement exams as benchmarks, we developed standards for what are currently fourth grade, eighth grade, and twelfth grades—the major transition points for students in a Modern Red Schoolhouse.

Modern Red Schoolhouse students progress through a curriculum that promotes mastery of these standards. The design introduces a new organizational unit for the curriculum—Hudson units. Successful completion of a Hudson unit reflects *accomplishment* rather than *time spent*. Each reflects mastery of specific skills and knowledge embodied in the standards of the Modern Red Schoolhouse.

The new Hudson units, combined with technology, remove two limitations that schools have confronted in the past: time and teaching methods. For centuries, time—classroom time, in particular—has limited the amount that children could learn. Students have been expected to learn material simultaneously with thirty to a hundred other students. Hudson units are organized so that learning time can be tailored to the needs of individual students. Teachers, parents, and students work together to set the appropriate pace of instruction.

Similarly, educators have been limited—often by technology and materials—in the strategies they could use to help students master certain concepts. The methods available to a teacher can lead some students to thrive and others to fail. Geometry, for instance, is generally taught as a set of abstract rules. Yet some students could better conquer the intricacies of geometry through the study of Picasso or of architecture. All students master difficult concepts, but *how* they learn these concepts will vary in a Modern Red Schoolhouse. Expecting mastery from all students requires a number of new ways of teaching and multiple paths to a stated destination.

Within certain guidelines, teachers in schools that are implementing the Modern Red Schoolhouse are developing Hudson units independently. Within a few years, a number of Hudson units will exist for each subject or set of standards.

Schools should help transmit a common culture that draws on the traditions and histories of our pluralistic society and the principles of democratic government that unite us all. At the same time, children should understand the histories and cultures of other nations and peoples.

Most Americans agree that "education is not just about making a living—it is also about making a life." When students graduate from high school, they should, of course, be able to read and write proficiently and know mathematics, science, English, history, and geography. But they should also have the discipline of mind and character to be contributing members of a democratic society. They should be able to advance an argument, foresee its implications, and understand counter-arguments. They must be willing to challenge their own—and other people's—assumptions and be prepared for a lifetime of continual learning. American society offers great opportunity, but only to people who are willing and able to make difficult choices, accept individual responsibility, commit to a moral road map, and, on occasion, take intellectual and economic risks.

While individual schools develop specific themes or lesson plans, they will retain the curriculum's fundamental shape. The curriculum offers a carefully sequenced body of knowledge in mathematics, science, English, history, and geography that enables students to have a broad appreciation of the roots of American culture and that of other nations. In addition to the core academic disciplines, the Modern Red Schoolhouse curriculum—across all ages—requires study of a foreign language, the arts, physical fitness, and health. This ensures that a student will be able to put the required knowledge in the larger context of "life." Individual schools are encouraged to offer other subjects based on local preferences and needs.

Students also learn about societies and cultures from around the world, both past and present. They study the early civilizations in the Tigris and Euphrates region, the Ottoman, Aztec, and Incan Empires; feudal civilizations in Europe, China, and Africa; and the modern cultures of Europe, Asia, Africa, and the Americas. Historic and present day cultures will be studied in an integrated fashion.

Beyond providing academic knowledge, a good education should also provide sound foundation for productive employment. A number of basic work-related competencies augment a student's intellectual arsenal. These are integrated throughout the curriculum of the Modern Red Schoolhouse.

Principals and teachers should have considerable freedom in organizing instruction and deploying resources to meet the needs of their students.

Teachers can inspire their students, but they cannot be inspirational when they are constrained by mandates about classroom structure and teaching strategies. The Modern Red Schoolhouse implements a common sense proposition: principals and teachers know best how to educate students in their schools. While the Modern Red Schoolhouse design requires a curriculum with strong emphasis on the core academic subjects, teachers are free to utilize instructional strategies that work for the children in their classrooms.

