This list of criteria and an invitation to participate in this project was published first in *Education Week*, November 10, 1999, and subsequently in other publications and through other means. Twenty-one schools were selected to participate. These included 11 public schools run by local districts, and 10 charter public schools. The schools serve urban, suburban and rural districts. The schools are listed on Page 2. More information about the schools can be found in *Appendix A*.

Stage Four – Preparing a Draft and Obtaining Feedback

Using information from the schools and other information gathered over the last year, the authors prepared a draft report. The draft was sent to the 21 participating schools and about 20 other national education reform authorities. Representatives from most of the schools, along with about 20 other people, met for a day to review the draft and offer recommendations for refinement. These people offered a number of suggestions. The authors deeply appreciate their frank, insightful comments.

These efforts helped produce this document. The authors hope the document will be useful to educators, families and policy-makers. This report, plus additional supporting materials too voluminous to be included, will be placed on the Center for School Change web site.

Chapter Two:
FEATURES OF EFFECTIVE STUDENT ACADEMIC ACHIEVEMENT ASSESSMENT PROGRAMS

What are the key components of an effective student achievement assessment system? This project suggests that there are six vital characteristics, and three valuable characteristics. Our research suggests that any public school – neighborhood, magnet, alternative or charter – should strongly consider making these features a part of its overall program.

Vital Features

Clear Goals	*The school has some clear, explicit, measurable learning goals, outcomes or standards. It has a curriculum designed to help students reach these goals, and the school's assessment system measures the extent to which its students are reaching these goals.*
Outcomes Understood	*Teachers, parents, students and community members understand and support the expected outcomes and standards. Students and parents are provided examples of what the standards require and are given opportunities to work with teachers toward improving personal performance.*
Multiple Measures	*The school uses multiple methods of assessment, not just standardized multiple-choice norm or criterion-referenced tests.*
Assessment as Part of an Integrated Approach to School Improvement	*Assessment is part of an integrated system of instruction, professional development and refinement of a school's operations. Assessment is not used only for ranking or sorting. Schools use assessment results to modify instruction and help plan in-service workshops.*

Language Proficiency	*Assessment takes into account a student's language proficiency. If some of the school's students come from homes where English is not spoken, or if the student comes from some other linguistic background, assessment practices take this into account. The assessment system actually measures what students know regardless of disabilities or linguistic backgrounds.*
All Students Are Assessed	*The school reports, in some ways, on the academic growth of all of its students.*

Valuable Features

Outside People Help Judge Student Work	*Assessment uses an outside person or persons to help judge student work.*
Assessment Systems Include School Graduates	*Assessment measures attitudes of people who graduated from the school.*
Student Assessment Committee Includes a Variety of People	*The school has a committee of parents, educators, community members and, in secondary schools, students who help plan, carry out and monitor the student assessment system.*

First Vital Feature:

Clear, Measurable Academic Goals

Wise organizations – including, but certainly not limited to schools – have at least some clear, measurable goals. As an old country proverb puts it, "If you don't know where you're going, any road will take you there." Not every important goal can be measured easily. But unless a goal can be stated explicitly, it is very difficult to know whether a school and its students are making progress – and if so, how much. As several researchers noted, "without good 'hard data' on school performance, accountability for student results will not work, either for policy-makers or for the educational marketplace. Parents and kids are left to judge their schools, and to select among schools, on the basis of soft and impressionistic grounds. They can be fooled. We can all fall prey to clever advertising – and the fact that someone likes the principal or teacher doesn't mean the kids are learning what they should." (Manno, et. al, p. 3)

Schools participating in this project use a variety of academic goals. This report describes academic goals in the traditional "three R's" of reading, writing and 'rithmetic (mathematics). The report also describes goals and assessments in two areas which many schools and communities have identified as important: the ability to speak to a group of people, and the ability to help improve the community. These five areas are not the only academic areas most schools will select, but these goals are offered as examples from which others can learn.

Reading

The **Charter School of Excellence** sets a goal that all students will gain one year's growth in reading in one academic year. This goal is measured through the use of numerous assessments: those generated by the Computerized Curriculum Corporation (CCC) program they use as well as informal reading inventories, progress reports, Florida Comprehensive Assessment Tests (FCAT), Scholastic Aptitude Test (SAT) scores and teacher-prepared tests. To help students accomplish this goal, the school has implemented the Wright Group Reading curriculum. They also use Open Court Readers,

Computerized Curriculum Corporation (CCC) software, Houghton Mifflin Grammar, and Modern Curriculum Press for teaching phonics.

