

each school. Teachers at each school will develop foundation units that prepare its students to achieve the Modern Red Schoolhouse standards.

Capstone units, as an instructional tool, help students to integrate knowledge across a variety of subjects, ensure that students have experiences in applying knowledge to real world contexts, and encourage student conversation about things they know or are learning. Successful completion of the unit reflects *mastery* of several standards. The capstone units are an important component of a carefully conceived assessment program. They allow students to demonstrate that they have retained and can use knowledge and skills learned in the preceding foundation units. They provide teachers with information regarding a student's readiness to complete subject exams in one or more areas. Capstone units will be the same in every Modern Red Schoolhouse; however, they are developed with the advice and direction of Modern Red Schoolhouse teachers. Initially, approximately 12 units will be available for each division—primary, intermediate, and upper. Eventually, more units will be available, allowing more flexibility in the construction of this portion of the curriculum. Teachers at each school evaluate their students' performance on these units and identify work that should be added to a student's portfolio.

The essential elements of a Hudson unit are the following:

- performance objectives, standards that are addressed, and prerequisites for the unit
- student and teacher activities that enable students to master objectives
- parent activities that support student learning
- assessment activities to evaluate student mastery of the unit's objectives

Teachers at participating schools construct Hudson units that reflect the local culture and interests, state and local standards, as well as the standards of the Modern Red Schoolhouse. Initially, as schools develop foundation units, it is expected that the units will be rather broad to accommodate various student learning styles within the unit. Over several years, as foundation units accumulate within a school and are shared across schools, units that combine particular learning styles or interests with specific Modern Red Schoolhouse standards will emerge. Then, teachers and students will have access to several different units addressing the same Modern Red Schoolhouse standards—allowing for multiple paths to the same standards.

Interdisciplinary Study

Interdisciplinary study is an important tool for achieving many of the Modern Red Schoolhouse standards. Some standards can be achieved *only* through interdisciplinary Hudson units. The following are examples:

English Language Arts. Each student can explain the structure of certain passages of literature from various historical periods and cultures, illustrating the authors use of syntax, images, figures of speech, literary and cultural allusions, symbols, irony, and other devices in the context of history, culture, and literary style.

Geography. Each student can analyze and interpret databases and case studies as well as use information from maps to describe the role that regions play in influencing trade and migration patterns as well as cultural and political interactions.

Students are often surprised to learn that the world is so interdisciplinary. In the information-age of today, people are expected to work together in complex systems and relationships. Education must prepare students to operate effectively in this interdisciplinary world.

The interdisciplinary experiences of students should be many and varied. Sometimes, the units will be formal and predictable. History, for example, will almost always draw together the arts, sciences, and geography. Other times, interdisciplinary study will be surprising and unexpected, arrived at through natural exploration. A unit on diet and nutrition, for example, may encourage students to delve into chemistry, biology, or statistics.

Properly constructed, interdisciplinary study should model for students how various disciplines are to be incorporated into the intellectual framework of the individual student. At Modern Red Schoolhouses, students might study with a history teacher who is knowledgeable about literature and understands how writers of different times interpreted history for their audiences. They might study with a physics teacher who understands how modern religions have accommodated the "big bang" theory.

Hudson units often will be organized around a complex theme such as "the Renaissance" or "Sound" being taught by one teacher, two teachers, or a team of teachers who have students in-common. Students are also encouraged to learn through personal investigation.

Continuous Progress

As should be evident by now, the Modern Red Schoolhouse design envisions a new definition of education. Education is no longer to be viewed as a process—expanding pre-schools, building self-esteem, introducing more computers, and so on. From now on, education will be defined by its results. Education happens when children demonstrate mastery of standards.

Achieving the high academic standards requires new ways of thinking about time and accomplishment in schools. Achieving high standards requires that all students master difficult concepts. Students will not master all of these concepts at the same time. Students are allowed a degree of flexibility in the time it takes to complete various Hudson units. Accomplishment is expected of every student, though not in lock-step fashion.

The Modern Red Schoolhouse will provide the environment, tools, and coaches to help students achieve these standards. But the effort and the accomplishment belong to the student. This can only happen with more individually paced learning.

Individually paced learning does not mean that students learn (or do not learn) at their own leisure. Rather, it refers to a school structure that pushes students to experience continuous progress in their learning. Students neither fall hopelessly behind their classmates nor sit bored while they wait for classmates to finish their work. Learning and initiative become nearly synonymous.

This does not necessarily imply that all children in a classroom work on different material. In fact, we urge schools to move toward more individually paced instruction in manageable increments. Several strategies exist to begin the transition. For instance, at the primary level, schools should consider the following as initial steps:

Performance grouping. Instruction is individualized by grouping across numerous classrooms. The most positive results in performance grouping have been documented in teaching reading. Grouping occurs for ninety-minute periods and must, at a minimum, involve several classrooms of students. Students are grouped according to their current performance levels for six to nine weeks of study. Performance is then reevaluated and new groups are formed.

Learning teams. Four or five teachers are assigned approximately 100 students of various ages and performance levels for multiple years. Students are assigned the same advisor throughout the primary level. However, they are assigned to various teachers on the team during the course of the day, depending on their performance level. Fairly sophisticated management of student progress is required for this strategy.

After-school studies. Students who need additional learning time or who want to progress faster are offered special after-school studies programs or are assigned individual projects that can be pursued independently after school.

Summer studies. Students whose progress lags behind appropriate expectations may be allowed to work on Hudson units under the supervision of a parent or mentor. When a student returns to school in the fall, he or she will complete critical assessment components to establish the level of mastery obtained during the summer.

Ungraded classrooms. Using thematic instruction, students, usually of different ages, work in the same classroom on different Hudson units covering the same topic, such as ancient civilizations or American history. Each student will achieve the same high standards but at different rates and, perhaps, ages.

Schools should consider the following at intermediate and upper levels as initial steps:

Project-based learning. By the intermediate level, students are less dependent on teachers to shape and direct their learning experiences. A portion of the day can be assigned to project-based learning, where students, alone or in groups, work to complete a project that addresses one or more Hudson units.

Individual tutoring. Teachers can dedicate time to individual and small group tutoring for students with special needs.

Student use of computers. By the intermediate level, students should use the computer as a research tool fairly frequently. They can access and enter data for analyzing scientific and historical issues. They can begin to evaluate their own progress in academic subjects and learn to identify areas of learning that will help improve their own performance and mastery of essential skills.

Small group tutorials and self-directed learning projects. For upper-level students, expectations specific to each student will determine the appropriate learning strategy. As in earlier levels, mastery of Hudson units will guide the structure of learning.

Multi-Year, Multi-Age Groupings

Students often benefit from having the same teacher two or more years. Each fall in the United States, teachers waste hundreds of hours as they learn about the particular strengths and weaknesses of the students assigned to them. Yet in some European countries, it is common for a student to have the same teacher for two or more years.

Students also benefit, academically and socially, from contact with students of different ages. In addition to critical learning opportunities that arise when they can give and receive assistance, young children benefit from the helping roles they initiate in mixed-age groups. Students of all ages gain critical insights when they have to explain a particular concept or principle to another person. These things occur more often in mixed-age groups.

Each Modern Red Schoolhouse will provide these opportunities for student learning differently. Some may begin with multi-age homerooms, with teachers being assigned to a homeroom for multiple years. Subsequently, they may expand these opportunities through performance grouping or ungraded classrooms.

As evident from the above discussion, the Modern Red Schoolhouse curriculum is a structure that will allow great flexibility and creativity on the part of teachers, but at the same time, it will ensure that every student learns important knowledge and skills.

Continuous Progress in Curriculum Development

Developing a curriculum that allows all students to attain the academic standards of the Modern Red Schoolhouse is not a one-time endeavor. Like all professional endeavors, it is a continuing process. Instructional strategies are revised when students appear to falter. Content may change to reflect new discoveries in science or new avenues to illustrate guiding principles. Teachers find that continuous progress in curriculum requires continued reflection on what students are learning and should be learning. Collaborative work among teachers and proper technological support make that endeavor feasible and often gratifying.

Chapter 4

THE ORGANIZATION OF THE MODERN RED SCHOOLHOUSE

The design for the Modern Red Schoolhouse envisions schools that lift the constraints of a cumbersome bureaucracy. Schools should be largely autonomous institutions where principals and teachers can respond flexibly and creatively to student needs. School staff and local stakeholders should control essential aspects of school organization including:

- budgeting
- staffing and personnel assignments
- curriculum details
- schedules
- teacher/student ratios
- time allocated to various subjects

Modern Red Schoolhouses do not allow traditional policies and practices to limit teaching. For too long teachers have been hampered because they were unable to answer two questions: How can some students be given more time to learn without wasting the time of others? How can a teacher vary the way he or she provides instruction to some, but not all, of the students? The Modern Red Schoolhouse will allow teachers to move beyond these questions by organizing the school to allow for the following:

- the incorporation of technology into teaching and assessment
- innovations in the use of time and pedagogy
- practical and commonsensical solutions to problems
- the use of successful organizational practices in pioneering schools

Schools that choose to participate in this project commit themselves to an open evaluation of existing governance structures and roles, staffing and hiring practices, and uses of support services. In every district that includes a Modern Red Schoolhouse, administrators and teacher organizations need to develop the side agreements necessary to allow for organizational flexibility at the participating school. Changes in organizational practice that have the potential to improve student learning should always be given the highest priority.

Providing Continuous Progress For All Students

As discussed in Chapter 3, providing all students with the opportunity to experience continuous progress in their learning is not a simple task. It requires organizing the daily routines of school in ways that allow some students to work on individual or group projects or tutorial periods during or outside the regular school day. Creative scheduling of large lectures and small tutorials, computerized management of student progress, and increased planning time for teachers may be needed to realize this goal.

Advising teachers are needed to provide continuity and direction for each student's academic pursuits and to ensure that social services are provided by community agencies when needed. Each student should have the same advisor for two to four years. The advising teacher will receive regular reports from a student's various instructors—usually through electronic mail—on the progress of a student, noting where particular problems need attention or particular successes deserve praise. The advising teacher has primary responsibility for preparing and monitoring a student's plan of work through the Individual Education Compact (see Chapter 2) developed in collaboration with parents and the student.

The Move To Autonomy

While the precise steps that individual schools take to achieve autonomy will vary, certain organizational changes should be achieved within three years at every Modern Red Schoolhouse. These changes include school control over the following areas:

- at least 80 percent of the resources consumed by the school including salaries and positions
- hiring and terminations
- acquisition and application of resources
- classroom ratios, including the authority to obtain waivers or side agreements
- class schedules
- curriculum
- positions and classifications

The need for such autonomy is based on the evidence that the school itself, rather than remote authorities such as the district or the state, is in the best position to understand the education needs of its students and to know how to best meet those needs. Changes must occur in the roles and responsibilities of the people involved: principals become education leaders and executives; teachers develop coaching and

mentoring skills; school stakeholders participate in decisions; and students and parents take more responsibility for education activities.

The implementation plan should include a schedule for training, piloting, and fully implementing the advising teacher program and an alternative school schedule that allows for continuous progress of students and increased planning time for teachers. The school schedule should be altered to allow for computer assisted instruction, interdisciplinary projects, learning beyond regular school hours, flexibility in the ways students learn, and an extended school year for those students who would benefit. The advising teacher program should allow for weekly interaction—perhaps through a homeroom structure—between student and his or her advisor; for regular interaction between the advising teacher and a student's instructors—perhaps through electronic communication and reports from an instructional management system; and for long-term relationships between an advising teacher and a group of students—through multi-age, multi-year homerooms.

New Roles and Responsibilities

Decentralization of authority from school districts to autonomous schools will change the roles and responsibilities of all concerned. The principal will be in charge of the school and, in conjunction with the stakeholders, will make the major decisions concerning the school. Principals will be both education leaders and executives. Teachers, parents, and others in the community will have greater opportunity to participate in school planning and policy making. Teachers will be able to develop and apply their mentoring, coaching, and leadership skills. Modern Red Schoolhouses should form site councils composed of parents, teachers, and others to provide advice to school administrators. Students and parents will have more responsibility for the students' education.

To the extent requested by the participating schools, district offices may provide services such as professional development, school maintenance, and accounting and disbursing funds. The school district superintendent has responsibility for assessing school progress in achieving agreed-upon outcomes. Where progress is unsatisfactory, the school board, in conjunction with the district office, will be responsible for implementing assistance programs.

Since the educational needs of students will be the driving force in making decisions, input and appropriate participation should be sought from all those with a stake in the outcome: teachers, counselors, union representatives, parents, students, and the community-at-large. The principal of the Modern Red Schoolhouse sets a tone encouraging all stakeholders to look for opportunities to

improve the system and thereby improve the quality of education. The principal will establish a collegial working environment in which collaborative planning and shared decision-making about the educational needs of students are the rule rather than the exception.

The success of the Modern Red Schoolhouse will be dependent on the attitudes and competence of its staff. The staffing process should focus on obtaining teachers who believe all students can succeed. Only people who want to be at the school are selected. The school should be staffed with teachers who are willing participants in the decision-making and mentoring process. Teams composed of both subject specialists and multi-disciplinary teachers should be assisted by aides and technical support personnel in team-taught learning communities. Varying staffing positions—aides, interns, or master teachers—should be used when the school decision-making body finds that it will enhance the quality of education the school can provide.

Schools will be accountable to the district in terms of their results: What have students learned? Do many parents want their children to attend this school?

Costs

Our estimates suggest that long-term operating costs will increase to cover the costs of a technology support person, but that other changes can be accommodated through changes in staffing structures and in materials purchased. Some personnel changes will increase costs, but other changes will reduce costs. Reductions in the demands of district-level bureaucracy will free some staff members to provide necessary support for technology, for the advisor program, and for increases in "contact time." Cost savings may also allow schools to provide a longer school day or year.

Outlined below (Table 1) are two possible staffing scenarios that illustrate options a school may encounter. Of course, these options represent just two of many possible expenditure plans. In the first scenario, the school would increase the total number of adults who interact with students, add a technology support person, and reduce the number of full-time interns. Three teachers would be promoted to master teachers, perhaps reflecting the need to provide newer teachers with more support and coaching. In the second scenario, substantial increases are proposed in part-time teachers and technology staff—perhaps reflecting the need to provide more technological support to an older population of teachers.

Start-up costs for a Modern Red Schoolhouse will vary substantially, depending to a great extent on the degree to which a school has acquired the technology needed for successful implementation of the design. For example, an elementary school with no technology, no experience with elements of the design, and 500 students may need as much as \$600,000 in start-up funds. A similar

school with a sophisticated technology system and a strong leadership team may need as little as \$100,000 in start-up funds. During the planning phase, the design team will work closely with a school to establish the actual start-up costs for the design.