The school districts that have joined with us to create the Modern Red Schoolhouse project span a broad geographic and socio-economic spectrum. They include schools from suburban and urban Indiana communities, a Navajo Indian Reservation in northern Arizona, and the South Bronx of New York City. Modern Red Schoolhouse teachers are encouraged to use a wide variety of teaching methods tailored to the needs and potential of their individual children. Students work alone or together; during days, nights, or weekends; in the summer as well as the fall; at one subject or many; with one teacher or more for as long as they need to learn. Teachers have maximum flexibility in the choice and use of instructional materials and methods.

An Individual Educational Compact (IEC) is the primary tool for monitoring continuous progress for each student. Just as importantly, the IEC facilitates responsibility and accountability. The IEC is an agreement negotiated by the student, the parents, and the advising teacher. It is an educational road map for the student over a specified period of time. It has three major functions: establishing measurable goals for the student, identifying the responsibilities of the parents and teachers in helping the student reach the Modern Red Schoolhouse standards, and identifying special assistance or services the student will need from school, parents, or community to achieve his or her goals.

In the Modern Red Schoolhouse, there are no age-limited grades where the student, by virtue of the mere passage of time, marches on from grade to grade, year after year. Instead, Modern Red Schoolhouses have three divisions—*primary*, *intermediate*, and *upper*. The time it takes one student to pass through one division and into the next may be shorter or longer than for another student. The primary division covers the material in the traditional kindergarten through grade four; the intermediate division covers traditional grades five through eight; and the upper division spans the traditional grades nine through twelve.

Even the amount of time spent in school may vary by student. Participating schools are open for more hours than is common today. Some students may come to school earlier or stay later. Class periods

do not have a uniform length. Not all teachers have the same schedule as they do now, and the teachers' individual schedules may vary from day to day. Some types of instructors, such as tutors, may work outside of the regular school hours or during the summer.

Schools should have greater flexibility in deciding how best to accomplish their mission and, at the same time, should be held accountable through regular assessment of student progress.

Modern Red Schoolhouses should operate autonomously. The superintendent may continue to appoint the principal, but all other facets of running the school should be left in the hands of the school's principal, its teachers, and other members of its community. The decision-making process may rest solely with the principal or a committee of teachers, or other arrangements may be established. For each school, a budget is developed based on the number and the needs of students who attend. The principal controls that budget, expending resources as he or she deems best to meet the needs of students. This can include contracting out for services that the district office might otherwise provide. The principal also has the responsibility and authority to organize the school to make critical operating decisions, such as those relating to personnel. A training program for staff, parents, and community agencies help them fulfill their expanded responsibilities.

Principals and teachers take on new roles. Principals must become "managers of success." They run schools that produce a high quality education; the school's culture expects students to achieve. This means inspiring school staff, giving teachers the freedom to be creative, and planning and budgeting into the future. Principals are expected to invest tax dollars in staff, services, and technologies that deliver the greatest yield on that investment—in terms of well-educated students.

Decentralized decision-making requires clear expectations of every participant and requires accountability. Benchmarks for measuring the school's success must be available to community members. In Modern Red Schoolhouses, watershed assessments measure students' progress in achieving our high standards. These watershed assessments test accomplishments in each of the five core subjects—mathematics, science, English, history, and geography—and help determine whether the student is ready to advance to the next division. Students complete investigations and give oral reports as part of this assessment, as well as taking more traditional multiple-choice exams and answering essay questions.

Advanced technology is a critical requisite to attaining high quality education in cost-effective ways.

Students need to be familiar and comfortable with today's computer and telecommunications technologies. Schools need to incorporate this technology to operate efficiently as well as to prepare students for the world of work and living.

Over the life of the Modern Red Schoolhouse project, each teacher, administrator, and professional staff member receives a computer and, therefore, improved access to parents and other teachers. For students, the target is a ratio of one computer for approximately six students in the classroom. The number of students per computer, however, may vary according to age. For example, there may be more computers available to the upper-level students than to the primary-level students, given the older students' greater ability to pursue independent learning. Students and teachers should also have access to a variety of other technologies, such as CD-ROM, interactive multimedia, and distance learning, that will enhance learning and facilitate productive use of time.