One of **Central Park East Secondary School's** goals is that students become life-long readers. All students have independent reading expectations during all six years they spend at Central Park East. Graduation is based in part on students' successful defense of their annotated bibliographies. A plan is developed for each seventh grader with participation of the school reading consultant, the student and the student's family. Comprehension is evaluated through individual conferences, student logs and testing.

All students at **Liberty Common School** in Colorado are expected to read at or above grade level by the end of first grade as measured by various assessments. The school's goal is that no more than 22 percent of students will be below "proficient" on district level tests in reading in grades three through six. On the Colorado State Assessment Program reading test, the school sets a goal that 75 percent of all third graders and 50 percent of fourth graders will score at or above "proficient" and that no more than five percent of students' scores will be unsatisfactory. The school uses various assessments to gain baseline data and progress information for each student.

Greely Junior High School in Maine has seventeen benchmarks against which students' progress is measured. One district eighth grade benchmark in reading is to analyze a complex piece of literature to isolate literary elements such as plot, setting character conflict, foreshadowing, flashback, symbolism, and irony. In order to meet the benchmark, students must know the definitions of these literary devices, recognize their appearance in a piece of literature, document and be able to analyze how these devices increase their comprehension of the literary selection. Student progress toward this benchmark is assessed through a variety of methods including regular reading responses, an interpretive quilt square, short answer quizzes, flash cards and direct student communication. Teachers have developed rubrics based on the benchmarks to evaluate most of these tasks.

At the **School Without Walls** in New York, candidates for graduation have a discussion with a committee composed of two teachers, two students and an external assessor about a work of fiction selected from their literature list. This discussion covers, for example, issues raised by the novel, the structure of the novel, and the perspective of the author. To prepare for the discussion, the student must identify several issues raised

by the novel and then select two significant passages that shed light on the identified issues. The student is responsible for opening the discussion with these passages and responding to all questions posed by the assessors.

At **Lincoln Center Middle School of the Arts**, all students demonstrate proficiency in reading comprehension by participating in the Accelerated Reader Program®, a program designed to help create purposeful and motivated readers. Students are asked to read a minimum of 25 pages each evening for homework and have their parents sign a form validating they have done so. (Alternatively, teachers may sign this form if they have observed the student read 25 pages in class or at lunch.) Teachers also use progress reports and other methods to follow up on students who are fulfilling the 25-page per night expectation. Students who are reading below grade level are expected to visit the library – every day if necessary – in order to accomplish the goal of reading 25 pages every day. In addition to the daily 25 pages, students are also expected to read at least three novels in class each year.

North Dade Center for Modern Languages' goals are directly linked to the school district's Competency Based Curriculum. For example, a goal for students in grade four is that students will increase their reading comprehension skills as evidenced by a minimum of 50 percent of the students scoring at or above Level 3 on the Florida Comprehensive Assessment Test (FCAT) reading test. In addition to using state-mandated tests, the school also uses site-generated performance tests and semi-annually gives the Scholastic Inventory Reading Test to determine each student's independent reading level for instructional purposes.

Palisades Middle School in Pennsylvania has a reading goal that students will read 25 books per year. All students keep a log of the books they read. To show visible progress, a tube for each grade is kept in the hallway into which students place a penny for each book read.

At **Branford High School** in Connecticut, seniors are expected to be able to comprehend and analyze classical and modern literature, including literary elements, stylistic qualities and relevance to human experience.

Writing

Options for Youth Charter School in California has a goal that students' writing skills will increase, on average, by at least 20 percent each academic year. Student writing samples are collected at the start of each year and are scored for writing mechanics, quality of expression and coherence of content.

The **Charter School of Excellence** expects that all students will understand and be able to implement the steps of the writing process they use (pre-writing, first draft, revision, editing, proofreading and publishing). Students are expected to write grade level appropriate essays with cohesive and logical sentence structure. Curriculum materials include Write Source books and Houghton Mifflin English books. Progress is measured through daily in-class writing assignments, teacher observation and Florida Comprehensive Assessment Tests (FCAT) writing section scores.