Table 1
Hypothetical Staffing Options

	Current Profile		Option 1		Option 2	
	# of staff	Cost	# of staff	Cost	# of staff	Cost
Master Teachers, full-time at \$50,000	0	\$ 0	3	\$150,000	0	\$ 0
Teachers, full-time @ \$33,000	67	2,211,000	60	1,980,000	62	2,046,000
Teachers, part-time @ \$10,000	10	100,000	15	150,000	18	180,000
Technology Staff, full-time @ \$30,000	0		1	30,000	4	120,000
Interns, full-time @ \$9,000	10	90,000	5	45,000	6	54,000
Interns, part-time @ \$3,000	5	15,000	15	45,000	5	15,000
Total	92	\$2,416,000	99	\$2,400,000	95	\$2,415,000

Keeping the Goal in Focus

In evaluating staffing and budgeting options, the principal and school staff should always weigh their options in terms of which one can do the most to improve student learning. Choosing one option over another because it is more convenient for teachers or agreeable to parents is not a compelling reason for change. Instead, options need to be evaluated in terms of their ability to improve the opportunity that *all* students have to attain high academic standards.

Changes in how resources are allocated are always difficult in any organization, but if everyone can agree on the overall goal, the discussions can be productive and compromises more easily reached. In addition, though, to focus on student learning, school personnel must have access to detailed data on student performance to uncover real strengths and weakness in the curriculum. Technology, which we discuss in the next section, can give teachers and principals access to that data. With a shared goal and hard evidence, changes in organizational practices can be sensibly evaluated in terms of how they address the particular weaknesses in student learning.

Chapter 5

TECHNOLOGY

Technology allows teachers at Modern Red Schoolhouses to remove the constraints that time has placed on teaching strategies. By using computer workstations and networks, interactive technologies, and new communications systems, teachers are able to interact with their students and assess their students' progress, at any time, from any place. Classroom walls no longer circumscribe the relations between teachers and student. A teacher's ability to monitor student progress, talk with colleagues, find alternative instructional strategies, and evaluate the effectiveness of the curriculum is enhanced with the proper technology.

At the Modern Red Schoolhouse, the staff uses technology to teach, to prepare and monitor IECs, to manage student progress, and to develop and oversee school budgets. This is possible because three different communication systems eventually will be brought into every school—a data network, a voice or telephone system, and a video distribution system.

Systems of Communication

The *data system* utilizes a Local Area Network (LAN) which serves to link all classrooms within the building together and with the outside world. Teacher and student computer workstations are to be placed in, or near, classrooms, rather than in isolated labs down the hall. A ratio of approximately six students per classroom computer is a minimum target, although the number of students per computer may vary according to age. Computer users are able to send messages or documents to other computer users via electronic mail on the LAN. The LAN promotes collaboration between students within a classroom, between different classrooms within a school, and with other schools using a modem. Certain resources are available via the school-wide network; students and teachers will share yet other resources within a classroom.

Each teacher will have a computer in the classroom that he or she uses as a presentation and management tool. Just like students' computers, the teacher's computer is part of the LAN. The teacher's computer should allow the teacher to create and present multimedia files, monitor student progress, communicate with colleagues and students, schedule tutorials, and connect with libraries throughout the world.

Servers—the "engine" of the LAN—will be used to store databases and other information, including certain administrative information.

Servers also support bulletin board systems which allow anyone with access via modem to leave messages or transmit documents from outside the building. Students and members of the community with home computers are able to access certain information "published" by the school.

The *voice system* will handle telephone-related functions. Ideally, each classroom should have a phone, voice-mail system, and/or a homework hotline for communication between parents and the school. Call and toll restrictions can be programmed into the phone systems to control unauthorized use of the system.

The *video distribution system* allows teachers and students to view, produce, and present video programming. Each school should have a satellite dish to receive educational programming, such as broadcasts distributed by NASA, that are beamed long distance via satellite transmission. Schools are outfitted with video production equipment—enabling students, teachers, administrators, and parents to create custom video programming to support community, school-wide, or classroom activities. Video programming—whether received via satellite, in taped versions, or produced in-house—should be available for viewing throughout the school. Each classroom should have a television monitor connected to the school-wide video distribution system.

Uses of Technology

Technology is an essential tool for all of the elements of a Modern Red Schoolhouse. In the area of standards and assessments, a computerized means of tracking student progress over time should be available. Student reports, IECs, and school reports should all be generated by computer. Ideally, the system should allow for electronic assessment tools that support the collection, storing, and tracking of quantitative (e.g., test scores) and qualitative (e.g., videos of performances, writing samples) data on student learning.

In curriculum and instruction, a number of applications are possible. Essential, however, is an Instructional Management System (IMS) that allows teachers to develop, implement, and monitor a core curriculum. Second, computers are used by students to author texts, collect data, and assess their own progress in certain areas. A schoolwide video system should allow classroom access to a variety of programs (NASA, CNN Newsroom, the Discovery Channel, and so forth). All of these systems should be further supported by a large collection software and technology-based courseware and by subject-specific technology equipment such as specialized equipment in science rooms, calculators for math, software and tools in music, computer assisted drafting (CAD) software and tools in vocational arts,

and additional computers and productivity tools in business education.

In organization and finance, on-line management tools (for budgeting, scheduling, and data collection) should be available at every Modern Red Schoolhouse. Daily attendance records should flow directly from a teacher's workstation to the front office. Communications within the school should be mostly electronic—memos from the front office, reports of meetings from various committees, and information on student progress to advising teachers are some examples. Students should be able to form informal study groups through an on-line scheduling system that can notify interested students and assign a study area for the time that students are available. To further support administrative, student, and teacher use, equipment such as a fax machine and laser printers should be centrally located and readily accessible.

Community involvement in schools will be enhanced through public cablecasting of school events, such as plays or musical events. Special pre-school or parent education programming, developed locally, could be available in clinics, laundromats, or public libraries. Businesses and other organizations interested in having their employees tutor or mentor students could be linked electronically to students for daily conversations.

Parental involvement in education could be similarly enhanced through homework hotlines, parental access to students' work related to their IECs, or the linkage of terminals in public libraries to school curriculum and educational resources.

Technology enhances the number of professional development opportunities available to teachers. Teachers at Modern Red Schoolhouses should be able to exchange ideas and curriculum through computer link-ups such as Internet. Face-to-face video conferences could be held with university faculty or nationally recognized curriculum experts. A media library of interviews with national experts, classroom observations, and student performances on projects could be available as references to teachers.

These uses of technology do not exhaust its potential to serve the goals of the Modern Red Schoolhouse, but should provide some initial insight into the degree to which technology is an essential component of a Modern Red Schoolhouse.

Acquiring Technology

Given the vast budget implications of implementing complete data, voice, and video systems within a Modern Red Schoolhouse, the design team recognizes the need for staggering the purchase of them. Planning and implementation activities are listed below which support the installation of a Local Area Network (LAN) and teacher work-

stations as the backbone of the Modern Red Schoolhouse technology infrastructure. As part of wiring the building during the first year, appropriate cables should be installed to support data (e.g., computers), voice (e.g., telephones), and video (e.g., cable television). Once such wiring exists within a building, additional technology can be phased-in each year as budgets permit. For example, additional computers can be connected to the LAN, telephones added to classrooms, and video programming can be expanded.

The following activities need to occur as part of planning phase:

1. Establish baseline data by completing an equipment/software inventory and a teacher usage survey.
2. Identify funds to support a part-time, school-based technology coordinator/trainer.
3. Develop school-based technology implementation plan and specifications, using the Modern Red Schoolhouse technology plan as a guide.

During the implementation period, each school will do the following:

1. Acquire and install:

- local area network; pull cables for data, voice, and video at same time
- file server(s) and LAN operating software
- computer for each teacher and administrator with multi-media capacity (e.g., a CD-ROM, sound capability, and adequate memory)
- instructional management system (IMS)
- management information software (MIS)
- electronic-mail software
- network modem(s) and supporting telephone line(s)
- a core set of instructional and management software (e.g., electronic encyclopedia; graphing programs; integrated productivity tools)

2. Provide and/or arrange for the provision of basic training for all teachers, administrators, and school staff covering the following topics:

- beginning computer fundamentals
- utilizing an integrated productivity software package
- integrating third party software into the curriculum
- basic multi-media applications
- utilizing school's e-mail and LAN
- utilizing telecommunications in the classroom
- electronically managing the core curriculum and assessment using the IMS

Beyond the first period of implementation, continued on-site support and training should be provided to ensure that all school staff can at a minimum: a) electronically manage information concerning student progress; b) utilize the internal and external communication systems; and c) provide enhanced instruction and learning. Supporting technologies, such as video cameras, should be purchased in these subsequent years. Long range planning should include an appropriate budget for additional software acquisition and system maintenance. While exact implementation schedules will vary at each school depending upon budget constraints and the technology acquired prior to the project, most plans should seek to complete their major acquisition within three years.

Using Technology

Technology can transform the learning opportunities of all students. Two mistakes, however, must be avoided. Teachers must have the time and training they need to be able to use technology reliably and imaginatively. Too many times technology is placed in classrooms or labs without training teachers in its use. Second, the use of technology for drilling students on arithmetic or reading skills should be limited. The learning gains are generally too small to be worthy of the investment. Instead, student use of technology should focus on providing opportunities for problem-solving, exploration of different times and places, and communication.

Chapter 6

COMMUNITY INVOLVEMENT

In the story of the little red schoolhouse, community members helped build the schoolhouse, and they gave the teacher complete support. Every member of the community worked to make sure it was a good school. At the Modern Red Schoolhouse, this type of community support is expected. Local service agencies and religious and civic organizations should work together to ensure that every child starts school ready to learn and that any family in distress is provided needed support. Volunteers play an important role in the life of the school. Parents, of course, are expected to maintain a conscientious commitment to their child's education. And, parents should be given the opportunity to choose the school their children will attend.

Readiness for School

Upon entering school, children need to be healthy, have self-confidence to take on new challenges and lessons, and good language skills, so they can ask and answer questions and take part in group activities. Children also need good social skills, so that they will be able to get along with other children and listen to adults. Children who enter school physically healthy, emotionally healthy, and self-confident, with good language skills, and able to behave and exhibit good manners, are ready to learn.

Modern Red Schoolhouses facilitate the formation of a consortium of community agencies and organizations dedicated to ensuring that all children enter school with an equal chance of succeeding. This consortium may include churches and synagogues, community-based service organizations, private agencies, existing pre-school programs, or other institutions. They specify what parents can do to prepare their child for school and help parents of all children increase their own effectiveness.

The focus of the consortium may differ in each community, but all will rely upon the Modern Red Schoolhouse's Parent Handbook as a guide in establishing priorities and concerns. A consortium may serve all children in a community or only those likely to attend a Modern Red Schoolhouse. Wherever possible, the consortium will be encouraged to serve all children in a community.

Support for Distressed Families

Communities should provide a coherent and comprehensive set of services to families in distress. When necessary, school districts participating in the Modern Red Schoolhouse project should establish a multi-agency task force to review existing services for redundancies and gaps, to formulate a plan to eliminate gaps, and to devise a strategy to ensure user-friendly support.

A division of labor is required. Schools educate. Only rarely should they be turned into multi-service community centers. Local service agencies provide social services. Schools and social-service agencies should coordinate closely. This way, schools do what they do best and social-service agencies do what they do best. Children and families should receive high quality education and support services, as opposed to finding mediocrity in both.

As a practical matter, this means that Modern Red Schoolhouses assist at-risk students by attending primarily to their educational needs and rely on other agencies in the community to address their wide variety of other needs. Guidance and career counseling, teaching the basics of good nutrition and hygiene, and physical education are part of every Modern Red Schoolhouse. Special learning services may also be included as part of a student's IEC to help him or her overcome the educational impairments that may accompany poverty, emotional abuse, or learning disabilities. Advising teachers, who work with the same group of students for several years in multi-age homerooms, will link children in need of special services with local social service agencies.

Parental Involvement

Parents should choose the public school their children attend. Parent information centers should be available to help parents make informed educational choices for their children, especially when it comes to choosing a school.

Parents are not simply encouraged to participate in the school and their children's education. Their responsibilities and contributions are incorporated into their children's Individual Education Compacts. Parents know what their children are expected to learn, how the children are progressing, and what the parent can do to help.

Technology is used to encourage and facilitate regular communication between parent and teacher. For many parents, this will be via telephone. For parents with home computers, this can be done via electronic mail.

Parents assist with instruction. It may be as simple as helping a child to read or as complex as explaining navigation to Mars. They may help students who are working on a project or rehearsing a play.

In those cases when a parent is unable to meet his or her responsibilities, the parent may choose an educational advisor for the child. The advisor should be authorized to fulfill basic parenting responsibilities in the school, such as the preparation of the IEC. Other parents, such as recent immigrants, may need a coach or advocate who helps them to fulfill their educational responsibilities by accompanying the parent to school meetings. The assistant or advocate may be a neighbor; another parent in the school; a fellow church, mosque, or synagogue member; or a social-services worker. The community involvement task force should establish ways to identify parents with these special needs and, as needed, provide assistance in recruiting volunteers to fulfill these roles.

Volunteer Support in Schools

Volunteers are essential if students are to achieve the high standards of Modern Red Schoolhouses. We encourage schools to utilize volunteers to do the following:

- augment classroom learning experiences;
- provide release time for teacher planning;
- extend the school experiences of students who are having difficulty maintaining satisfactory progress in one or more subjects;
- supplement, as needed, the work of parents in providing out-of-school experiences which support the curriculum; and
- serve as parental advocates or assistants to those parents requiring them.

Volunteers may be recruited from local colleges, groups of retired persons, or other service-oriented organizations.

Supporting the Modern Red Schoolhouse

The ambitious standards for students enrolled in a Modern Red Schoolhouse cannot be met solely through the energy and dedication of teachers and administrators. If the goals of the Modern Red Schoolhouse are to be attained, they require the support of parents at home and in the classroom, of community members as committee members and tutors, of social services agencies to secure health and welfare assistance, and of political and religious leaders in providing educational leadership for the entire community. The community involvement task force is responsible for stimulating this type of involvement.

Chapter 7

PROFESSIONAL DEVELOPMENT

Implementing the Modern Red Schoolhouse design will require every participant to take on new roles and to do things in unaccustomed ways. Giving schools nearly complete autonomy will require principals and other administrators to develop new skills. Teachers will need to operate within the structure of the new Modern Red Schoolhouse curriculum and in a new, technologically rich environment. To be successful, teachers must reformulate their role as professionals. They must learn to work in teams with colleagues, participate more directly in decisions affecting the entire school, become curriculum innovators, and renew their commitment to the belief that all students can master challenging curricula. The implementation of a Modern Red Schoolhouse design calls for new curricula and assessment tools, new technology and teaching methods, new decision making and school governance practices, and increased collaboration between schools and communities.