Technology also augments the impact of teachers' efforts and allows for more options in instructional strategies. For example, technology is essential to the objective of abolishing the limits that time places upon teachers and students in most of today's schools. Because communication between teacher and students should be possible at almost any time and from almost any location, productive interaction between teacher and student is not restricted to time spent in the classroom. Technology allows more individualized instruction by providing systems to manage student progress and diagnose weaknesses, and by serving as an instructional resource for students.

Schools should be places where students and staff members choose to belong.

Students should attend a Modern Red Schoolhouse by choice, not by assignment. Each participating school, of course, complies with any existing court orders regarding racial composition or other features of the student body. Preferences may be given in ways that allow siblings to attend the same school or ensure that students who live close to the school can enroll there. Beyond that, however, the schools should rely upon a random process for admitting students who want to attend.

Similarly, a strong program is possible only with the support of a vast majority of staff at the school. Teachers at prospective Modern Red Schoolhouse sites must reflect and deliberate carefully. Only with the support of the principal and nearly all of its teachers should a school begin planning for the implementation of the Modern Red Schoolhouse design.

Chapter 2

STANDARDS AND ASSESSMENT

Standards

Students in the United States typically get on the education "conveyor belt" at the age of five or six and—unless they drop out—move along in a rather automatic fashion until they are deposited at about age eighteen at the other end. Hopefully, they learn something during the ride. But, Modern Red Schoolhouses stop the "conveyor belt." No student moves through school automatically. No student "slides by." Every student meets the high standards of the Modern Red Schoolhouse.

Along with representatives of the participating school districts, we have established a common set of standards for the core academic subject areas of mathematics, science, English, history, and geography, as well as standards for the arts, health, and foreign languages. Advanced Placement exams were used as initial goals for determining the knowledge and skills students should possess in the fourth, eighth and twelfth grades—the transition points for students in the Modern Red Schoolhouse. Whenever they were available, we incorporated national standards developed by various professional groups in their subjects of specialty (e.g. the National Council of Teachers of Mathematics).

Here are some examples of standards that students will achieve in the upper division of Modern Red Schoolhouses:

Mathematics

Each student understands and applies the concepts of instantaneous and average rates of change.

Science

Each student understands and can apply knowledge of the following concepts in the physical sciences: matter, energy, physical and chemical change, motion and force, waves and light, and electricity and magnetism.

English

Each student can draw on a broad base of knowledge about the great themes of literature—themes of initiation, love and duty, heroism, illusion and reality, salvation, death and rebirth, for example—and explain how these themes are developed in specific works.

History

Each student can identify significant features of government and political process in the United States and can summarize the historical development of these features, including federalism, the rise of the party system, the presidency, and the electoral, legislative, and judicial processes.

Geography

Each student understands the general dynamic of geographic movement and can predict the changes resulting from a major population relocation, an epidemic, a natural disaster, a media broadcast, or the transportation of raw materials and finished goods.

Districts or individual schools may wish, however, to increase requirements in any of these areas. For example, magnet schools that offer specialized training in international studies may require their graduates to attain a more extensive understanding of world history than that specified by Modern Red Schoolhouse standards.

Every school sets up a procedure for modifying or waiving certain standards when it is necessary because of a student's physical or learning disability. Teaching strategies will be appropriately modified for students with disabilities, but achievement will be fostered and expected of all students.

Assessment

Students' progress towards achieving the standards is measured at all schools involved in the Modern Red Schoolhouse project. Schools regularly assess student progress and conduct exit exams at the point when a student is ready to move from one learning division to the next. These assessment mechanisms help to gauge an individual student's educational development and inform community members about the progress of the school. Participating schools provide regular reports to students, parents, and the community.

Each Modern Red Schoolhouse relies upon five assessment tools: the Individual Education Compact, Hudson units, watershed assessments, student reports, and school reports.

Individual Education Compact

The Individual Education Compact (IEC) is an agreement among the student, parents, and advising teacher that charts an educational road map and indicates the steps that the student will take over a period of time.

The advising teacher is responsible for monitoring a student's progress for two to four years.