Students at the **Urban Academy Laboratory High School** cannot graduate until they are "competent" writers, particularly in the area of analytic writing. (See *Appendix B.*) To ensure that all students have the opportunity to practice continually, every course offered at the Academy includes some type of writing. All staff members – including social studies, science, math and art teachers – support writing across the curriculum. Success in writing is measured by proficiency standards the school has developed and which students are required to meet in order to graduate. Students must complete analytical papers and research papers in science and social studies and logic papers in math. Papers are evaluated using teacher-developed grids that define the level of skills required for receiving passing grades. Papers are assessed by teams of teachers as well as by external evaluators. (For additional writing assessment ideas, see *Appendix C* for the writing rubrics example from Academy of the Pacific Rim.)

The **School Without Walls** strives to create clear goals for students fulfilling their graduation by exhibition requirement. In social studies, students must write a proficient paper addressing a debatable question. To do this, they need to read extensively so they can present background on their chosen topic, analyze conflicting sources, present a clear argument or position, and explain why opposing arguments are less valid. The paper must demonstrate solid organizational and writing skills.

Lincoln Center Middle School of the Arts expects that its students will demonstrate mastery of written and spoken expression by writing, presenting and defending a clearly

reasoned, persuasively argued research paper. Block scheduling allows students time to develop oral, written and research skills in both electronic and print media. The block schedule makes it possible for students to get out of the classroom to use their own community as a resource and to conduct in-depth studies. Students also demonstrate their skills in narrative, imaginative, expository and persuasive writing. Each of their required writing samples must receive a proficient rating or better on the Milwaukee Public Schools (MPS) writing scale.

South Brunswick High School requires all of its students to complete a freshman project. The project must relate to a concept relevant to all required subject areas. With the help of two mentors from home and school, students prepare and then present their conclusions in writing, orally and visually to two members of the faculty who have not been involved with their project. Established rubrics are used to score students' work, and students must earn a competent score in each area or repeat it. (See *Appendix D* for other writing rubrics from South Brunswick.)

Teachers at **Peacham Elementary School** in Vermont strongly recommend the information which their state department, in cooperation with teachers, has developed to assess six types of writing. Rubrics have been created for each of these six areas of writing: 1) a response to literature, 2) a report, 3) a narrative, 4) a procedure, 5) a persuasive piece, and 6) a personal essay. (Vermont State Information)

Math

Lincoln Center Middle School of the Arts uses a variety of assessments to measure student progress in math. To demonstrate readiness to succeed in high school algebra, students must achieve a score of 34 or higher on the Wisconsin State Math sub-test and a score of 16 or higher on the Milwaukee Public Schools Mathematics Proficiency Exam. The latter exam is given twice each year, both fall and spring. Both are performance assessments that require students to provide a written explanation and rationale detailing how they solved the problem. Teachers also use similar rubric-based assessments in their classes to give students feedback on their mathematics problem solving skills. (See *Appendix E.*)

Greely Junior High School's eighth grade algebra students are expected to demonstrate proficiency in several core areas. For example, students must recognize the

written equivalents of mathematical operations, transform algebraic expressions and equations into written language, translate written expressions into algebraic expressions appropriate to a specific problem and formulate equations from algebraic expressions. Student progress toward this benchmark is assessed through a variety of methods including tests, quizzes and work with algebra tiles.

At the **North Dade Center for Modern Languages** in Florida, school-wide testing in mathematics includes site-generated pre- and post-tests and state-mandated assessments. These tests monitor and assess individual student's areas of weakness for future skill instruction. Their school standard is that at least 50 percent of their fifth grade students will score at or above Level 3 on the mathematics section of the Florida Comprehensive Assessment Tests (FCAT) administered in the winter. (See *Appendix F* for other examples of math rubrics.)

Public Speaking

Many schools incorporate public speaking in their curricula. Typically, public speaking consists of students presenting a project to a variety of audiences – classmates, teachers, advisors and community members. As the Massachusetts Charter Resource Center noted, "Using carefully designed rubrics, juried panels of faculty, community stakeholders, and/or experts critique student presentations in a particular content area. Exhibitions are designed to determine a student's knowledge of a subject and her or his ability to explain what she or he has learned. In both cases, these assessments bridge classroom work to the outside world." (Nahas and Brigham, p. 41)

Some schools, such as **Central Park East**, **St. Paul Open School** and **Minnesota New Country School**, have made public presentations part of their high school graduation process. (See *Appendix G* for St. Paul Open School's graduation process and School Without Walls Senior Project rubrics.)