Professional development is central to the success of any school, but takes on heightened importance in schools participating in the Modern Red Schoolhouse project because teachers are compelled to expand their roles, taking on greater responsibility than is typical. Only with professional development opportunities and adequate time to put new ideas into place can teachers succeed in their new roles.

Teachers and schools will vary in their need for training. Prior local and state initiatives may have given teachers extensive experience in site-based management or portfolio training. The training provided by the Modern Red Schoolhouse design team varies accordingly.

During the planning phase, training and consultation is provided by the design team in each of the six task force areas: standards and assessment, curriculum, organization and finance, technology, professional development, and community involvement. Individual schools and teachers have been, and are, receiving high levels of technical support as they work to create new materials, establish new organizational structures for decision making, and take concrete steps necessary to put new educational practices in place.

Becoming a Modern Red Schoolhouse

During the planning period and the first year of implementation, the design team has primary responsibility for professional development. During the planning period, we provide orientation sessions on each of the core elements—standards and assessment, curriculum, organization, technology, and professional development;

assist in helping a school to determine training needs and in evaluating the costs of implementation; and help teams of teachers develop implementation plans for each of the core elements.

Each summer, institutes are held for teachers at Modern Red Schoolhouses. They are designed to be responsive to the needs of participating teachers in developing curriculum and instructional strategies. In 1993, participants from elementary sites became familiar with the *Core Knowledge* curriculum and began developing Hudson units. In 1994, ten two-day sessions were held for elementary teachers, primarily on instructional strategies. The sessions covered the following topics:

- Character education in the curriculum
- Portfolio assessment
- Multimedia in the classroom
- Mathematics and science instruction
- Strategies for multi-age grouping
- Process writing
- Creating a continuous progress classroom
- The one-computer classroom
- Reading instruction through literature

The 1994 institute for middle and secondary teachers focused on creating curriculum scope and sequences consistent with the Modern Red Schoolhouse standards, developing new instructional strategies in each of the disciplines, and writing Hudson units.

Design team and national faculty members provide extensive consultation with implementing sites as they develop their core curriculum. In addition to the summer institutes, they are available for site visits to consult with faculty. As technology permits, school faculty may want to use electronic mail to consult with team and national faculty members assigned to them.

Sustaining a Modern Red Schoolhouse

Becoming a Modern Red Schoolhouse is not a short-term endeavor. It is a life-time endeavor—not because the design is so complex, but because teaching and learning are so complex. To meet that challenge, schools must commit themselves to a holistic approach in professional development, not an individualistic one. That is, the professional development activities of any one teacher should advance the mission of the school—in particular, its ability to have students meet the standards.

We work closely with each school to help them develop a long-term strategy for professional development that addresses the unique

needs among faculty. The plan may include opportunities for intensive study, in say, geography; workshops on instructional methods; school visitations; and media materials for self-evaluation. The opportunities should, however, reflect a systematic review of teacher interests and needs as well as student performance.

Professional development opportunities should not be restricted to workshops or university classes. They may include internships at corporations or public service agencies and visits to other Modern Red Schoolhouses. They could include long-term mentoring relationships with university faculty in, say, geography or history that are maintained almost exclusively through electronic communication.

It is seldom possible for all teachers to receive all the training that is appropriate and needed. Special attention should be given, therefore, to ways in which the training of one can benefit many. Some strategies that schools may wish to consider are as follows:

- asking teachers who attend special training to give a report or mini-training to their colleagues;
- expecting teachers who are part of a team to vary their specialization, for example, in technology, portfolio assessment, and reading, so as to provide ongoing support to each other in their respective areas; and
- providing release-time to teachers receiving special training in subjects such as technology.

At all times, Modern Red Schoolhouses should seek to foster professional development opportunities that promote the mission and goals of the school, not simply the particular interests of each teacher.

Finally, sustaining a Modern Red Schoolhouse requires the development of an adequate induction program for new teachers. Each school will need to develop a program that orients a new teacher to the mission and philosophy of the school.

Chapter 8

IMPLEMENTING A MODERN RED SCHOOLHOUSE

Implementation Schedules

Implementation schedules and timelines will vary substantially. Schools begin the journey to becoming a Modern Red Schoolhouse at different points, with different resources and skills. For example, a school that has been using technology consistent with the design will need less time to complete implementation than a school that has no computers.

In describing possible implementation timelines, we have generally assumed a planning period that extends from three months to a year and an implementation period of two years. Some schools may need to develop an implementation schedule that covers a longer period of time, perhaps three years, or in the case of high schools, as much as four years. Extending changes over a longer period, however, no matter how pleasant it sounds, can compromise the momentum for change. We encourage school staff to be realistic, but also to push changes speedily wherever possible. The press that comes from commitments and timelines is extremely important—providing discipline to all groups that are working for change. Whatever the timelines, evidence of change must be constantly visible to teachers and the community—reminding all participants that steps in an important journey are taking place.

Public Engagement

Community-Wide Initiatives

The decision to join the Modern Red Schoolhouse initiative should be made deliberately and with strong community participation. We suggest that communities begin with a series of deliberations regarding what they think their children should know and be able to do.

Using the Modern Red Schoolhouse standards and other standards documents prepared by national organizations in the various disciplines as a point of reference, parents, teachers, and members of the civic and business communities should work together to establish some consensus about what students should know and be able to do as graduates of their high schools. Some communities may want to bring in outside speakers to help parents and other members of the community gain an appreciation of the issues at stake. Other communities may prefer to rely on local leadership. Design team members can be available to help plan these discussions, to provide speakers, or to provide more detailed information on the design.

Through these deliberations, a community should make an initial assessment of whether it wants one or more of their schools to become a Modern Red Schoolhouse. Some communities may propose to add standards or to alter some of the ones proposed by the Modern Red Schoolhouse. They may propose these alternatives and still wish to be part of the Modern Red Schoolhouse initiative. The critical issue will be the degree to which these changes remain consistent with the overall assessment system that is part of the Modern Red Schoolhouse design. The design team can be available to discuss this issue.

Some communities may decide that the Modern Red Schoolhouse standards are quite different from their own priorities and concerns. In that case, they would not want to join the Modern Red Schoolhouse initiative. Even with that conclusion, communities will benefit from the deliberations by establishing what it is that they *do* want their students to know and be able to do.

Some communities and states recently completed the process of standard setting in academic subjects. In those instances, Modern Red Schoolhouse standards will likely be fairly consistent, but more rigorous. Schools within those communities and states can usually adopt the Modern Red Schoolhouse standards without creating inconsistencies. Rather they will be introducing higher expectations of their students in the same academic subjects. In these instances, secondary schools must give special attention to the existence of feeder schools with matching expectations to ensure the success of students entering their school.

Charter Schools and Systems of Choice

Charter schools, or schools within a district already providing choice, may approach the deliberations on standards somewhat differently. After a positive review of the standards by teachers and, as appropriate, the school advisory council, the staff may wish to survey parents in the community to determine the degree of interest they would have in sending their child to a school with Modern Red Schoolhouse academic standards. Again, the Modern Red Schoolhouse can assist such schools in developing a plan for public engagement that is targeted to potential parents and students.

If teachers and parents aspire to create a school with the standards of the Modern Red Schoolhouse, then they will want to consider the next step, planning for a Modern Red Schoolhouse.

Planning for a Modern Red Schoolhouse

Creating Modern Red Schoolhouses with all of the changes outlined in earlier chapters requires teachers, administrators, and parents to participate in most aspects of planning and implementation. We recommend that each site establish six transitional task forces to focus on the following design elements:

- standards and assessment
- curriculum
- technology
- organization and finance
- community involvement
- professional development

These task forces provide impetus and direction for change in each school. Close communication across task forces is absolutely essential. Modern Red Schoolhouse sites need a steering committee that is comprised, at least in part, of representatives from each task force.

Each task force should make recommendations for change to the steering committee, the entire faculty, or the principal—whichever process appears most effective for their school. This process of review and recommendation should be established *prior* to the formation of the task forces.

If a school has existing committees with assigned responsibilities in these areas, we encourage the integration of Modern Red Schoolhouse responsibilities into these committees. With proper representation from the task forces, an existing leadership council can function as the steering committee. Confusion and misunderstandings inevitably will arise if a school has a regular or standing committee structure that is distinct from committees designed to implement the Modern Red Schoolhouse design.

For effective organizational practices to be sustained over a long period of time, the membership should remain fairly stable. We recommend that members be given three-year staggered terms so that no more than one-third of the members are new to a committee in any given year.

For the task forces to function effectively, a school-wide mission and goals should be established that are consistent with those of the Modern Red Schoolhouse. Organizational changes should be considered in terms of how they help the school achieve the mission and goals. Schools that need help to develop or reformulate their mission or goals may receive assistance from the design team. In addition, we are prepared to provide further support in the following ways:

- training facilitators from each task force;
- conducting orientation sessions for each task force, clarifying options and priorities;
- providing prototypes of the basic elements of the design that can be adapted to local environments;
- reviewing and helping in the collection of relevant information; and
- helping to solve implementation problems.

Schools or districts that wish to implement the Modern Red Schoolhouse design should begin with a thorough review of the strengths and weaknesses in what their students know and are able to do in terms of the Modern Red Schoolhouse standards. Parents and other members of the community should join teachers and administrators in assessing their commitment to addressing whatever weaknesses are identified.

If a community of parents, teachers, and administrators find they have such commitment and interest, local stakeholders will identify, in collaboration with our design team, what steps need to be taken to allow all children to attain Modern Red Schoolhouse standards. Our design team will help evaluate training and curriculum development needs as well as estimated costs. Hudson Institute, NASDC, and local officials will work together to secure funding and develop an implementation plan.

Standards and Assessment

Responsibilities of School Task Force. The school task force for standards and assessment recommends a timeline for implementation of standards, Individual Education Compacts, student reports, and school reports. Once these timelines are approved or endorsed, this task force works to secure their successful implementation. The timelines should include periods for piloting these elements, for review and evaluation of the pilot experience, for teacher training, and a date for achieving full implementation.

Of those tasks, the schedule for implementing the standards is most critical and complicated. It is critical because that schedule affects a vast array of activities. It is complicated because establishing benchmarks for student achievement during the years of transition must be both realistic and challenging.

The task force also should develop a strategy to provide collegial review of the assessment components in the Hudson units. The task force will also consult with the professional development task force to identify special training needs that should be addressed in the implementation of the assessment. High school sites need to establish a timeline for adopting Modern Red Schoolhouse standards and the

watershed assessments as a graduation requirement for their students. Students must know, before they enroll in a school, what requirements they must meet for graduation. Finally, the task force must develop a strategy for communicating the standards to parents, prospective students, and the community at large.

The task force also should develop a strategy for achieving school-wide consensus on any special subjects that the school may wish to emphasize, such as the arts or foreign languages. For instance, should a school wish to have an international focus, they may wish to have foreign language requirements that exceed those of the Modern Red Schoolhouse.

Some members of this task force will serve on the national advisory boards for the watershed assessments—the capstone units and the subject exams. Along with teachers from other participating sites, they advise the design team about the content of the watershed assessments.

Responsibilities of the Modern Red Schoolhouse Design Team. Working under the guidance and advice of the teachers on the national Modern Red Schoolhouse advisory boards, we have developed the capstone units and the subject exams. We have also developed prototypes of the Individual Education Compacts (IEC) and the student and school reports that schools can adapt to their local circumstances. In each instance, we will provide counsel on implementation, planning, and training. During the second year of implementation, or, as soon as a site is ready, we will be available on request to assist the task force in piloting of the student and school reports as well as the IEC.

We will assist each school in establishing transition benchmarks for student performance as they move to fully implement the standards.

We will be responsible for ensuring that the repertoire of capstone units continually expands and that the item pool for subject exams is maintained and replaced to guarantee the security of the exams. Teachers at participating sites will continue to serve on advisory boards for both of these assessment systems.

Review and revision of standards will be done on a five-year cycle, with teachers from participating sites serving on all advisory boards. In 1995-96, we will review the standards in the arts.

The contractor for standards and assessment is Advanced Systems, in Dover, New Hampshire. They have extensive experience in developing traditional and authentic assessments, most recently having worked with the Kentucky officials in developing new assessments in that state.

Curriculum

Responsibilities of the School Task Force. The school curriculum task force is charged with the general responsibility of developing consensus around school-wide models of curriculum and instruction. The task force recommends a timetable for developing foundation Hudson units that prepare students to meet Modern Red Schoolhouse standards. The sequence for developing these units differs. For example, during the first year of implementation, most elementary sites incorporate *Core Knowledge* curriculum components across all grade levels, but not for all subjects and skills. In the second year of implementation, these sites will integrate those omitted subjects and skills into existing Hudson units or develop separate units.

High schools, on the other hand, likely will need to develop a strategy that implements the curriculum across all subjects, but beginning only at one grade level. Given that the Modern Red Schoolhouse implies changes in what students must do to graduate, implementation should begin with a ninth grade cohort that enters the school understanding these new expectations. The strategy for change at the high school should, then, be consistent with this need. The implementation schedule should be developed in consultation with the standards and assessment task force.

The second responsibility of this task force is to develop a strategy, in collaboration with the school leadership, that will allow the school to provide continuous progress for all students. For elementary schools, this often will be a second-year activity, with piloting activities being done late in the first year. For secondary schools, arrangements for continuous progress in student learning likely will need to occur earlier in the implementation period.

The third responsibility of the curriculum task force will be to initiate and oversee a process of consensus building regarding the core virtues and workforce skills that the school will seek to instill in students. Parents and community leaders should join with teachers in identifying and selecting those virtues—such as honesty, self-discipline, fairness, and courage—that teachers and parents will encourage among students. Local business leaders may be involved in helping to set priorities for workforce skills.

The curriculum task force will work with our team and the school professional development task force to identify training and curriculum development needs. This may include, but is not limited to, project learning, learning centers, and interdisciplinary learning.

Responsibilities of the Modern Red Schoolhouse Design Team. We conduct summer institutes before implementation years one and two to assist teachers in developing foundation Hudson units and strategies for more individualized instruction. For grades one through six, teachers will rely upon *Core Knowledge* materials to develop units of instruction.

For grades seven through twelve, curriculum frameworks will be provided to guide the development of foundation Hudson units. We assist in the process of initial peer reviews of the units and help each school establish an ongoing review of learning activities for these units.