The same high standards for graduation will be achieved by every student. But the methods and schedule for progressing towards those standards varies for each child. The Individual Education Compact tailors a specific educational program to each student's aptitudes and achievements. The IEC has three major functions: establishing measurable educational goals for the student, identifying the responsibilities of the parents and teachers for helping the student reach defined standards, and identifying special assistance or services the student will need to receive from the school, parents, or community to achieve his or her goals.

The time period covered by each IEC varies, depending on the age of the student and the expected time needed to achieve mastery in certain subject areas. The advising teacher updates the IEC regularly based upon student performance and achievement. Each IEC is integrated into a computerized system accessible to all teachers and, eventually, to parents.

The IEC also specifies the responsibilities of parents. Parents will be expected, for example, to assist with school work, to monitor the completion and quality of their children's homework, and to promote values such as responsibility, hard work, and integrity.

The IEC is an important accountability tool. It states each party's responsibility, identifies trouble spots, and provides a basis for focusing any needed remedial attention.

Hudson units

Hudson units are the bricks in the foundation upon which every Modern Red Schoolhouse is built. They enable educators to build a standards-based curriculum. They are the individual curriculum units that prepare students to demonstrate mastery of the Modern Red Schoolhouse academic standards.

Each Hudson unit includes a student's plan of work for mastering specific competencies, knowledge, and skills reflected in Modern Red Schoolhouse standards, as well as an assessment component to determine a student's progress toward those standards. (Given their centrality to the curriculum, Hudson units are discussed in greater detail in Chapter 3.)

There are two types of Hudson units. First, *foundation units* organize learning of a limited and discrete body of competencies, knowledge, and skills. Foundation units prepare students to demonstrate mastery of one or more standards; they prepare students to tackle the second type of unit: capstone units. *Capstone units* build upon foundation units and integrate the competencies, knowledge, and skills

needed to achieve the standards in the core subjects. For example, a standard states that a primary-level student can use aerial and other photographs, satellite images, maps and globes, media, and computers to solve simple problems. One foundation unit might teach students to use maps and globes. Subsequent foundation units might deal with using satellite images, aerial photographs, and computers. Finally, an activity in a capstone unit might require students to examine a region of the United States using all of the resources listed in the standard.

As an assessment tool, capstone units include a series of student learning activities coupled with assessments that provide products for a student's portfolio and information on a student's mastery of some standards. Information from one or more capstone units allows teachers to determine if a student is ready to complete one or more subject exams. For each capstone unit, prerequisite skills have been identified. This allows teachers to determine when a student is ready to begin the unit.

Capstone units are part of the watershed assessments, discussed next.

Watershed assessments

Watershed assessments consist of approximately twelve capstone units and five subject exams which demonstrate mastery of the standards at the primary, intermediate, or upper division. They are exit exams. A student needs to complete them successfully before moving from one level of the Modern Red Schoolhouse curriculum to the next. Capstone units and the subject exams constitute the critical evaluations that allow teachers and parents to determine whether students are mastering Modern Red Schoolhouse standards. Capstone units and subject exams in the core academic subjects will be the same among all the Modern Red Schoolhouses.

When a student demonstrates mastery of several specified capstone units, the teacher will know that the student is ready to take a subject exam. To demonstrate mastery of a capstone unit, a student is required, for example, to conduct investigations, prepare reports, or deliver speeches in a way that shows that the student understands the set of standards and their application to everyday life. These materials become part of the student's portfolio of accomplishments. After completing several capstone units, a teacher may determine whether a student is ready to sit for one or more subject exams.

Subject exams are traditional examinations. For each subject, there are forty multiple-choice and eight open-ended questions. Exams initially are provided in mathematics, science, English, history, and geography. The exams, as well as the capstone units, have been developed in consultation with participating school districts. These exams are administered at various times during the year. They are secure exams; that is, the actual content of the exam is not shared with students, teachers, or administrators prior to the exam.

A student may choose to take a scheduled exam at any time after he or she has successfully completed the appropriate capstone units. It is possible that a seven-year-old student may take a subject exam at the primary level even though the typical student is apt to take that exam at age nine or ten. A fifteen-year-old student could take and complete the upper-division assessment and graduate early. It is possible for students to "straddle" divisions, working, for example, in the intermediate division in mathematics and the upper division in history. However, emphasis will be placed on achieving mastery in all the relevant subjects before advancing from one division to the next.