The **Integrated Day Charter School** in Connecticut requires students to present one or more projects each year. Integrated Day assesses its students on a variety of points, including poise, articulation, and how they involve their listening audience. **Palisades Middle School** has developed a school-wide oral communication/presentation rubric for use in all of its classrooms. (See *Appendix H.*)

Minnesota New Country School requires students to do five public presentations during the year in which advisors, other students and community members assess the speaking, presentation methods and content of the project using rubrics designed by the staff. The process is similar to that used by the Connect-4 program of **Monticello High School** in Minnesota. Like Minnesota New Country, Connect-4 was a Center for School Change school reform implementation site. (See *Appendix I* for descriptions of Monticello's grades 11 and 12 exhibition requirements and evaluation.)

At **Marblehead Community Charter Public School** in Massachusetts, students are assessed in public speaking according to four key elements: clarity, accuracy, fluency and expression. Clarity means the extent to which students maintain focus in their discussion, project their voice appropriately and enunciate words clearly. Accuracy refers to whether students clearly distinguish fact from opinion and the extent to which they support their ideas with detail and appropriate evidence. Fluency means employing a steady flow of speech and using appropriate vocabulary and proper grammar. Expression includes using nonverbal cues and maintaining eye contact and appropriate posture.

Greely Junior High School's eighth grade benchmark in public speaking requires that students give an oral presentation for a specific audience using predetermined standards in writing and speaking. To achieve this benchmark, students must know the components of an effective oral presentation, select an appropriate topic, organize materials, prepare their presentation and deliver it effectively. Student progress toward this benchmark is assessed through a variety of methods including class discussions, Socratic dialogues, and small group practice presentations. (See *Appendix J* for a variety of public speaking rubrics.)

Service Learning

Many schools engage students in projects that combine classroom research with service in the broader community. Students might read about pollution problems and then try to reduce certain kinds of air pollution. Students might read about hunger in various eras and then try to reduce the number of hungry people in their community. Students might study the political system and become involved in an electoral campaign.

These are all examples of learning that are based partly in the classroom and partly in the community.

These programs allow students to become more involved in their communities, to gain greater awareness about different issues and to develop better attitudes about being active citizens. Additionally, the community benefits greatly through students' contributions of time and effort toward projects such as helping produce cleaner lake areas, solving adults' consumer problems, or building stronger intergenerational relations involving teenagers and senior citizens.

Two recent books do an excellent job of summarizing research on service learning. Both books describe *Some Things that Do Make a Difference for Youth.* These reports document that well-designed service learning programs can increase students' knowledge, change their attitudes toward themselves and others, and improve the way young people behave. (American Youth Policy Forum, 1997, 1999)

Researcher Shelley Billig has examined a number of studies that show four potential areas of benefit for youngsters involved in well designed service-learning programs. These include 1) academic outcomes, 2) civic responsibility outcomes, 3) career-related outcomes and 4) personal development outcomes. More information is available in her recent article, *Research on K-12 School Based Service Learning Continues to Build.* (Billig, 2000). One good summary of research in this area is found at the *Learning Indeed* web site created by the W.K. Kellogg Foundation (www.learningindeed.org). Billig also contributed to this web site.

Billig is compiling a series of instruments that can be used to measure student growth in the four areas she cites. Currently, the plan is for this information to be posted on the *Learning Indeed* web site by the end of January 2001. Look in the research area.

Two federally funded resource centers offer relevant information. The National Service-Learning Clearinghouse is an excellent resource. (http:umn.edu/~serve). The Clearinghouse recently published a report, *Service-Learning and Learning Assessment: A Field Guide for Teachers*, which many teachers will find useful. (National Service-Learning Clearinghouse) The federal National Center on Education Outcomes also identifies possible outcomes in what they call "contribution and citizenship." (NCEO, October 1996) They also offer ideas about how to assess student progress in this field.

The following examples show how several schools assess the impact of service learning.