Our team assists in transferring the foundation units into a computerized instructional management system that will allow for automated sequencing and scheduling after the first year. As needed, we help schools develop a diagnostic system that will allow teachers to provide new students with appropriate learning opportunities.

We provide ongoing consultation, as requested by the curriculum task force, during the second year of implementation.

Organization and Finance

Responsibilities of School Task Force. Schools will develop their own site-specific plans for autonomy that are based on generic plans developed by the design team. To facilitate this process, two task forces will need to be created: one at the school level and one at the district level. Districts must provide guidance that will include a timeline for autonomy, the budget allocation formula, and any conditions that may be attached to certain aspects of autonomy.

The school-level task force will recommend strategies for using time flexibly and allowing for schedules that permit more individually-paced instruction. Establishing a schedule and assignment procedure for multi-age homerooms monitored by advising teacher will also be the responsibility of this task force.

In middle and secondary schools, this task force also must identify any needed changes in the school's instructional supply and materials inventories to accommodate more individualized learning opportunities. For instance, the purchasing schedule of chemicals for classroom experiments may need to be changed.

During the planning period, the *district* task force should determine the scope and pre-conditions for autonomy and accountability. The teachers and principals should revise or develop their general mission statement. In consultation with other task forces, the school task force should determine what start-up costs can be anticipated—such as computer hardware and software, curriculum materials, training, and so forth.

During the first period of implementation, the school task force should prepare an autonomy plan that is consistent with that of the district task force. The district task force should approve the plan, and the school task force should propose procedures for meeting staffing needs.

The school task force should propose a plan for implementing multi-year and multi-age homerooms and advising teacher programs. The school leadership team should work with teachers to address class size, grouping of students, and the school calendar and schedule.

Autonomy and accountability plans should be implemented by the second year of implementation; and the task force should propose functions that may be outsourced. The school task force should propose a preliminary budget for subsequent years of operation.

Responsibilities of the Modern Red Schoolhouse Design Team. The Modern Red Schoolhouse design team can provide technical assistance in establishing or revising a school's mission, prioritizing autonomy goals, establishing a school-based management information system, estimating start-up costs, and in developing long-range implementation plans. In addition, the design team can assist a school in identifying waivers and special agreements that may need to be secured to implement the design.

Arthur Andersen and the Center for Effective Schools have assisted our sites in developing the organization and finance component of the Modern Red Schoolhouse.

Technology

Responsibilities of School Task Force. This school task force is responsible for the following activities:

- assessing the current status of equipment and software in the building and its use by teachers and staff;
- reviewing materials relevant to state-of-the-art equipment and software available for schools and becoming familiar with the best educational uses of these tools;
- developing a local implementation plan for the installation of new technology and for appropriate training and staff support; and
- monitoring the implementation of this technology and training, making adjustments to their local school plan as appropriate.

The plan will need to articulate a vision that is consistent with Modern Red Schoolhouse goals, in order to guide all future decision making.

A variety of factors will affect the implementation schedule for technology, including available resources and the current use and availability of equipment. The Modern Red Schoolhouse design team has developed a suggested timeline for implementation, which is included in Chapter 5.

Responsibilities of the Modern Red Schoolhouse Design Team. The Morrison Institute for Public Policy, at Arizona State University,

serves as the project technology consultant. Staff from the Institute work with participating schools to complete their initial equipment and usage inventories and to develop an overall Modern Red Schoolhouse technology plan. The Morrison Institute will be available to help school personnel develop school-level technology implementation plans that focus on meeting first year minimums and establish a vision for future years. We can provide training in fundamental computer operations, the use of productivity software, the development of multimedia curricula, and the integration of third-party software into the curriculum.

Several instructional management systems have been identified that are compatible with the Modern Red Schoolhouse design. Depending on the instructional management system chosen by the school, design team members can provide training in its use and help develop specific adaptations needed by the site.

Professional Development

Responsibilities of School Task Force. The school task force on professional development is responsible for developing the school-wide capacities needed to achieve the mission and goals of the school. The task force will need to develop a professional development strategy for the school.

Initially, our team will provide orientation and training to all task forces. The school task force will survey teachers and other committees to determine training needs for subsequent years.

The task force should work in careful collaboration with the organization and finance task force to determine the most useful professional development strategies. For example, if the school's basic organizational plans foresees teacher teams, the professional development task force might recommend that each team member acquire unique, specialized training that can be utilized by all members of the group in such areas as technology, student assessment, and classroom methodologies.

During the planning phase, the school task force should assess professional development needs with reference to the school mission and the Modern Red Schoolhouse initiative. The task force should compare services available from the Modern Red Schoolhouse design team with these staff needs, evaluate the impact of the current professional development program, identify future training needs, and propose a plan.

The work of this task force is enhanced greatly if it is comprised, at least in part, of members from other task forces. Then, knowledge of the issues and problems arising from various elements of the design can be addressed more readily in the professional development plan.

Responsibilities of the Modern Red Schoolhouse Design Team.

Training and orientation on the essential elements of the design will be provided to each site during the planning phase and the first year of implementation. The amount and type of this assistance will vary depending on the current practices at the site.

During the first year of implementation, the Center for Effective Schools in Wisconsin assists Modern Red Schoolhouse sites by providing each professional development task force with materials for completing a needs assessment of their faculty and, as needed, assistance in analyzing the results.

We will provide summer training opportunities in curriculum and instruction that address the needs of a significant number of sites and will provide information regarding other programs that address the needs of Modern Red Schoolhouse sites.

Community Involvement

Responsibilities of the School Task Force. The community involvement task force will develop strategies that increase parental involvement in student learning—both inside or outside the classroom. The task force should facilitate the establishment of parental education programs in the community and help build a network among social-service organizations that can support the social and emotional needs of students and their families. The task force should recruit a cadre of community volunteers who can serve as mentors or instructional assistants in the school.

Each school task force will need to prioritize these responsibilities to reflect the needs of their students and the school. In the first year, they should focus on the issue (or issues) deserving highest priority. In subsequent years, other issues should be addressed through various community educational programs.

Responsibilities of the Modern Red Schoolhouse Design Team. We will assist the task force in developing their priorities and provide support materials, such as a parent handbook, brochures, and videos, that can be adapted to local needs. We will assist the task force in identifying community networks and agencies that should provide support and assistance to their initiatives.

Chapter 9

Members of the Design Team

Standards and Assessment

Advanced Systems in Measurement & Evaluation, Inc.

Advanced Systems is a leader in the field of alternative assessment, dedicated to educational reform through constructive test instruments. With major contracts nationwide, Advanced Systems has developed and administered to over 750,000 students in 15 states state-of-the-art assessments including open-response questions, portfolios, and performance events. Advanced Systems became the contractor for the Maine Educational Assessment and the Massachusetts Basic Skills Testing and Educational Assessment Programs. Advanced Systems was the contractor for the five-year Kentucky Instructional Results Information System (KIRIS), the largest contract of its kind ever awarded in the U.S. testing history. In 1993, Advanced Systems became involved with the New Standards Project, which seeks to establish a world-class standard of performance for all student in the U.S. The project is a joint program of the National Center on Education and the economy and the Learning and Research Development Center at the University of Pittsburgh. Advanced Systems provides in-house hand-scoring at its Dover, New Hampshire headquarters as well as professional development for educators through training sessions and workshops.

Curriculum

Alan Fraker

Mr. Fraker taught history in public high schools for a number of years and now teaches history at the Deerfield Academy in Massachusetts where he served as Dean of Studies. He was the first high school teacher to direct a National Endowment for the Humanities summer institute and also the only high school teacher to chair the College Board's Advanced Placement Test Development Committee in American History. A graduate of Dartmouth College and Duke University, Mr. Fraker is the co-author of two books, *A First Rough Draft of History* and *Document-based Questions in United States History*.

Mr. Fraker has served as a consultant for the MRSH's middle and upper school curriculum. In his work, he has assisted in assembling a team of subject area specialists. This team assisted in the middle and upper school curriculum development summer institute for 1994.

Finlay McQuade

Dr. McQuade, coordinator of intermediate and upper level curriculum for the Modern Red Schoolhouse, is an international specialist in curriculum management. His own discipline is English, a subject he has taught at various levels, including first grade and college. A Magna Cum Laude graduate of Pomona College, Dr. McQuade was a Woodrow Wilson Fellow at Harvard University, where he earned a Master's degree in English. His doctorate in Curriculum and Supervision is from the University of Pittsburgh. Dr. McQuade has written teacher guides for the College Board's Advanced Placement courses on English literature and English language and served on their Advanced Placement Development Committee. He serves on the Board of Visitors for the Learning Research and Development Center at the University of Pittsburgh and has authored numerous publications, including *Profiles of Excellence in Teaching*, an annual publication of the College Board. His latest publication, co-authored with David Champagne of the University of Pittsburgh, is a comprehensive book on school improvement, *How to Make a Better School*, published by Allyn and Bacon (1994).

Kevin Mattingly

Dr. Mattingly is an international science specialist. Dr. Mattingly, a native of Indiana where he taught science in public high schools for several years, currently teaches and serves as a Master of Science and Interdisciplinary Studies at The Lawrenceville School in New Jersey. He has extensive experience in teaching Advanced Placement biology and chemistry courses as well as environmental science, outdoor leadership, field ecology and bioethics courses for high school students. Dr. Mattingly directs the Klingenstein Summer Program at Columbia University's Teachers College and has formerly directed environmental science programs for Cleveland's inner-city children at the Holden Arboretum and for students from Central Park East and Bronx Regional at the Mountain School in New York.

For the Modern Red Schoolhouse, Dr. Mattingly assists teachers in the development of science curriculum and materials for middle and upper schools.

Kevin Ryan

A former high school English teacher, Dr. Ryan received his masters in English Education from Columbia University Teachers College and his doctorate from Stanford University.

Dr. Ryan has been a teacher for over 30 years. In 1989-90, he received the Boston University Scholar-Teacher Award and the Outstanding Teacher Educator Award from the American Association of Teacher Education. He has consulted widely with colleges, univer-

sities, federal agencies, and the state departments of education in such states as California, New York, Ohio, and Maryland.

The author and editor of 15 books and over ninety published articles, reports, and reviews, Dr. Ryan's work has appeared in such journals as the *School Review*, *The Teachers College Record*, *The Kappan*, and *The Journal of Research and Development in Education*. His works include *Reclaiming Our Schools: A Handbook for Teaching Character, Academics, and Discipline* (Macmillan, 1992); *Teaching Skills for Elementary and Secondary School Teachers*, *Multi-media Materials* (General Learning Corporation); *Those Who Can Teach* (Houghton-Mifflin, 1995); and *Character Development in Schools and Beyond* (Praeger, 1992).

Dr. Ryan also served as the Chairperson of the Policy Panel on Moral Education for ASCD (Association for Supervision and Curriculum and Development) which issued *Moral Education in the Life of the School* (1988). In 1989, Dr. Ryan organized and became director of the Boston University Center for the Advancement of Ethics and Character.

Luther Spoehr

Dr. Spoehr is a specialist for both history and geography. He received a B.A. from Haverford College and a M.A. and Ph.D. from Stanford University. After teaching for several years at the collegiate level, Dr. Spoehr joined the faculty of Lincoln School in Providence, Rhode Island. He has served as the Chair of the K-12 history department and the Dean of Studies. He also is a consultant and teacher trainer for the College Board and was the first American historian to receive the Advanced Placement's Recognition Award for excellence in teaching and contributions to the AP program. Dr. Spoehr co-authored the American Studies hypercard program for the ACCESS Project at Brown University. Also, at Brown University, he has conducted workshops at their teacher training institutes. He is the author of numerous publications which have appeared in such periodicals as the *Saturday Review*, *Washington Post*, *Educational Psychologist*, and *Reviews in American History*. With Alan Fraker, he has co-authored two books, *A First Rough Draft of History* and *Document-based Questions in United States History*.

Dr. Spoehr assists middle and upper level teachers of the Modern Red Schoolhouse project in developing history and geography curriculum and materials and to develop teaching methodologies.

Patte Barth

Ms. Barth, a graduate of George Mason University with a B.A. in English, is editor and director of publications for the Council for Basic

Education (CBE) and is often called to speak with the press, policy makers, and educators about educational issues. Ms. Barth's research includes studies on curriculum policy issues for the American Association for the Advancement of Science and the National endowment for the Arts. Ms. Barth has co-authored with Ruth Mitchell, a book on elementary education which includes standards of what all students should know and be able to do in order to be prepared adequately for secondary school. The book, *Smart Start*, has sold nearly 20,000 copies. More recently Ms. Barth has worked with Harriet Tyson on a book titled, *Who Will Teach Our Children? Progress and resistance in teacher education* published in 1994 by Jossey-Bass.

Core Knowledge Foundation

The Core Knowledge Foundation is a non-profit organization that aims to help schools achieve greater excellence and fairness through helping children establish strong, early foundations of knowledge. Founded in 1986 by E.D. Hirsch, Jr., a professor at the University of Virginia and author of *Cultural Literacy: What Every American Needs to Know*, the Core Knowledge Foundation conducts research on curricula and offers model content guidelines in the *Core Knowledge Sequence*, a guide to about 50% of a school's curriculum in grades K-6 (guidelines for grades 7-8 are forthcoming). The Sequence articulates a body of specific knowledge in World and American Civilization, Language Arts, Geography, Science, Math, and the Fine Arts. The foundation developed the books in the Core Knowledge Resource Series such as, (*What Your First-Sixth Grader Needs to Know*). Each book outlines and offers excerpts of the prescribed curriculum for each grade in all subjects. The Core Knowledge Foundation also works with a growing network of schools by providing training, model lessons, guides to resources, and networking opportunities, including an annual national conference. Currently, over 100 schools in 29 states are in varying phases of implementing Core Knowledge programs.

The foundation serves as advisor to the MRSH in the area of curriculum development and offers continued support in the development of improved resource materials for effective classroom instruction.

Organization and Finance

Arthur Andersen & Company

Arthur Andersen and Company, one of the largest management consulting firms in the nation advises the Modern Red Schoolhouse in the area of organization and finance. Arthur Andersen himself was an

educator and the company has traditionally made assisting schools a priority. Through its "School of the Future" initiative, the company has designed new organizing principles for schools, and developed training programs based on Total Quality Management, cooperative learning, and authentic assessment which it makes available to American schools nationwide. In fact, the consulting firm has worked with every state in various schools and school districts.

Arthur Andersen assists Modern Red Schoolhouses in developing their own autonomy plans and identifying considerations in changing the way schools are organized. Arthur Andersen also provides training on school-based budgeting and direct technical assistance in implementation

Karen Reynolds and Suzette Brown

Reynolds and Brown began their careers as public school teachers in the Indianapolis area. Karen Reynolds has also been an administrator in elementary and middle schools, a central office administrator and a manager in the corporate world. Combining their experience in education and business, they serve as consultants to the corporate, education and not-for-profit communities.