Most students will graduate at about the same age as they do now. Very few students will graduate early. The curriculum is too rigorous and the standards are too high. The key difference between a Modern Red Schoolhouse diploma and many diplomas awarded by a typical high school of today is that the students will get it the old fashioned way—they will earn it. Students will receive diplomas only after their successful completion of the upper-division watershed assessment, demonstrating their achievement of the high academic standards needed for successful adulthood. Those who pass at a superior level will receive "honors."

Upper-division students who do not pass the watershed assessments and who choose not to take the exam again will receive a certificate indicating the attainment of certain Hudson units. They will not receive a Modern Red Schoolhouse diploma.

Student Reports

Student reports document the progress of a student in mastering Hudson units and the standards of the Modern Red Schoolhouse. At the end of the time period covered by the IEC, the advising teacher analyzes data from test scores, student papers, observations, and the instructors' progress reports to determine the degree of success in meeting the objectives of the Hudson units outlined in the IEC. The advising teacher provides this progress report to the student, his or her parents, and the school. Based on this report, the student receives credit for completed foundation and capstone units. Units that were not successfully completed will be incorporated into a new IEC. Student progress reports, then, provide regular updates to parents about successful mastery of Hudson units and enable all parties to plan for the next IEC.

Annual student reports provide an overview on a student's progress in attaining the standards. Parents will know what specific knowledge and skill areas need additional attention and work and when their child will be ready to begin the watershed assessments. A narrative assessment will be written by the student's advising teacher for all student reports.

Upon graduation from a Modern Red Schoolhouse, the student will be able to use the portfolio of work built from capstone units as well as subject exams scores to demonstrate achievement to others, including college admissions staff and potential employers. Modern Red Schoolhouse standards, of course, are available to anyone interested in what a graduate knows and is able to do.

School Reports

School reports help parents and community members assess how well the school is doing. Each report will include such items as curriculum offered, number and type of Hudson units mastered by students, aggregate student scores on subject exams and other standardized tests, student attendance records, student behavior records, and graduation rates. It also reports on school staffing, parent involvement, and levels of satisfaction among students, parents, and teachers.

Using Standards and Assessments to Improve Instruction

Assessing student progress is not limited to watershed assessments or standardized tests. Rather, it is an integral part of instruction. Assessments of any form do not simply tell us what a student knows. Equally important, they tell us which aspects of instruction are working and which are not. Such information is essential if teachers are to develop long-term improvement strategies. Using technology, Modern Red Schoolhouses have access to information that allows them to pinpoint specific strengths and weaknesses in their curriculum at any time for various groups of students. With that knowledge, they can develop strategies for improvement that may affect how and what students are taught, how their school is organized, what new technology is acquired, and which members of the community need to become more involved in the life of the school.

Chapter 3

THE CURRICULUM

At our first meeting as a design team, we articulated two principles that should guide the development of a curriculum at a Modern Red Schoolhouse. First, a good curriculum includes instructional strategies that enable all children to succeed. Second, a good educational experience should be interesting and challenging to children of all racial, ethnic, religious, and family backgrounds.

Beginning in the 1960s and continuing through the 1970s, a number of reformers tried to remove *knowledge* from *education*. They rejected curriculum that is rich in content as "rote learning." They encouraged the teaching of "higher-order thinking skills" often divorced from subject-matter knowledge. Today, many students still are being taught in this manner.

We believe that *what* students know is as important as *how* they think and analyze problems. The reason is simple: knowledge of subject matter is a requirement for higher-order thinking—understanding challenging content and subject matter allows students to think and reflect in sophisticated ways.

The curriculum of the Modern Red Schoolhouse has a distinct identity. It is adapted and modified by individual schools, but its basic shape is retained. Mathematics, science, English, history, and geography are the backbone of all student education. This does not exclude other fields of study; it will actually enhance the study of other subject areas by providing a broad context in which to better understand them. In addition to the five core disciplines, the Hudson curriculum also requires study—and mastery—of a foreign language, fine arts, physical fitness, and health. Individual schools also offer other subjects in response to local needs and preferences.