At the **Urban Academy**, every student participates every term in the community service program. Placements include governmental agencies, neighborhood advocacy groups, the arts and medicine and environmental projects, and take advantage of the vast resources of New York City. Students are evaluated four times a year by their immediate on-the-job supervisors, and are visited on site by Academy staff members. Students also make public presentations twice a year to the entire school community about their placement experiences. Student success is measured by a combination of practical factors such as attendance and punctuality as well as initiative, persistence and the ability to grow on the job. (See *Appendix L.*)

Several schools state goals for service learning in terms of the number of hours students spend on these efforts. **Options for Youth** in California requires all seniors to complete at least 10 hours of community service as a requirement for graduation. **Peacham School** in Vermont requires all sixth graders to complete a minimum of 12 hours of community service outside the school day. At **School Without Walls**, students are required to earn three credits in community service for graduation. Students begin in the ninth grade year to give two and a half hours per week each school year to a non-profit, non-religious organization of their choice. The community service site supervisor prepares a written student progress report each quarter. (See *Appendix K.*)

Central Park East Secondary School students in eighth, ninth and tenth grades spend a half-day per week at their service learning placement – usually at a non-profit service agency. They keep a journal and spend time preparing a report (called an "exhibition") which describes the non-profit's mission, examines how well the non-profit adheres to its mission and makes recommendations.

Every class at **Integrated Day Charter School** identifies a service learning project and integrates the study of that project into the year's curriculum. Projects have included helping an orphan and obtaining a computer for an orphanage in Tanzania, working at local food banks, shelters, and a local nursing home, and improving school grounds. Other projects have included planting a vegetable and flower garden at a senior citizen home, raising community awareness about composting, fire safety and puppy mills, and collecting oral histories and producing a play for senior citizens. Currently, 97 percent of

students participate in service learning projects. Achievement is measured by student and teacher surveys and student reflection on their service learning projects.

Liberty Common's goals are to have volunteer hours equal 50 percent of staff hours, and to develop a more coherent program using service and character education. Students are required to perform services within their site, including cleaning, tutoring, serving as office aides or teacher assistants, and providing assistance to low-income families. They also maintain a Community Advisory Board. In 1999, students collected hats and gloves for winter giving, cleaned up the lake area near the school, sponsored gift giving for the needy and set up a $2000 scholarship fund for dress code assistance.

Service-learning can be a valuable part of any school, elementary or secondary, rural, urban or suburban. This is a classic example of a subject that is not easily measured by a standardized test. But most people agree that helping young people learn to participate constructively in a democracy society should be one of the central goals for most schools. Fortunately, more and more information is becoming available about how to measure student growth in this field.

Second Vital Feature:
Making Outcomes Understood

It's critical for students, parents, educators and members of the broader community to understand what a school is trying to accomplish. Wise schools communicate their goals, visions and expectations of students through annual reports or through posting their goals in prominent places in their school buildings. Many schools also conduct meetings with parents on a quarterly or annual basis to keep parents informed of students' progress. Some schools also put a good deal of effort into sharing results with the broader community.

At the **St. Paul Open School** in Minnesota, students, parents/family members and teachers meet every August, before school starts, to create an individual plan for each student and to discuss how the student is progressing toward graduation. (See *Appendix M* for information.) Since 1973, graduation at this school has been based entirely on demonstration of skills and knowledge, not on accumulation of credits. This meeting is

just one of the settings in which staff, students and parents are trained in the process of their "graduation portfolio." (See *Appendix G* for graduation portfolio requirements.) St. Paul Open School also includes goals in its vision statement which is made available to all students and parents.

The **Academy of the Pacific Rim** in Massachusetts monitors students' performance at weekly advisor meetings and through weekly progress reports mailed to parents. Parents are expected to sign a reply form and return it with their students each Monday to show that they have read their student's progress report. Parents and students sign a contract at the beginning of the year pledging effort toward achieving academic success and initialing their approval of the Academy's strict promotion policy – mastery of 70 percent of the standards. Academic standards are discussed at the orientation session at the beginning of the year and at parent information sessions held in the spring. Attendance is mandatory for all applicants. To help parents set high standards at home so they can help their children produce better quality work, the school regularly sends parents examples of ideal homework. Parents join teachers for conferences three times a year and have three yearly phone conversations with their child's advisor.

Peacham Elementary School publishes an annual report card (See *Appendix M* for the Report Card 2000 table of contents). The report card includes a vast array of information, and is distributed to all families. The report presents information about student achievement and examples of student work in various fields including writing, math and art. It's an excellent model for schools to study.