Reynolds and Brown work with civic groups such as the Indianapolis Chamber of Commerce in educational programs (Partners in Education, Learn About Business, and the Parental Involvement Program) and the National Association for Community Leadership in leadership training for community leaders. They specialize in helping administrators, team leaders and the entire teaching staff learn to design, manage and implement significant changes in their schools. They help educators develop effective behaviors and strategies in high-leverage areas such as communicating, decision-making, conducting effective meetings, handling conflict and team building so that every staff member's strengths are used to the maximum advantage to create the desired and necessary changes.

Leonard Finkelstein

A former science teacher, principal, director of alternative programs, and superintendent in Philadelphia, Dr. Finkelstein is an educational and corporate consultant specializing in organizational analysis and improvement; training of teachers, administrators and managers; community affairs; experiential learning; and computer, science, and energy education. He also served as the Director of the Parkway Program, Philadelphia's nationally recognized "High School Without Walls." He has served as an adjunct faculty member in the areas of teacher and administrative preparation at the Bank Street College, University of Pennsylvania, and Temple University among others. He was elected to the Executive Board of the World Council

for the Talented and Gifted Children representing the United States. He serves as a consultant to school districts, regional research laboratories, state departments of education, universities, and corporations throughout the United States. Most recently, he has worked with the Indianapolis Public Schools as an advisor to the Board of Commissioners, the administrative leadership group, and the teachers' organization to bring diverse groups together so they might develop concepts of shared decision making and school based management.

Dr. Finkelstein offers assistance to Modern Red Schoolhouse principals in the areas of effective leadership and management skills.

Technology

The Morrison Institute for Public Policy

The Morrison Institute provides research and guidance to the project in technology and overall project design. Based at Arizona State University in Tempe, Arizona, the Institute has a broad range of experts on education reform initiatives, including technology-based projects. For the MRSH project, Morrison Institute focuses on helping schools utilize technology as a means to accomplish reform goals in the areas of pedagogy, curriculum, instruction assessment, and communication. This involves educating participants on the latest school technology trends, developing an overall project technology plan consistent with these trends and MRSH design elements, and assisting schools in the creation of their own technology teams and school-specific implementation plans. The Institute also works with schools to assess their current levels of technology usage and to identify training needs for school personnel engaged in using current technologies. Morrison Institute does not sell or install hardware or software; such services, as well as technology training and support, are handled by school/district-based personnel and local vendors who have the ability to provide immediate on-site assistance. Instead, Morrison Institute helps school personnel to "add value" to the education process by helping them understand and plan for appropriate technology applications. This in turn, helps to bridge the gap between those who understand technology systems and equipment (i.e., "techies") and those who desire to utilize such systems to impact student learning.

Community Involvement

Ursula Davis

Ursula Davis, a graduate of Hampton University with a masters degree from Bank Street College, is known nationally as an expert in the area of early childhood education. An advocate for all children,

Ursula has spoken out vigorously on early childhood issues and practices both in this country and abroad. She currently serves on many boards that represent the interests of parents and children.

Ursula has served as Early Childhood Director in Community School District 4 in New York City. During her tenure, she was responsible for all Early Childhood programs in 25 schools from pre-Kindergarten to third grade. She has also served on the New York City Chancellor's Commission on Minimum Standards regarding qualitative evaluation. In 1991, Ms. Davis was appointed as Deputy Director of the Mayor's Temporary Commission on Early Childhood and Child Care in New York City. In this capacity she worked to evaluate and effect changes within the various systems and agencies serving our youngest citizens.

Additionally, Ms. Davis is a writer and editorial consultant for several magazines for children, parents and educators including *Pre-K Today*, *Let's Find Out*, and *My First Magazine*.

Ms. Davis has been involved in assisting each district in the creation of a Pre-School Consortium focusing on the needs of children before they enter the Modern Red Schoolhouse in an attempt to proactive to the needs of our incoming students. Involved in this group are various components of our community.

Wade Horn

Dr. Horn is a child psychologist and is currently the Director of The National Fatherhood Initiative. Dr. Horn received a B.A. from The American University in Washington, D.C. and a M.A. and Ph.D. from Southern Illinois University. Beyond his extensive work with children as a child psychologist, he was also the Commissioner of the Administration for Children, Youth, and Families at the U.S. Department of Health and Human Services. As Commissioner, Dr. Horn was responsible for the national Head Start program as well as many other programs for children and families.

For the Modern Red Schoolhouse, Dr. Horn provides expertise in the area of pre-school readiness and education for children with disabilities.

Jeffrey Rosenberg

Mr. Rosenberg is a specialist in communications and public relations. He is currently the president of Rosenberg Communications. He has also been the Director of Communications and the Director of Children with Attention Deficit Disorders (CH.A.D.D.) and at the U.S. Department of Health and Human Services. A graduate of Western Maryland College, Mr. Rosenberg co-authored with Dr. Horn the Modern Red Schoolhouse pre-school handbook and assisted with the writing of the parent activities book.

Professional Development

National Center for Effective Schools

The National Center for Effective Schools (NCES) brings a wealth of knowledge about reforming schools from the Wisconsin Center for Education Research at the University of Wisconsin-Madison, Madison, Wisconsin. The mission of NCES is to build schools' and districts' capacities to implement and sustain meaningful change so that both quality and equity are present in all educational programs. NCES technical assistance and training generally involves helping schools formulate a clear mission, goals and objectives, develop a sense of teamwork and collegiality, clarify roles and responsibilities, understand the need for and use of data to guide educational decisions, understand the process of change, and formulate a belief that all students can learn challenging curricula. The Center has worked successfully with school districts in the U.S., as well as in Canada, Guam, Malaysia, the Virgin Islands, Saudi Arabia, and Hong Kong to help them develop strategies for successfully implementing school change.

NCES presently offers teachers at Modern Red Schoolhouses various professional development opportunities as well as assistance in planning for training that is geared toward teacher needs.

Florence Johnson

Dr. Florence Johnson is Director of the National Center for Effective Schools in the Wisconsin Center for Education Research at the University of Wisconsin-Madison, Madison, Wisconsin. Her work as director involves coordinating the implementation of the Effective Schools Process, the School-Based Instructional Leadership (SBIL) and the Management Information System for Effective Schools (MISES) programs in schools across the U.S. and internationally, and designing and conducting research on school reform. She has conducted research, written and presented findings on a variety of educational topics related to professional development and school improvement.

The National Center for Effective Schools is a not-for-profit organization located within the Wisconsin Center for Education Research at the University of Wisconsin-Madison, whose mission is to help schools and districts develop the capacity to implement and sustain successful school improvement so that both quality and equity are present in all school programs.

Before joining the University of Wisconsin, Dr. Johnson was Director of Human Relations for the Milwaukee Public Schools. In that position she was responsible for planning, coordinating, and administering professional development programs and support for teachers, principals, parents, and community members. She served as an elementary school teacher for a number of years in the Milwaukee

Public Schools. She has conducted professional development training for educators in 20 states. Dr. Johnson received her Ph.D. degree at the University of Wisconsin-Milwaukee with majors in educational administration and curriculum and instruction.

Dr. Johnson, as the development specialist working with the Modern Red Schoolhouse (MRSB) project works with professional development task forces to help them clarify their mission and goals and develop a strategic long-range plan for professional development for their individual school.

Hudson Staff

Sally B. Kilgore

Senior Research Fellow

Director, Education Policy Studies and the Modern Red Schoolhouse

Dr. Kilgore, with a doctorate in sociology from the University of Chicago, has published extensively on the organization of schooling and achievement. Her recent work focuses on science and mathematics in secondary schools. Dr. Kilgore's work has appeared in leading scholarly journals, including the *American Sociological Review*, *Harvard Education Review*, and *Sociology of Education*. In the early 1980's, she co-authored *High School Achievement* with Thomas Hoffer and the noted scholar James S. Coleman.

Dr. Kilgore has served on the editorial boards of the *American Education Research Journal* and *Sociology of Education*. She has served on numerous national advisory boards; currently she serves on advisory boards for the Center for Excellence in Education and the National Center for Education Statistics at the U.S. Department of Education.

Between 1986 and 1988, Dr. Kilgore served as Director of the Office of Research for the U.S. Department of Education. Her other administrative roles include co-principal investigator of a National Science Foundation study of mathematics and science achievement and associate vice-president for research and advanced studies at the University of Cincinnati where she served before coming to Hudson Institute.

Dr. Kilgore served on the faculties of Emory University, University of Cincinnati, and Huston-Tillotson College, where she was chairman of the sociology department.

Bruno V. Manno

*Senior Fellow, Associate Director of the Modern Red Schoolhouse
Hudson Institute*

Bruno Manno, an experienced education practitioner and policy analyst, serves as a consultant to organizations and jurisdictions on a variety of issues in education policy, research, and practice.

The Modern Red Schoolhouse

**Primary, Intermediate, and Upper
Level**

Standards

**The Hudson Institute
5395 Emerson Way
P.O. Box 26-919
Indianapolis, IN 46226**

**Modern Red Schoolhouse
Academic Standards
Primary, Intermediate, and Upper Levels**

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PREFACE

The little red schoolhouse of yesteryear, at least as idealized in American memory, was an institution that drew people together for common purposes, to share 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. The Modern Red Schoolhouse intends to reinvent some of the key virtues and values of the little red schoolhouse in a modern context and with a modern mission—to be a place where all children will learn and achieve academic standards that are truly world class.

This is not to say that all children will learn in the same way, or at the same time, or at the same pace. To this challenge, Modern Red Schoolhouse offers a set of teaching methods tailored to identify and nurture the potential that exists in every child. The Modern Red Schoolhouse standards are high. But they come with the expectation that all children will be afforded many routes towards their attainment. Like its nineteenth-century namesake, the Modern Red Schoolhouse does not lose sight of the fact that mastery of subject matter is the only acceptable goal for all children, wherever they may come from and however they may learn.

The standards documented here will be met by Modern Red Schoolhouse students in eight core subjects defined as English language arts, geography, history, mathematics, science, the arts, foreign languages, and health and physical education. The Modern Red Schoolhouse curriculum consists of Hudson Units—both Foundation Units and Capstone Units. Foundation Units are developed or selected at each school for the primary purpose of instruction, although Foundation Units also include some built-in assessment. Capstone Units are developed by Advanced Systems, Inc., assessment contractor for the Modern Red Schoolhouse, in collaboration with teachers at cooperating schools. Their primary purpose is to assess students' academic progress, but because they are integral to curriculum, they also include some built-in instruction. Schools will arrange a series of Hudson Units to meet the individual learning needs of each student. All the performance objectives of all the Hudson Units successfully completed by each student will lead that student to achievement of the standards. All the Capstone Units, supplemented by examinations in each subject, form a Watershed Assessment of the standards which signal students' readiness to move to the next level of schooling.

All Modern Red Schoolhouse students are expected to meet the standards that follow with a few modest qualifications. The foreign language standards assume that students will become proficient speakers of two languages: English and one other. This does not preclude students from pursuing study of a third language; in fact, they are encouraged to do so. The arts encompass three arts disciplines: visual arts, music, and drama. Students are expected to meet standards for all three through the intermediate level. Advanced level students will achieve the advanced standards for one arts discipline of the student's own choosing.

The Modern Red Schoolhouse standards are the result of two years of the combined thinking of teachers, administrators, community members, and national subject specialists. During the design phase, representatives of participating school districts began to identify high standards in eight core subjects. The College Board's Advanced Placement standards were used as an initial benchmark to help participants articulate what students should know and be able to do at the time of graduation from high school. Although students in the Modern Red Schoolhouse will reach these standards at different rates and therefore at different ages, the three levels are roughly equivalent to what students should know and be able to do at the end of grades 4, 8, and 12.

Successive drafts of the standards were reviewed by the Modern Red Schoolhouse Standards and Assessment Task Force. This document is the result of considerable revision by a team of subject specialists, all with broad experience in setting high standards and helping students to achieve them. Their joint experience includes work for the Advanced Placement program, the Council for Basic Education, the National Council of Teachers of English, the National Endowment for the Humanities, the Mathematical Association of America, the National Science Teachers Association, and a combined hundred years in classrooms at all levels. Drafts of the standards have been reviewed by subject specialists at Advanced Systems, Inc. and teachers in member schools, whose suggestions have prompted additional revisions. The greatest challenge offered by these standards—raising student achievement to meet them—will be addressed through innovative curriculum and not by lowered expectations.

While the Modern Red Schoolhouse standards are unique, they are not inconsistent with the recommendations of professional associations striving for excellence in education. We have borrowed heavily from other sets of standards developed in recent years in the great national effort to reform America's schools. We are indebted to the work of the National Assessment Governing Board whose National Assessments of Educational Progress in language arts, geography, mathematics, science, and the arts helped inform the standards. We drew from the College Board's various teacher's guides to their Advanced Placement courses. Publications from the following professional associations informed the development of the standards in their respective disciplines: the Association of American Geographers, the Bradley Commission on History in Schools; the National Center for History in the Schools (UCLA-NEH); the National Council for Teachers of Mathematics; the American Association for the Advancement of Science; National Standards in Foreign Language Education project; and the National Association for Sports and Physical Education.

In addition to these, the standards have been informed by the U.S. Department of Education's "James Madison" series and the U.S. Department of Labor's SCANS reports. Standards for the primary and intermediate levels were also informed by E.D. Hirsch's "Cultural Literacy" inventory and Smart Start by Patte Barth and Ruth Mitchell.

We are indebted especially to the work of the following authors and associations:

In English language arts:

Barth, P. and R. Mitchell. *Smart Start*. North American Press, 1992.
Gadda, G., E. Jensen, F. McQuade, and H. Wilson. *Teacher's Guide to Advanced Placement Courses in English Language and Composition*. The College Board, 1985.
McQuade, F. *Teacher's Guide to Advanced Placement Courses in English Literature and Composition*. The College Board, 1993.
Reading Framework for the 1992 and 1994 National Assessment of Educational Progress. National Assessment Governing Board, U.S. Dept. of Education.
Reading and Thinking: A New Framework for Comprehension. Massachusetts Department of Education, 1987.
Writing Framework for the 1992 National Assessment of Educational Progress. National Assessment Governing Board, U.S. Dept. of Education.

In Geography:

Geography Framework for the 1992 and 1994 National Assessment of Educational Progress. U.S. Dept. of Education, 1992.
Geography (K-6 and 7-12): Themes, Key Ideas, and Learning Opportunities. Geography Education National Implementation Project, 1989.
Guidelines for Geographic Education. Association of American Geographers, 1984.