What Students Will Learn

Academic Subjects

We provide teachers with guidance in critical elements of the curriculum. For much of the primary and intermediate levels, that guidance is based on E.D. Hirsch's new curriculum, *Core Knowledge*. For the upper level and some of the intermediate level, we have developed curriculum guidelines that rely on the James Madison series developed by the U.S. Department of Education under William Bennett and the national standards developed by various professional organizations in their subjects of specialty (e.g. the National Council of Teachers of Mathematics). A discussion of the major curricular themes for each subject area follows.

Mathematics. Too many students avoid mathematics. In fact, the National Research Council reports that approximately half of all students drop the study of mathematics in high school, usually after the study of first-year algebra in ninth grade. Yet, all students can learn mathematics if they have the opportunity and tools.

"Not since the time of Newton has math changed so much as it has in recent years," wrote Lynn Arthur Steen, editor of *On the Shoulders of Giants*. Yet, school mathematics has not kept pace with movement in the field. The mathematics of chance and the mathematics of change are missed in most American classrooms. Moreover, technology has yet to have the impact on mathematics education that it has had on the mathematical sciences. The mathematics curriculum in the Modern Red Schoolhouse takes advantage of technology to exceed the standards found in the *Curriculum and Evaluation Standards* of the National Council of Teachers of Mathematics.

Five competencies give direction and focus to the mathematics curriculum of every Modern Red Schoolhouse. Specifically students will be able to do the following:

- draw on a broad body of mathematical knowledge and skill when solving problems;
- develop and apply a variety of mathematical strategies to solve real-world and non-routine problems;
- gather, analyze, and evaluate data to formulate and test hypotheses;
- use functions and their transformations to understand the physical world; and
- explore the properties and relationships of figures in space.

The mathematics classroom in the Modern Red Schoolhouse is a mathematics laboratory. Students work individually and collaboratively to explore and model the world. Although students will master computational skills, they will also use technology to enhance their mathematical explorations and to communicate about mathematical ideas with peers and experts beyond their classroom. Their teachers coach and tutor them individually and in groups and promote a lively environment of inquiry and discovery.

Science. The science curriculum encourages students to a complete understanding of the "workings" of life. Students study the traditional subjects of biology, chemistry, and physics and how these subjects connect and interrelate with other disciplines. The science curriculum emphasizes six major areas of study:

- the creation of energy, its role in different interactions, and its effect upon events that may be only tangentially related to those interactions;

- the development of man and other species and the patterns and processes of history that shaped this development;
- the identification and application of the three basic patterns of change: trends, cycles, and irregular changes;
- the patterns of stability, such as the difference between static equilibrium and dynamic equilibrium and how to apply these two concepts to scientific, political, historical, and economic analysis;
- scale and structure, that is, the relationships between diverse life-forms, geological forms, and physical and chemical structures; and
- the interactions within and among systems, including an appreciation for the complex interactions of everyday life and political and economic systems.

English. The Modern Red Schoolhouse emphasizes clarity in communication. In many of today's English classrooms, expectations for writing skills have been lowered, grammatical rules have been tossed out as somehow irrelevant, and reading assignments have been dictated by current fads or fashions. The result is students who can neither write clearly, speak intelligently, nor listen critically. This trend can be reversed. Students at a Modern Red Schoolhouse master the English language.

The study of classic literature and literature with "classic potential" (such as young-adult literature for the intermediate division) is central to the curriculum. Outstanding literature that reflects the cultural diversity of America and the world is also included. In all cases, the literature taught is valuable in establishing a common ground for students to understand and appreciate universal values. Fundamental language skills are mastered through the study of great literature. Composition, speaking, listening, critical thinking, research skills, and vocabulary development evolve from this literary study. All students will understand and be able to use standard English in their communication with others. The development of good, clear, and concise writing skills is integral to every unit of study in the Modern Red Schoolhouse.