At **Summit Middle School**, content area standards are published in the school's annual report and are made available to the public. Teachers are trained in developing benchmark based units and assessments, as well as in sharing learning goals with students and parents. At the start of units of study, students, and frequently parents, are given handouts identifying the learning goals for the unit and the assessments that will be used to determine progress. Scoring rubrics for key assessments are tied to the benchmarks and teachers explain the rubrics and expectations as part of the instruction and assessment process. In addition, teachers are developing ways to track progress toward meeting benchmarks and to report that progress to students and parents.

Palisades Middle School communicates its goals through a variety of means including district and school notices. Rubrics are posted for each assignment. Exemplars

are shown to the children. Clear assignment/expectation sheets are given for each task, and student work is put on display everywhere in the school.

Many schools use a parent-teacher-student compact or contract approach for communicating goals, ensuring outcomes are understood, and keeping parents involved. For example, at the **Charter School of Excellence** parents sign a contract that pledges the school will keep them informed on all academic and social issues. In turn, the parents agree to volunteer 20 hours of their time in the school over the course of a school year. In addition, the school surveys parents twice a year and parents serve on the board of directors. Some parents also teach children as part of their involvement in the national Junior Achievement Program.

Lincoln Center Middle School of the Arts keeps parents informed by conducting meetings in smaller settings. These meetings occur with new sixth grade parents and continue on into the seventh and eighth grade settings. The meetings usually include a grade level guidance counselor, homeroom teachers, the learning coordinator, the principal and both parents and students. The setting is informal, usually includes refreshments, and parents can both receive information and ask questions about the school's assessment practices.

The Urban Academy provides parents a videotape that explains the school's inquiry-based approach to teaching and learning and demonstrates what performance-based assessment is by showing external assessors interviewing students and commenting on student writing and project work. Parents and community members are invited to presentations of student work throughout the year and the public participates in external reviews of student work. Regularly scheduled parent meetings are held where staff members explain graduation requirements and performance standards. Printed materials are distributed throughout the year, which detail the school's expectations. Students review these materials with teachers in their tutorial groups. Finally, a web site is under construction for the general public.

New Visions Charter in Minneapolis publishes an annual report that is shared with parents and a variety of community leaders. The report describes progress students have made in academic and other areas, explains the school's philosophy, and discusses how the school is attempting to meet its goals. (See *Appendix O* for a copy of the table of contents for New Visions' annual report.)

Third Vital Feature:
Multiple Assessment Measures

Many authorities point out that using a variety of measures to assess student achievement will provide broader, more complete and accurate understanding of what students know than is possible if just one kind of assessment is used. James S. Catterall, a UCLA professor of education, has been evaluating schools for nearly a decade. Catterall has developed the following principles:

1. Assess student learning from multiple perspectives. For example, assess student learning using pre- and post-tests in basic verbal and mathematics skills, using equivalent forms of the same test. Catterall and his colleagues have used a test developed from a test item bank created by the California State Department of Education. He is now planning to use the short form of Terra Nova tests, under an agreement with CTB-MCGraw Hill. Catterall also examines student writing samples periodically and evaluates them for growth in student writing and communication skills. He also asks students what they think they are learning, asks students periodically about their attitudes toward education, and asks teachers to provide their view of student learning based on information they've gathered.
2. Diagnose school operations. Examine what the school does well and where it needs attention. Use test scores, performance assessments and interviews with faculty and students. Be consistent in evaluation designs from year to year, so that changes are clear from known benchmarks. This doesn't mean that tests can't be modified from time to time, nor that interview questions can't be changed. But consistency helps identify important trends linked to school and student performance.
3. Communicate. Evaluators need to communicate with their clients about their needs for information, and school leaders need to communicate with school board and other groups to whom they report, to make sure that information is being gathered in the needed areas. (Catterall)

George Madaus, an authority on academic assessment from Boston College, has concluded that there are three basic ways a school can measure academic achievement

- Select an answer from among several options – multiple choice.
- Ask students to produce an answer in essay form
- Ask students to do something – fix a carburetor, do a dive off a diving board, make a presentation, etc. and rate the student on this task. (Madaus, 2000).