In History:

Historical Literacy. Bradley Commission on History in the Schools, 1989.
History-Social Science Framework. California Department of Education, 1988.
Holt, T. *Thinking Historically*. The College Board, 1990.
National History Standards Project. National Center for History in the Schools, UCLA-NEH Research Program, ongoing.

In Mathematics:

Edwards, E.L. *Algebra for Everyone*. National Council of Teachers of Mathematics, 1990.
Curriculum and Evaluation Standards for School Mathematics. National Council of Teachers of Mathematics, 1989.
Mathematics Assessment: 1994 National Assessment of Educational Progress. Submitted to the National Assessment Governing Board by The College Board, 1992.
Meiring, S.P., R.N. Rubenstein, J.E. Schultz, J. de Lange, and D.L. Chambers. *A Core Curriculum: Making Mathematics Count for Everyone: Addenda Series, Grades 9-12*. National Council of Teachers of Mathematics, 1992.
Silver, E., J. Kilpatrick, and B. Schlesinger. *Thinking through Mathematics: Fostering Inquiry and Communication in Mathematics Classrooms*. The College Board, 1990.

In Science:

Fulfilling the Promise: Biology Education in the Nation's Schools. National Research Council, 1991.
National Committee on Science Education Standards and Assessment. National Research Council, 1993 (draft).
Project 2061: Science for all Americans. American Association for the Advancement of Science, 1989.
Science Framework for the 1994 National Assessment of Educational Progress. National Assessment Governing Board, U.S. Dept. of Education.
Science and Technology Education for the Elementary Years. National Center for Improving Science Education, 1989.
Scope, Sequence, and Coordination of Secondary School Science. The Content Core: A Guide for Curriculum Designers. National Science Teachers Association, 1986.

The Modern Red Schoolhouse has also integrated character education into the academic curriculum of its students. In his essay "Character Education in Our Schools" (published separately by Modern Red Schoolhouse), Kevin Ryan of Boston University discusses the need for character education and the attempt by the Modern Red Schoolhouse to effectively address this issue. However, discussions about dealing with this subject are best made with the community. Therefore, individual schools are advised to develop their character education programs with the help and guidance of the school's parents and communities. In preparing the curriculum, especially in health and physical education, we encourage educators to review not only the standards enumerated here, but also Kevin Ryan's essay. It discusses in more detail the reasons for character education and the specific goals of the Modern Red Schoolhouse program. This essay can be obtained separately from the Hudson Institute.

The Modern Red Schoolhouse standards are anchored in beliefs and principles that most Americans today—as they did a century ago—know to be true and valid. We believe that standards can serve as an anchor for those principles while at the same time preparing graduates to take their place in the communities of the twenty-first century.

Sally B. Kilgore, Ph.D.
Director

English Language Arts Standards Primary Level

A. Performance Statement: Each student can decode unknown words through a variety of strategies.

Standards:

1. Each student can pronounce and decode unknown words using letter-sound relationships and knowledge of word structures.
2. Each student can infer the meaning of unknown words in an unfamiliar reading passage by examining known words, syntax, or grammar in the context of the passage.
3. Each student can use a dictionary.

B. Performance Statement: Each student can identify facts, place events in sequence, draw inferences, make judgments, and describe the details and content of a variety of literary and non-literary texts, including narratives, stories, poetry, expository texts, articles, and instructions.

Standards:

1. Each student can distinguish fiction from nonfiction, realistic fiction from fantasy, biography from autobiography, and poetry from prose.
2. Each student can recall events in order, identify the main ideas, describe the setting, and summarize critical details from a variety of classic and contemporary children's literature.
3. Each student can draw from a reservoir of archetypal stories—including major myths, folk tales, and narratives from the United States and cultures worldwide—in order to describe conventional characters, plots, and themes; understand common allusions and metaphorical phrases; make predictions; and relate experiences to his or her own life.
4. Each student can draw from a reservoir of general knowledge about the world and familiarity with common forms of written communication—such as newspapers, instructions, maps, and textbooks—in order to derive meaning from and respond appropriately to texts.
5. Each student can combine ideas drawn from classic and contemporary stories, identify cause and effect, and compare and contrast characters or events, relating these to other works and student's own experience—for example, by discussing the messages of Beauty and the Beast or Dickens's Scrooge.

6. Each student can use common allusions from fairy tales, fables, biographies, etc. (e.g., the Emperor's clothes, the boy who called "wolf") when writing or speaking about other topics.
7. Each student can describe personal reactions to literature, citing reasons ("I like this book because ...") and comparisons to other works.
8. Each student can select and read a text for information, summarize it, and connect new information to prior knowledge.
9. Each student can describe the author's voice in a text (e.g., first-person narrative, an editorial) and infer the author's purpose and the main ideas expressed.

C. Performance Statement: Each student can construct meaning from oral messages communicated in various setting for various purposes, including speeches, lectures, and group discussions.

Standards:

1. Each student can identify and explain the purpose of an oral communication.
2. Each student can respond to one or more speakers by expressing appropriate ideas, opinions, and questions.
3. Each student can select and summarize accurately the key points and main ideas from an oral presentation such as a story or speech.
4. Each student can explain how a speaker has used inflection, eye contact, and gestures to reinforce the speaker's message.

D. Performance Statement: Through writing, each student can communicate opinions, ideas, information, and messages using various forms, including letters, simple reports, narratives, and essays. Each student can write creatively and expressively.

Standards:

1. Each student can write for a variety of audiences following the conventions of standard English and/or by using informal language as appropriate.
2. Each student can write a report, essay, or letter which has a clearly identifiable purpose; is well organized; recalls events or situations accurately, clearly, and sequentially; and contains illuminating details and descriptions
3. Each student can write from draft to final product, revising content when necessary to clarify or make improvements.

4. Each student can write a narrative that describes a complete experience, is well developed, contains descriptive words and phrases, and has a beginning, middle, and end.
5. Each student can write a story that establishes a main character distinct from other characters, has a clearly defined plot, contains a setting, and has details which advance the plot.
6. Each student can create simple poems using different forms including rhymed couplets, haiku, limericks, and free verse.

E. Performance Statement: Each student can orally communicate information, opinions, and ideas effectively to various audiences, in various contexts, and for various purposes.

Standards:

1. Given a choice of familiar topics, each student can speak extemporaneously, volunteering an organized set of appropriate ideas, opinions, and/or questions in response.
2. Each student can construct and present a report which summarizes ideas and information about a specific topic.
3. Each student can give instructions, relate a personal experience, and/or create a fictional story using concrete details and descriptive language.
4. Each student can participate in discussion by listening attentively, respecting the opinions and feelings of other people, and responding coherently.
5. Each student can use inflection, eye contact, and gestures to reinforce his or her message.

F. Performance Statement: Each student, working individually or in groups, can form a question, conduct an investigation, and report the results coherently and accurately with convincing evidence.

Standards:

1. Each student can formulate a question on a topic of interest and plan and conduct an investigation which attempts to answer it.
2. Each student can use more than one source or method of investigation, including library resources, interviews, and computer databases.

G. Performance Statement: Each student can demonstrate a basic knowledge of the structure of English.

Standards:

1. Each student can distinguish between formal and informal English and use the different forms appropriate to situation and purpose.
2. Each student can edit his or her own work for accurate spelling and proper use of standard English.
3. Each student can create and edit written work on a computer.

**English Language Arts
Intermediate Level**

***A. Performance Statement:* Through oral and written responses, each student can demonstrate the ability to analyze the structure and construct the meaning of a variety of literary and non-literary texts written for various purposes at various times in history, including literature of interest to students and other printed materials they encounter in everyday life.**

Standards:

1. Given an unfamiliar passage to read, each student can identify and explain the type of information conveyed, the main ideas, the way the text is organized, and the relationship of parts to the whole.
2. Each student can read for a variety of purposes—to make a decision, follow directions, select and record information, analyze an argument, gain understanding, or enjoy a good story, for example—and use strategies of reading and note-taking appropriate for each purpose.
3. Given a purpose for reading and responding to a text, each student can select, summarize, paraphrase, analyze, and evaluate relevant passages.
4. Each student can draw on a broad base of prior knowledge about the genres of literature—the structure and conventions of essays, epics, fables, myths, plays, poems, short stories, and novels, for example—when constructing the meaning of a text.
5. Each student can draw on a broad base of knowledge about the themes, ideas, and lessons of religious texts and classical literature—for example, knowledge of the Bible, the Koran, and works by such authors as Homer, Cervantes, Shakespeare, Dickens, and Twain—when reflecting about life and literature.
6. Each student can evaluate the reliability of information conveyed in a text, using external criteria—such as knowledge of the author, topic, or context—and internal criteria—such as, analysis of logic, evidence, propaganda, or diction.
7. Each student can explain how an author has used figures of speech, information, incidents, character, and conflict to create an effect, thesis, or theme.
8. Each student can describe conflict and the resolution of conflict in literature both in concrete terms related to plot and in abstract terms related to theme.

9. Each student can explain and defend critical opinions about a text, informally in a discussion with peers and formally in a well-organized speech or essay.
10. When asked to read and respond to the writing of other students, each student can provide helpful information at various stages of the writing process.

B. Performance Statement: Through oral and written responses, each student can demonstrate the ability to analyze the structure and construct the meaning of oral discourse delivered in various contexts for various purposes, including speeches, lectures, and discussions on topics of current interest to students.

Standards:

1. After hearing an oral communication for the first time, each student can identify and explain the type of information conveyed, the main ideas, the way in which the communication was structured, and the relationship of parts of the whole.
2. Each student can listen for a variety of purposes and use strategies of listening and note-taking appropriate for each purpose.
3. When constructing the meaning of an oral communication, each student can employ prior knowledge about the speaker or speakers, the content, and the context in which the communication takes place.
4. Given a purpose for listening and responding to an oral communication, each student can select, summarize, and analyze appropriate segments.
5. Each student can evaluate the reliability of information conveyed in speech, using external criteria—such as knowledge of the speaker, topic, or context—and internal criteria—such as analysis of logic, evidence, propaganda, or diction.
6. Each student can explain how a speaker has used figures of speech, information, rhetorical techniques, and non-verbal cues to create an effect, thesis, or theme.
7. Each student can explain and defend critical opinions about an oral communication informally in a discussion with peers and formally in a well-organized speech or essay.
8. When asked to listen and respond to practice speeches delivered by other students, each student can provide helpful information at various stages of composition.

C. Performance Statement: Each student can communicate information, opinions, and experiences effectively when writing for various audiences, in various genres, for various purposes.

Standards:

1. Each student can employ a variety of strategies—lists, freewriting, word maps, and outlines, for example—to evaluate, revise, and develop a topic within permissible limits.
2. Each student can determine the purpose of a piece of writing, identify an appropriate audience, and develop a plan to fulfill the purpose.
3. Each student can choose a genre—story, poem, letter, personal narrative, or persuasive essay, for example—and use the conventions of the genre to further the purpose of the writing.
4. Each student can develop a composition through a series of drafts, using critical reading and responses of others to guide the process of revision.
5. Each student can produce a coherent and complete composition, containing sufficient detail to fulfill its purpose, language appropriate for its audience, and a structure revealed through clear coordination and subordination of ideas.
6. Each student can write narratives showing a sequence of events through concrete detail and descriptive language, yet at the same time illustrating a more abstract insight or theme.
7. Each student can write stories that contain major and minor characters and a coherent plot, all realized in narrative and descriptive detail.
8. Each student can use literary and cultural allusions, imagery, and various figures of speech to communicate actual or imagined experiences to an audience.
9. Each student can construct a coherent argument and cite reliable evidence.
10. Each student can use a computer for writing and revising drafts, integrating graphic and numerical information into text, and sending and receiving files.

D. Performance Statement: Each student can communicate information, opinions, and experiences effectively when speaking to various audiences, in various contexts, for various purposes.

Standards:

1. Each student can participate in a discussion by listening attentively, respecting the opinions of other people, using language appropriate to the context, responding coherently, and otherwise contributing to the purpose of the group.
2. Each student can employ a variety of strategies—lists, freewriting, word maps, and outlines, for example—to evaluate, revise, and develop a topic within permissible limits.
3. Each student can determine the purpose for speaking in various contexts, appraise the needs and expectations of an audience, and develop a plan to fulfill the purpose.
4. Each student can make appropriate decisions about substance and style and use the conventions of public speaking to help fulfill the purpose of a speech.
5. Each student can develop a speech or lecture through a series of drafts, using practice delivery and the responses of a trial audience to guide the process of revision.
6. Each student can produce a coherent and complete presentation, containing sufficient detail to fulfill its purpose, language appropriate for its audience, appropriate visual aids, and a structure revealed through clear coordination and subordination of ideas.
7. Each student can relate narrative showing a sequence of events through concrete detail and descriptive language, yet at the same time illustrating a more abstract insight or theme.
8. Each student can use literary and cultural allusions, imagery, various figures of speech, inflection and tone of voice, non-verbal devices and gestures, humor, and visual aids to reinforce the message of a speech or lecture.
9. Each student can construct and deliver a coherent argument that accurately summarizes the ideas and opinions of other people, evaluates those ideas and opinions, advances the student's own ideas and opinions, and cites supporting evidence.
10. Each student can use a computer for planning a speech or lecture, integrating graphic and numerical information, and projecting visuals during delivery.

E. Performance Statement: Each student can formulate questions that might be answered through various methods of investigation, organize and conduct an investigation, and integrate discovered information into oral and written reports using appropriate conventions for preparing a manuscript.

Standards:

1. Each student can formulate questions and conduct an investigation that produces relevant information.
2. Each student can use the research tools made available in the school and other local libraries, including encyclopedias, almanacs, dictionaries, card catalogs, indexes to periodicals, and computerized databases.
3. Each student can take notes, keep track of sources, and formulate alternative strategies for finding and recording information.
4. Each student can follow conventions for the preparation of a manuscript.

F. Performance Statement: Each student can demonstrate knowledge of the structure and history of English through reading, listening, writing, and speaking.

Standards:

1. Each student can evaluate the use of words and phrases according to the context and purpose of a communication.
2. Each student can evaluate the use of syntax, figurative language, and rhetorical structures according to context, purpose, and related linguistic conventions.
3. Each student can find information that is helpful in evaluating the use of English by consulting dictionaries, style sheets, handbooks, editing software, and other sources of information.
4. Each student can proofread, edit, and revise a manuscript.
5. Each student can describe parts of speech and fundamental rules of syntax and apply this knowledge in written and oral work.

**English Language Arts
Upper Level**

A. Performance Statement: Through oral and written responses, each student can demonstrate the ability to analyze the structure, language, and content of complex literature written in various countries during various historical periods and to read critically the non-literary documents and articles associated with other disciplines.