History. The value of a history education should be an article of faith. In 1892, Woodrow Wilson and leaders in the historical studies exhorted schools to teach four years of history to prepare each future citizen to have that "invaluable mental power which we call judgment." Modern reformers have renewed Wilson's appeal. In 1984, the Council for Basic Education defined a four-year "irreducible minimum" of history. In the same year, TheodoreSizer (author of *Horace's Compromise*) and Mortimer Adler (author of *The Paideia Program*) added history to their core curricula. Prompted by Chester Finn and Diane Ravitch's study of students' knowledge of history, the National

Endowment for the Humanities issued *American Memory* in 1987, which recommended the study of history and literature in each year of secondary school. The Modern Red Schoolhouse extends this expectation: primary level students should also be exposed to American and world history.

There is good reason for this persistent and pervasive advocacy for history education. Imagine Americans trying to understand the implications of proposed responses to the tragic situation in Bosnia without their judgment being informed by historical perspective. An informed opinion about the Bosnian situation requires a knowledge of the past several centuries in Europe and Asia. Or, imagine Americans trying to understand the complex relations among racial and ethnic groups in this country without understanding several centuries of relationships among these groups in the United States. Today, U.S. students are unprepared to have a deep appreciation of either issue.

At the primary level, Modern Red Schoolhouse students learn about ancient civilizations, major historical epochs—such as the feudal ages, American history, and the history of their own region. At the intermediate and upper divisions, students acquire an understanding of political institutions and behavior, social and economic change, diplomacy and international relations, and cultural and intellectual developments for each of the three major epochs—before 1789, 1790-1914, and 1915 to present.

Western civilization is also investigated in a global context, providing an understanding of our roots in ancient civilizations that include Africa, Greece, and the Americas. The study of United States history in the modern world follows a chronological framework and is informed by Hudson units from economics and other social sciences. At the upper level, special attention is given to historical investigation and analysis. Older students at a Modern Red Schoolhouse learn to practice history, not just recite names and dates of events. They develop their own investigative frameworks, analyzing the contents of a text and making sense out of the oddities and ambiguities that have created American society.

Geography. Today's world is smaller in many respects than it has been in the past. Communication throughout the world is instantaneous. Travel is almost as quick. The events in one region of the world reverberate in others.

In that context, citizens need to know not only the location of regions and nations and their geographical resources, but also the relation between human life and its physical environment. Every day national leaders consider reams of environmental and cultural data before making decisions. Local issues and decisions also are dependent upon an understanding of geography. The decision of where to place a mall, an incinerator, or a road is usually based upon geographical features and impact.

Primary level students at the Modern Red Schoolhouse learn basic information about the earth's inhabitants and their location, both past and present. Primary level students can locate nations and major cities in the world and use maps with ease.

Modern Red Schoolhouse students study the two central questions of geography: Why are things or phenomena located in the place they are? How do these places affect our lives? The curriculum leads students to study objects or happenings through the five-part lens of modern geography:

- location—the position on the earth's surface
- place—physical and human characteristics
- relationships within places—humans and environments
- movement—human migration on the earth
- regions—form and change

Cultural Literacy

Cultural literacy refers to knowledge of historical events and eras, literature, and scientific concepts that are part of everyday life in a society. Students attending Modern Red Schoolhouses learn these cultural elements shared by all Americans. They also are encouraged to appreciate and incorporate into their studies the unique elements of their backgrounds and communities. The curriculum reflects unity and diversity, partly to facilitate our cohesion as a nation and partly to ensure that children from all backgrounds learn what they need to learn to have the ability to appreciate and enjoy a wide variety of historical and literary texts.

Cultural literacy will have special emphasis at the primary and intermediate levels. The *Core Knowledge* curriculum provides a sequenced course of study for grades one through six in mathematics, science, English, history, geography, and fine arts. It is different from, but not in conflict with, most local guidelines. It gives specific suggestions for content while local guidelines usually emphasize skills that students should acquire. Specifying the concepts to be mastered and literature to be read provides three things. First, it ensures that students are systematically exposed to great literature, giving them a cultural lens for viewing history. Second, it helps teachers build upon what students have learned in previous years. Finally, and most important, it ensures that students acquire the cultural literacy that allows them to engage in conversation—with texts and persons—across a broad spectrum of communities and cultures.