Some educators use the driver's license examination as a classic example of the value of multiple measurement. Most states give prospective drivers a two part exam – one via paper or computer on which students are tested via a multiple choice test for their ability to recall answers to questions. The other part of the test is a *performance assessment* in which prospective drivers are asked to show that they actually have at least modest skills in driving and parking a car. Most states would say that by using both forms of assessment, they get a fuller description of what the prospective driver knows and can do than if either part of the test was used by itself. This is the central rationale for using multiple measures – it gives a fuller description of what a student knows.

The schools participating in this project rely on multiple measures to assess student achievement. Using various approaches to assessment can give students, parents, and policy-makers a broader and more complete picture of student knowledge and skill. Moreover, researchers note that some skills and knowledge can be more effectively measured by people trained in observation than by the traditional standardized test. For example, the best way to assess students' ability to make a public presentation is not to give them a standardized test. Instead, many authorities agree that trained observers should rate a speech using various criteria. For many reasons, using multiple measures makes much more sense than relying solely on one – whether it is a standardized test or a performance assessment.

Assessment at **Marblehead Community School** includes analysis of portfolios, individual learning plans, use of rubrics, benchmarks and student exhibitions. Marblehead students also take standardized tests such as the Stanford Achievement Test series, the Northwest Education Association Achievement Test (NWEA) and the Massachusetts Comprehensive Achievement System (MCAS).

The **Charter School of Excellence** uses informal reading inventories, student portfolios, literacy folders, oral assessment in math and spelling, reports generated by the

self-paced computerized learning software they use, phonics tests and standardized tests in math, reading and writing.

The **North Dade Center for Modern Languages** incorporates a variety of ways to assess student achievement. It uses the state-mandated Florida Comprehensive Assessment Tests (FCAT) in reading and math, the SAT Norm-Referenced Test in reading and math, the Scholastic Reading Inventory Test, and site-generated tests in reading, writing, math and science. Rubrics are used for judging individual oral presentations in grades one through five. Assessment also takes into account student writing portfolios, daily attendance, students' journals across the curriculum and community service activity and participation logs.

The **St. Paul Open School**'s graduation process uses a portfolio system that is aligned with the Minnesota State Graduation Standards. The portfolio includes student reflection essays, letters of recommendation from teachers or community members regarding students' performance in a selected broad skill area and documentation of classes taken and evaluations of fulfillment of graduation standards.

Chicago Public Schools develops an accountability contract with each of the charter schools it sponsors, covering academic growth and other factors. This agreement explains that the charter school's students will be expected to make progress on various standardized tests, and will be expected to pass tests mandated by the state for high school graduation. The contract also allows individual charter schools to work with evaluation specialists to develop and use applied performance assessment measures. (See *Appendix P* for part of the contract between **Chicago Public Schools** and **Perspective Charter School**.)

Options for Youth believes that test scores are only one indicator of a student's abilities and knowledge, and that it is more useful to the school and the student to use test scores in context with other information about the student. This information includes an understanding of the test used and the student being tested. The school's self evaluation includes such factors as portfolio assessment, attendance records, participation in the school, attitude about the school (as measured by surveys, tests and outside interviews), and parental feedback. The overall OFY evaluation, carried out by Professor James Catterall, is one of the most comprehensive, complete and helpful which the authors have seen. (See *Appendix Q* for this report's table of contents.)

Students at **School Without Walls** receive assessment feedback from: 1) student progress reports completed quarterly by each teacher and reviewed individually with each student, 2) biweekly advisory conferences and 3) "Graduation by Demonstration Committees." At the latter, individual students present projects, portfolios, and/or "essential question" responses to teachers, students, parents and community professionals.

The **School Without Walls** is part of a consortium of schools negotiating with the New York State Education Department to obtain an exemption from all state high-stakes, end-of-the-year standardized exams. School Without Walls staff members believe that they cannot maintain their school's success if they must prepare their students for Regents Exams while at the same time preparing them for learning and assessment through their own multi-faceted system and learner-centered educational process.

Fourth Vital Feature:
Assessment Informs School Improvement Efforts

Our national consultants and various educators agreed: Using assessment and its results to inform instruction and professional development is an essential approach to school improvement. As the Massachusetts Charter Resource Center notes, "Assessment is a system, not an end point. It allows teachers and administrators to make changes, based on analysis of student performance data, so that all students can achieve high educational standards. It is part of, not an add-on to, the curriculum and teaching process." (Massachusetts Charter School Resource Center, p. 37) We found many excellent examples of this among participating schools.