Standards:

1. Each student can draw on a broad base of knowledge about American, British, European, and non-European literature and recognize the conventions associated with the literature of certain historical periods and cultures.
2. Each student can draw on a broad base of knowledge about the great themes of literature—for example, themes of initiation, love and duty, heroism, illusion and reality, salvation, death and rebirth—and explain how these themes are developed in specific works from various historical periods and cultures.
3. Each student can draw on a broad base of knowledge about great works—images and ideas, episodes, characters, quotations, and so on—when reflecting about life and literature.
4. Given an unfamiliar work of literature, each student can identify details of language, setting, point of view, plot, character, and conflict and explain how the author has organized these details to produce a dominating effect, impression, or theme.
5. Each student can explain the structure of certain passages of literature from various historical periods and cultures, illustrating the authors' use of syntax, images, figures of speech, literary and cultural allusions, symbols, irony, and other devices in the context of history, cultures, and literary style.
6. Given an essay, each student can identify its central idea or ideas and explain how the author has developed the essay through coordination and subordination.

7. Each student can distinguish fact from opinion in an article, identify propaganda techniques and fallacious reasoning, and integrate knowledge from the article into prior knowledge about the topic.
8. Each student can identify a topic of personal interest, identify major authors who have written about the topic, develop an agenda for reading, and become knowledgeable not only about the topic itself, but also about the language and conventions of discourse in which discussion of the topic is framed.
9. When asked to read and respond to the writing of other students, each student can provide helpful critiques, suggestions, and informed appreciation at various stages of the writing process.

B. Performance Statement: Through oral and written responses, each student can demonstrate the ability to analyze the structure, language, and content of oral discourse delivered in various contexts for various purposes, including speeches, lectures, and discussions in other disciplines.

Standards:

1. After listening to a speech, lecture, or discussion, each student can identify the central ideas and explain how these ideas were developed through related constituent ideas.
2. Each student can distinguish fact from opinion in a speech, lecture, or discussion, identify propaganda techniques and fallacious reasoning, and integrate knowledge gained into prior knowledge of the topic. By asking questions, each student can elicit information to help this process of understanding and integration.
3. Each student can identify a topic of personal interest and seek out speeches, lectures, or discussions about the topic, either recorded or live. Through listening and reading, each student can become knowledgeable not only about the topic, but also about the language and conventions of discourse in which discussion of the topic is framed.
4. When asked to listen and respond to practice speeches delivered by other students, each student can provide helpful critiques, suggestions, and informed appreciation at various stages of composition.

C. Performance Statement: Each student can communicate information, opinions, and experiences effectively when writing for various audiences, in various genres, for various purposes.

Standards:

1. Each student can employ a variety of strategies for developing and organizing ideas, resulting in knowledge, opinions, or insights that are worth communicating to an intended audience.
2. Each student can develop a piece of writing that conveys knowledge, opinions, or experiences to an intended audience, using rhetorical structures that divide complex thoughts into simpler thoughts, transitions to help an audience follow the logic, and language the audience can understand.
3. Each student can summarize verbal and numerical information, expand or reduce the summary by adding or omitting detail, and incorporate information at an appropriate level of generality into an essay or report, using relevant conventions of documentation and format.
4. Each student can construct a coherent argument that advances an opinion, accurately summarizes an opposing opinion, refutes the opposing opinion, and cites persuasive evidence.
5. Each student can write stories with a coherent plot, distinct characters, and conflict resolved through the action characters.
6. Each student can write in a mature style characterized by adequate vocabulary, an unaffected "voice," a variety of sentence structures, clear coordinating and subordination of ideas, and rhetorical devices that reinforce meaning.
7. Each student can develop a composition through a series of drafts, using critical reading and the responses of others to guide the process of revision.
8. Each student can use a computer for writing and revising drafts, integrating graphic and numerical information into text, sending and receiving files, and laying out a publication.

D. Performance Statement: Each student can communicate information, opinions, and experiences effectively when speaking to various audiences, in various contexts, for various purposes.

Standards:

1. Each student can participate in or lead a discussion effectively by being prepared, understanding the purpose of the discussion, listening attentively and respectfully to others, asking questions, and offering relevant and reliable information.
2. Each student can employ a variety of strategies for developing and organizing ideas, resulting in knowledge, opinions, or insights that are worth communicating to an intended audience.
3. Each student can develop a lecture or a speech that conveys knowledge, opinions, or experiences to a selected audience, using rhetorical structures that divide complex thoughts into simpler thoughts, transitions to help an audience follow the logic, language the audience can understand, and figures of speech that reinforce meaning.
4. Each student can deliver a lecture or a speech with confidence and poise, using eye contact, gestures, visual aids, and appropriate interaction with members of the audience through questions and answers.
5. Each student can summarize verbal and numerical information, expand or reduce the summary by adding or omitting detail, and incorporate information at an appropriate level of generality into a speech or a lecture using relevant conventions of documentation and format.
6. Each student can construct a coherent argument that advances an opinion, accurately summarizes an opposing opinion, refutes the opposing opinion, and cites persuasive evidence.
7. Each student can use a computer and presentation software for preparing and enhancing the delivery of a speech or a lecture.

E. Performance Statement: Each student can formulate questions that might be answered through various methods of investigation, organize and conduct an investigation, and integrate discovered information into oral and written reports using appropriate conventions for preparing a manuscript.

Standards:

1. Each student can formulate questions and conduct an investigation that produces relevant information.
2. Each student can use the research tools made available in school and college libraries, take notes, keep track of sources, and formulate alternative strategies for finding and recording information.
3. Each student can conduct interviews, take notes or otherwise record oral information, and summarize or transcribe oral information as needed.
4. Each student can write and administer questionnaires, organize data received from questionnaires, and employ statistics to support all inferences drawn.
5. Each student can incorporate verbal, visual, and numerical data into oral and written reports, citing sources according to convention, and taking care to distinguish between data and inferences drawn from data.

F. Performance Statement: Each student can demonstrate knowledge of the structure and history of English through reading, listening, writing, and speaking.

Standards:

1. Each student can evaluate the use of diction, syntax, figurative language, rhetorical structures, and linguistic conventions according to the context and purpose of a communication.
2. Each student can edit a manuscript to correct problems of usage, grammar, spelling, punctuation, format, and style.
3. Each student can find information that is helpful in evaluating the use of English by consulting dictionaries, style sheets, handbooks, editing software, and other sources of information.

4. Each student can summarize the history of English using specific words and literary changes that have taken place.
5. Each student can draw inferences about values, attitudes, and point of view by analyzing a writer's or a speaker's use of English.
6. Each student can edit and revise a manuscript to improve content and organization.

Geography Standards Primary Level

A. Performance Statement: Each student can locate particular places on earth, identify spatial patterns on the earth's surface, and describe physical characteristics and human processes that shape these patterns.

Standards:

- ✓ 1. Each student can construct models or sketch maps of his or her own state, the United States, and the world; and label continents and oceans of the world, and the countries and major cities of North America on unmarked maps.
- ✓ 2. Each student can compare and contrast information on maps drawn to different scales.
3. Each student can use fundamental geographic vocabulary to identify basic geographic patterns and phenomena and to describe a cultural or environmental issue from more than one perspective.
4. Each student can use number and letter grids to plot specific locations, sketch simple maps, and describe and/or draw landscapes.
5. Each student can use aerial and other photographs, satellite images, maps and globes, media, and computers to solve simple problems.
6. Each student can identify major land and water formations on a map of the student's state, using appropriate terminology.

B. Performance Statement: Each student can explain how earth's natural and human systems are connected and interact.

Standards:

1. Each student can identify and describe basic human systems (for example, political, economic, transportation) that are located in different parts of the student's city or community.
2. Each student can illustrate ways people depend upon, adapt to, and modify the environment (for example, farming, commercial fishing) and explain positive and negative consequences of both physical and man-made changes.
3. Each student can compare ways humans have adapted to different climates, focusing on clothing, housing, methods for heating and cooling, etc.

4. Each student can locate the habitats of certain plant and animal species on a world map, show where their populations are either flourishing or are in decline, and give reasons for their health or endangerment.
5. Each student can describe some environmental, economic, and/or cultural issues in own community; identify arguments both for and against; and take and justify a position.
6. Each student can examine a natural catastrophe (hurricane, earthquake, flood, brush fires, etc.) and describe its impact on individuals and communities.
7. Each student can compare past and present technologies related to energy, transportation, and communications in own community, and describe and evaluate the effects of the changes on people's lives.

C. Performance Statement: **Each student understands how spatial connections among people, places, and regions affect the movement of people, goods, and ideas.**

Standards:

1. Each student can give examples of the movement of people, goods, services, and ideas from one place to another; give reasons for current and historical migration; and, working in groups, map immigration into own community over time.
2. Each student can explain how people and communities are both independent and interdependent.
3. Each student can identify occupations and industries in different parts of own state and give geographical reasons for their presence.
4. Each student can explain the causes and effects of major migrations.
5. Each student can describe characteristics and regional interconnections that define the student's own region of the United States.
6. Each student can describe distinguishing characteristics of urban, suburban, and rural areas, focusing on how people's needs are met.

Geography Intermediate Level

A. Performance Statement: Each student can locate particular places on earth, identify spatial patterns and arrangements around the earth's surface, and describe the physical and human characteristics and processes that shape these geographical features.

Standards:

1. Each student can use a map or globe to locate natural regions such as mountain ranges, deserts, and rivers; human regions—such as nations or cities; and patterns of climate and vegetation.
2. Each student can use geographic vocabulary and references (distance, direction, proximity, boundaries, scale, latitude and longitude, and different map projections) to locate and describe specific places and regions.
3. Each student can define and give examples of the physical characteristics of places—for example, land forms, coastline, soils, flora and fauna.
4. Each student can define and give examples of the human characteristics of places—for example, languages, religion, politics, economics, and social structure.
5. Each student can use maps, globes, atlases, and almanacs to identify and assemble geographic information about a particular place or region.
6. Each student can analyze geographic information about a particular place or region to understand the impact of its physical characteristics on its human history.

B. Performance Statement: Each student can explain how the earth's natural systems (hydrosphere, lithosphere, biosphere, and atmosphere) and human systems (economic, social, political, and religious) are interrelated.

Standards:

1. Each student can locate selected natural resources (minerals, plants and animals, forests, fossil fuels, among others) on a map and identify their worldwide distribution.
2. Each student can identify and describe the world's major ecosystems (rain forest, savanna, desert, for example) and the range of human adaptations (nomadic pastorals, terrace farming, shifting cultivation, etc.) which provide food, clothing, and shelter from these ecosystems.

3. Each student can identify, research, analyze, and present a case study examining the effects of technology on the local environment—for example, a new highway that brings economic vitality along with more automobile emissions.
4. Each student can illustrate the widespread, systemic nature of environmental change through the examination of a major environmental modification—for example, the eruption of Mount Pinatubo in the Philippines and its effect on world climate, or the impact of the construction of Disney World in Orlando on the surrounding areas of Florida.

C. Performance Statement: Each student can trace the movement of people, goods, and ideas around the globe and discuss the ways through which this motion continuously defines and/or connects the world's regions.

Standards:

1. Each student can follow the migration of a population, a resource, a commodity, a disease, or an ideology around the globe while identifying the "push-and-pull" factors that either accelerated or impeded the process.
2. Each student can explain, with the help of diagrams and maps, how linkages are created through movement, using local (e.g., school bus routes), state (e.g., high school basketball broadcasts), or national (e.g., the sale of commodities) examples.
3. Each student can define and explain the characteristics of a region (the school district, township, "The Rust Belt," or Appalachia, for example) as well as those elements that distinguish the home region from other comparable regions.
4. Each student can describe, explain, and map relationships among local regions—for example, among neighborhoods in a town, or among regions producing various crops.

✓ **Geography**
Upper Level

A. Performance Statement: Each student can locate particular places on earth, identify spatial patterns and arrangements around the earth's surface, and describe the physical and human characteristics and processes that shape these geographical features.

Standards:

1. Each student can use a map or globe to locate complex natural features (such as river systems, continental divides, and watersheds), historic and cultural features, and regions (such as the Fertile Crescent, the Great Wall of China, and the European Economic Community).
2. Each student can use geographic vocabulary to describe basic physical structure (such as continental drift, plate tectonics, volcanism) and human population (such as demographic characteristics, birth and death rates, doubling time, emigration and immigration) of a place or region.
3. Each student can compare and contrast the physical characteristics of places and regions in different parts of the world (for example, mountains and plains, humid and dry areas, hot and cold regions) and the physical patterns and processes (for example, atmospheric winds, ocean currents, weathering and erosion) that shape them.
4. Each student can compare and contrast the human characteristics of places in different parts of the world and the cultural processes (for example, enculturation, acculturation, assimilation, diffusion) that shape them.
5. Each student can use demographic tables and charts, primary and secondary sources, and special purpose maps and projections to identify and assemble historical and contemporary geographic information about a particular place or region.
6. Each student can analyze historical and contemporary information about a place or region, develop hypotheses to explain its physical and human changes over time, and organize an argument with narrative and cartographic evidence.

B. Performance Statement: Each student can explain how the earth's natural systems (hydrosphere, lithosphere, biosphere, and atmosphere) and human systems (economic, social, political, and religious) are interrelated.

Standards:

1. Each student can locate concentrations of selected natural resources on a map and show how their unequal distribution generates trade, encourages interdependence, and shapes economic patterns.
2. Each student can identify major human adaptations to the world's many ecosystems and can discuss the cultural systems (economic, social, political, and religious) that have developed and evolved to meet changing environmental conditions throughout history.
3. Each student can identify, research, analyze, and present a balanced national or international case study (historical or contemporary) that demonstrates the intended and/or unintended effects of technology on the environment—for example, the economic and environmental effects of moving from deep-shaft to strip mining in Appalachia.
4. Each student can demonstrate how an environmental change in one region can affect other places around the globe—for example, the impact of El Nino on commercial fishing and agriculture in the western hemisphere.

C. Performance Statement: Each student can trace the movement of people, goods, and ideas around the globe and discuss ways through which this motion continuously defines and connects the world's regions.

Standards:

1. 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.
2. Each student can produce a flow map showing both the rate and scope of movement of a particular product (for example, oil tankers, wheat exports) around the globe during a specific period of time.
3. Each student can produce a sequence of flow maps, charts, and diagrams to demonstrate historic changes through time, such as the traffic on a major trade route, the quantity of a commodity moving from place to place, and the dissemination of an ideal or a belief like capitalism or Christianity.
4. Each student can identify and explain the many criteria (physiography, vegetation, politics, economics, administration, among others) that define a region and draw multiple maps of the world using a series of these regional locators.