Important topics are covered several times along a student's academic career, providing greater depth of analysis and understanding each time. For example, the Declaration of Independence is first studied to gain familiarity with its existence and to associate it with a time in history. Second, the Declaration may be discussed as a culminating event leading to the American Revolution. Third, it is re-introduced to reflect upon the ideas of the Declaration—inalienable rights, the pursuit of happiness, and equality.

Work Force Skills

A good education should be a sound foundation for productive employment. Graduates should possess what the U.S. Department of Labor refers to as "workforce competencies." Modern Red Schoolhouse graduates are able to allocate time, money, and other resources; use technology; evaluate and process information from a variety of sources; work with others; and understand, monitor, improve, and design social, organizational, and technological systems. Graduates will be well prepared for college or employment. Reflect again upon the modern automobile plant, where workers need to apply complex concepts such as statistical evidence and systems theory. The Modern Red Schoolhouse not only teaches these concepts but also teaches how to apply these concepts in the workplace.

There are not separate workforce skills classes in Modern Red Schoolhouse. Instead, the curriculum has lessons and activities to help students develop these competencies. Each school has the flexibility to design special activities, such as peer tutoring, civic projects, group tasks, or student clerical and maintenance work within the schools, that can promote workforce skills.

Character Development

Knowledge and skills are important, but they are not enough. Students need to develop habits of action that include courage, self-discipline, prudence, and a commitment to justice and liberty. Only then will they be prepared for responsible citizenship and employment after leaving school. At the Modern Red Schoolhouse, teachers, parents, and other community members join together to define the critical virtues that schools can and should foster.

Every aspect of the curriculum can encourage character development. Indeed, every aspect of the school environment will do so. Academic projects, papers, and assessments require initiative, integrity, and discipline. Community service activities can be integrated into Hudson units, encouraging responsible behavior and empathy. Literature and reflection upon certain events can help students appreciate courage and trustworthiness.

How Students Will Learn

Hudson units

Hudson units are a departure from current educational practice. They replace the traditional grade levels. No longer is learning be determined by how much time is spent on a subject; with the advent of the Hudson unit, progress is determined by how much is actually learned.

Hudson units are *not* linked to a fixed amount of time spent studying a subject. They *are* linked to specified competencies, knowledge, and skills. These units may encompass a limited number of concepts or many, depending upon the learning level of the student. A study of the earth might constitute one Hudson unit for a primary student. An upper-division student might complete a paper on *Julius Caesar* and political power to fulfill the requirements of a Hudson unit.

The number of Hudson units that a student will study in a school year will vary by the age of the child. Primary students, for example, will work at units that are relatively short and discrete; thus they will have more units of study—perhaps as many as forty per year. Upper-division students will, on the other hand, be working on Hudson units that are more involved and complex and, as a result, longer and less circumscribed than units studied by younger students. Upper-division students will, then, study fewer units in a year.

The number of Hudson units also may vary across Modern Red Schoolhouses. Any student who transfers from one school to another will be accompanied by a report that details which of the Modern Red Schoolhouse standards the student has already mastered. Students who transfer into a Modern Red Schoolhouse will be assigned Hudson units that build upon what they know and are able to do.

This approach is not to isolate bits of knowledge into neat little boxes or emphasize rote memorization and simple demonstration of factual knowledge. Rather, it acknowledges that learning is a cumulative, building process. If a student is having difficulty with simple algebraic variables, the pointless, defeating, and all too common practice of moving him or her on to trigonometry will not occur. The sequencing of Hudson units make it more likely that students will get it right the first time. It allows for a great deal of flexibility for teachers and students to proceed at an appropriate pace.

There are two types of Hudson units: *foundation units* and *capstone units*.

Foundation units are discrete units of instruction. Arranged sequentially, they form a course of study that will help each student acquire the knowledge and skills needed for eventual mastery of Modern Red Schoolhouse standards. Foundation units are unique to