History Standards Primary Level

A. Performance Statement Each student understands what is meant by historical inquiry, recognize major historical events and place them in chronological order, understand and explain various perspectives concerning major historical events, and obtain historical information from different sources.

Standards:

1. Each student can use reference books, maps, and interviews to examine historical events, and present findings in a variety of ways, such as photographs, paintings, cartoons, architectural drawings, models, graphs, charts, or maps—as well as in essays or oral presentations.
2. Each student can obtain historical data, organize historical information chronologically; distinguish between past, present, and future time; explain simple cause-and-effect relationships; and evaluate conflicting evidence about an historical event.
3. Each student can identify present economic, social, and political conditions in his or her own town, region, or state and compare them to the past.
4. Each student can trace the history of an important public or school issue, identify and summarize opposing views, and explain reasoning for each.

B. Performance Statement Each student can identify characteristics and accomplishments of major world civilizations in such places as Europe, Africa, the Americas, and Asia. Each student can show an understanding of how selected cultures are represented in the beliefs and practices of the United States and how they have helped to form a national heritage.

Standards:

1. Each student can show a basic understanding of North, Central, and South American, European, African, and Asian cultures as seen through their literature, customs, art, religion, and history by describing, for example, the form and purpose of such things as the Great Pyramids, the Roman roads, the Crusades, the English Parliament, the Great Wall, and the League of the Iroquois.
2. Each student can describe the contributions of various world cultures including their folklore, holidays, and ceremonies to the student's state and national history and show also an understanding of the world's major migrations of people and their effects on state and national heritage.

3. Each student can describe similarities, differences, and relations among the various cultures in the community and can compare the present community with one found in earlier civilizations.
4. Each student can show a basic understanding of the role played by religion and civic values in the history of his or her own state and nation and describe how that role is similar to, or different from, an ancient civilization, such as Greece or Egypt, and a feudal society found in Europe or China.
5. Each student can describe some major discoveries in science and technology and show an understanding of their social and economic effects.

***C. Performance Statement* Each student understands how democratic values came to be, along with the essential institutions at the federal, state and local levels that preserve and support these values, including especially those embodied in the U.S. Constitution, local and state frameworks of government, and the rights and responsibilities of citizenship.**

Standards:

1. Each student understands the significance of key U.S. documents—such as the Mayflower Compact, the Declaration of Independence, the Constitution and Bill of Rights, and the Emancipation Proclamation—and important American symbols, like the flag and the Statue of Liberty—and can discuss the central democratic values and ideas embodied in both documents and symbols.
2. Each student can discuss the contributions of major national figures—such as Washington, Jefferson, Lincoln, and Martin Luther King Jr.—and show a basic understanding of how these individuals helped promote democratic values and ideas.
3. Each student can explain important local, state, and federal governmental functions and the roles of the executive, legislative and judicial branches of government.
4. Each student can identify ways citizens of the United States can influence and participate in governmental decisions at the local, state, and national levels—for example, by running for office, voting in general elections, signing an initiative, speaking at hearings, etc.
5. Each student can give examples of ordinary people—such as James Armistead, Lydia Darragh, Sybil Ludington, and Nathan Beman—who have displayed particular courage or sense of responsibility in helping the common good in the community.

D. Performance Statement Each student can identify major figures and events in American history and that of their own state, and can show a basic understanding of their significance.

Standards:

1. Each student can relate the contributions of major historical figures in the United States—including leaders in politics, civil rights, economy, international affairs, science, arts, and exploration—and put them in the proper time and place. Each student can discuss the biographies of a few such figures.
2. Each student can compare present life in own community or region to life in the remote and more recent past, beginning with the life of indigenous peoples and discuss how and why it has changed.
3. Each student can place his or her state or region's history into the context of major events in American history, for example, the period of exploration, the Revolution, Civil War, industrialization, etc.

History Standards Intermediate Level

A. Performance Statement Each student can gather historical information from a variety of primary and secondary sources, evaluate the sources, analyze and evaluate different points of view, and construct coherent narratives explaining historical continuity and change over time.

Standards:

1. Each student can construct a chronology of major events in American and world history.
2. Each student can collect, interpret, organize, and evaluate information about a specific issue or problem in American or world history from a variety of primary and secondary sources.
3. Each student can construct, evaluate, and revise an argument to explain the causes and consequences of an important event in American or world history.
4. Each student can describe broad themes or patterns in American and world history and explain the significance of these themes by referring to specific events.
5. Each student can generate an historical question of personal interest, develop and demonstrate understanding of the historical context in which an answer might be found, and construct a coherent written narrative to answer the question.
6. Using appropriate computer technology, each student can incorporate visual and quantitative data into oral and written presentations.

B. Performance Statement Each student can make comparisons to demonstrate understanding of the social, cultural, religious, and ethnic heterogeneity of American and world societies, past and present; outline the beliefs and practices of principal religions; and show how ideas, beliefs, attitudes, and values are projected through representative works of art, science, and literature.

Standards:

1. Each student can identify and describe ideas, ideals, practices, traditions, and beliefs that unify the civic culture of the United States and compare such concepts to their counterparts in other nations.
2. Each student can identify the periods of immigration for various ethnic and cultural groups, their destinations, and their reasons for coming to the United States.

3. Each student can describe the contributions of various ethnic, social, and cultural groups to American life and how they have helped to form a shared national heritage and civic culture.
4. Each student can identify, describe, and compare ideas, ideals, practices, and beliefs of selected cultures and nations in various regions of the world.
5. Each student can outline beliefs and practices of the principal religions of the world and assess their influence on American society.
6. Each student can describe and explain beliefs, ideals, and viewpoints expressed in important examples of art and literature in the United States and compare such works to those of people in other countries.

***C. Performance Statement* Each student can describe and explain the political, legal, and constitutional heritage of the United States, referring to important events and documents, and explain the roles played in a representative democracy by political and legal institutions, their officers, and individual citizens.**

Standards:

1. Each student can distinguish and summarize the powers of federal, state, and local governments in the United States and the roles of the legislative, executive, and judicial branches.
2. Each student can identify the essential debates throughout U.S. history regarding the proper jurisdiction—federal, state, or local—for certain social and economic issues and suggest their implications for current political debates.
3. Each student can describe and explain the effects of important historical events, people, and demographic changes on American law and government.
4. Each student can identify important historical events and judicial decisions that affect contemporary political ideas, policies, and legal practices.
5. Each student can identify the rights and responsibilities of citizenship in the United States and compare them with those of another democratic nation.
6. Each student can describe and discuss the significant instances of tensions and collaborations among various majorities and minorities in the United States.

D. Performance Statement Each student can compare and contrast major economic systems, summarize the economic development of the United States, describe how the nation responded to fluctuations in economic well being in the past, and provide examples of interdependence and competition in the international economy.

Standards:

1. Each student can identify different economic systems, and can explain and evaluate how each addresses such basic economic questions as: what is produced? how is it produced? and for whom is it produced?
2. Using the basic economic questions, each student can describe the historical changes in the U.S. economic system and their relation to other historical events.
3. Each student can summarize and discuss the positive and negative effects of important scientific discoveries and technologies on the quality of life, the environment, and the economy.
4. Each student can recognize and describe complex competitive and interdependent economic relationships among modern nations.

E. Performance Statement Each student can understand issues and events in United States history from the perspectives of people past and present and recall, select, and apply relevant and accurate historical knowledge.

Standards:

1. Each student can recall, select, and apply knowledge of New World exploration which linked people from Europe, Africa, and the Americas.
2. Each student can recall, select, and apply knowledge of the American Revolution, focusing on events which precipitated the move towards independence.
3. Each student can recall, select, and apply knowledge of the major individuals, issues, and events leading to a federal system of government in the Constitution and its subsequent application and modification in the Early Republic, including the development of a two-party system.
4. Each student can recall, select, and apply knowledge of the events which contributed to growth during the first half of the Nineteenth Century of various American regions—North, South, and West—each with its distinct geography, economy, and way of life.
5. Each student can recall, select, and apply knowledge of major individuals, issues, and events of the Civil War, the end of slavery, and Reconstruction.

6. Each student can recall, select, and apply knowledge of post-Civil War industrialization.
7. Each student can recall, select, and apply knowledge of the migration to the American West and the relations of migrating people to indigenous people.
8. Each student can recall, select, and apply knowledge of the response of national reform movements—Populists, Progressives, Grangers, American Federation of Labor, Knights of Labor, etc.—to rapid American urban and economic growth.
9. Each student can recall, select, and apply knowledge of the emergence of the United States as a world power in the Spanish-American War and the two World Wars.
10. Each student can recall, select, and apply knowledge of major individuals, issues, and events that influenced American character and lifestyle during the Twenties and the Great Depression.
11. Each student can recall, select, and apply knowledge of major individuals, issues, and events of the Cold War between the United States and the Soviet Union.
12. Each student can recall, select, and apply knowledge of the expansion of civil rights in the 19th and 20th centuries.

History Standards Upper Level

A. Performance Statement Each student can choose a topic of interest, generate historical questions about it, gather relevant information from a variety of primary and secondary sources, evaluate the sources, analyze and evaluate different points of view, then develop, write, and present an historical paper.

Standards:

1. Given a set of primary and secondary documents related to a significant historical question, each student can analyze the documents, assess their relevance and value, make comparisons, integrate knowledge of the documents with prior knowledge, and come to a reasoned conclusion about the issue.
2. Each student can gather data from a variety of sources (e.g., letters, diaries, newspaper, speeches) that express different points of view on the same issue or event and incorporate these data into a reasoned summary.
3. Each student can select certain historical events and, using data gathered from a variety of sources, explain their relationship to or effect on the modern world.
4. Each student can select people, documents, works of literature, cultural artifacts, and art objects and explain their importance to political, economic, social, or cultural trends.
5. Using information gathered from primary and secondary sources, each student can develop a historical paper on a topic of interest and present the paper for review by teachers and fellow students.
6. Using computer technology, each student can incorporate visual and quantitative data into historical analysis.

B. Performance Statement Each student can make comparisons to demonstrate understanding of social, cultural, religious, and ethnic heterogeneity of American and world societies, past and present; outline the beliefs and practices of principal religions; and show how ideas, beliefs, attitudes, and values are projected through representative works of art, science, and literature.

Standards:

1. Each student can explain the origins, central ideas, and global influence of major religious traditions, including Buddhism, Islam, Hinduism, Judaism, and Christianity.
2. Each student can describe and analyze beliefs, ideals, and viewpoints expressed by important works of art and literature in other societies, place them in historical context, and compare them to works of American art and literature.
3. Each student can describe patterns of scientific development in various regions of the world and discuss how these developments reflect variations in beliefs, attitudes and values.
4. Each student can describe and analyze the ways cultural and social groups are defined, identify contributions by certain groups, discuss how the definition and structures of groups have changed over time, and make explicit comparisons to similar groups elsewhere in the world.

C. Performance Statement Each student can describe and analyze the legal, political, and constitutional heritage of the United States; refer to important events, ideas, and documents; analyze the roles played in the American political system by political and legal institutions, their officers, and individual citizens; and compare the American system to various political systems in the past and present.

Standards:

1. Each student can identify, cite, and discuss important historical documents that have influenced government in the United States and explain the nature of their influence.
2. Each student can identify significant features of governmental and political processes in the United States and summarize the historical development of these features including federalism; the party system; the electoral, legislative, and judicial processes; and the presidency.
3. Each student can compare significant features of the American political system to those of selected political systems in the past and present.

4. Each student can summarize major Supreme Court decisions—such as *Marbury v. Madison*, *Fletcher v. Peck*, *Dred Scott v. Sanford*, *Plessy v. Ferguson*, *Schechter v. United States*, *Brown v. Board of Education*, and *Roe v. Wade*—and analyze their impact on United States history.
5. Each student can illustrate, through the development of case studies, how institutions, their officers, and individual citizens have interacted to create and resolve conflict in United States history—particularly in areas of tension between freedom and equality, liberty and order, region and nation, individual and community, law and conscience, diversity and civic unity.
6. Each student can summarize, discuss, and analyze some of the important and continuing debates that run through American history, particularly those regarding democracy, liberty, and equality.

***D. Performance Statement* Each student can compare and contrast major economic systems and their goals, discuss and analyze how nations have responded to fluctuation in economic well-being in the past, and describe international economic interdependence and competition.**

Standards:

1. Each student can identify and explain basic economic concepts—such as supply and demand; production, distribution, and consumption; labor and capital; inflation and deflation—and use these concepts to compare economies regionally, nationally, locally, and historically.
2. Each student can compare, contrast, and evaluate different types of economies (traditional, command, market, and mixed) and discuss their relationships to the social and political systems of particular cultures.
3. Each student can compare and contrast the characteristics of these general economic eras: Paleolithic (hunting), Neolithic (farming), mercantile, industrial, and post-industrial (information and services).
4. Each student can demonstrate an understanding of cause and effect by analyzing the impact of industrialization, urbanization, population growth, and technological change.
5. Each student can describe and explain global economic interdependence and competition, using examples to illustrate their influence on national policies.

E. Performance Statement Each student can describe the evolution of increasingly complex political systems—beginning with autonomous tribal bands and, continuing through confederacies and city-states, and culminating with modern nation-states and international alliances.

Standards:

1. Each student can describe and evaluate ideas of how society should be organized and how political power should be exercised, including the ideas of monarchism, anarchism, socialism, fascism, and communism; compare those ideas to those of representative democracy; and analyze how each idea has or has not worked in practice.
2. Each student can describe and analyze frequent causes of conflict within, between, and among nations, and those formal and informal mechanisms—from war to mediation—that aim at resolution.
3. Each student can discuss and analyze how different political systems define and protect (or fail to protect) individual human rights.
4. Each student can describe the purpose and effects of treaties, alliances, and international organizations that characterize today's world—for example, the United Nations, the North Atlantic Treaty Organization, the North American Free Trade Agreement, the World Bank, and the International Monetary Fund.

F. Performance Statement Each student understands complex issues and events in United States history from the perspectives of people past and present and recall, select, apply, and analyze relevant and accurate historical knowledge.

Standards:

1. Each student can recall, select, apply, and analyze knowledge of New World exploration which linked the people from Europe, Africa, and the Americas.
2. Each student can recall, select, apply, and analyze knowledge of the American Revolution, focusing on events which precipitated the move towards independence.
3. Each student can recall, select, apply, and analyze knowledge of the major individuals and events leading to the formation of a federal system of government in the Constitution and its subsequent application and modification in the Early Republic, including the development of a two-party system.
4. Each student can recall, select, apply, and analyze knowledge of the events which contributed to growth during the first half of the Nineteenth Century of various American regions—North, South, and West—each with its distinct geography, economy, and way of life.