For the past three years, **Lincoln Center Middle School of the Arts** has been participating in the Assessing Learning Project with Alverno College and the Milwaukee Public Schools. The goal of the project is to narrow the gap in performance between minority and majority students. The school's primary strategy is to use performance assessment to diagnose student needs and to use clear criteria/rubrics to inform students about performance expectations.

As a significant professional development effort, the Lincoln *Center's Assessing Learning Project* team has involved all faculty in a school-wide action research project focused on writing. Through this project, all students write in all subject areas throughout the day. Students write reactions to material they are studying. This helps them internalize ideas and gain skill in expressing themselves about school subjects. All faculty use common rubrics for the various forms of writing. The Assessing Learning Project team leads the faculty in reviewing the project's impact and in identifying help that individual teachers may need to make it successful for all their students. The improvement of seventh graders' performance on the Milwaukee Public Schools writing scale is one evidence this project is succeeding. In 1996-97, only 22 percent of seventh graders scored proficient or above; in 1997-98, 42 percent scored proficient or above; and in 1998-99 the number of proficient scorers reached 58 percent.

Greely Junior High School uses assessment to document student achievement, to provide feedback to students on their progress and areas in need of improvement and to inform and improve teacher instruction. Since all classes in the school are heterogeneously grouped (with the exception of two sections of math at each grade level), assessment results are not used for sorting and labeling students.

South Brunswick High School administrators and teachers evaluate the results of both standardized and performance assessments. This information is used to assess and revise the curriculum, as well as to plan staff development programs.

The **Integrated Day Charter School** conducts an in-service workshop to discuss the results of Connecticut standardized tests. The staff studies the areas of weakness and strength and designs plans for maintaining positive results or for remediation at these workshops.

Teachers at **Branford High School** share assessment activities and do peer observations to increase their understanding and use of assessment techniques. Curriculum and instruction have been revised to ensure that the students have the opportunity to learn, develop and be assessed on the learner outcomes aligned with each course. Currently, teachers are gathering data on student performance to identify areas of the education program that are working well and areas that need improvement or increased effort.

At **Options for Youth**, administrators believe that assessment is a key to understanding the direction school improvement should take. The school believes it is essential to understand both failures and successes in order to work on programs to improve student learning. As part of its school improvement plan, each year Options for Youth incorporates suggestions from its outside evaluator, Dr. James Catterall of UCLA. Last year, for example, as a result of findings, the school purchased Academic Innovations Mathematics and trained staff in this new approach. As a result, math scores between pre- and post-testing improved dramatically the following year. (See *Appendix Q* for the Table of Contents of a recent report prepared by Catterall.)

Summit Middle School uses both the Comprehensive Test of Basic Skills (CTBS, also called Terra Nova) and its own internally developed student performance measures to identify areas that need improvement. Summit enhanced computation and problem solving in math in response to the weaknesses observed on 1997 Terra Nova results. The overall 1977 math scores for sixth and seventh grade students improved in 1998. Summit also changed the way it taught spelling, and added more spelling instruction to its language arts curriculum because of weaknesses in student spelling identified by 1997 and 1998 Terra Nova scores. Further, Summit created a reading strategies class for the second semester of school year 1999-2000 because of poor Colorado Student Assessment (CSAP) and Terra Nova test results from Spring 1999, and because of weaknesses noted by teachers.

Just gathering data about student achievement is not enough. As two researchers pointed out, "At least in part, the success of a data driven accountability system hinges on the ability of school leaders and central administrators to use data to improve practice." (Hassel and Herdman, p. 20)

Fifth Vital Feature:
Assessment Considers Language Proficiency

Schools throughout the United States – urban, suburban and rural – often serve students whose first language is not English. This can include students whose families have lived in the United States for many years, as well as students whose families

recently arrived in this country. Several authorities pointed out that the single best source of information about serving these students (as well as assessing the growth these students make) is the National Clearinghouse on Bilingual Education. The Clearinghouse has an excellent web site, www.ncbe.gwu.edu/.

The number and percentage of students with limited English proficiency varied widely among the 21 schools participating in this project – as it does around the nation. Some of the participating schools had significant numbers of students whose first language is not English. Other participating schools had very small numbers of students (or none) with limited English proficiency, and thus had very limited information on how such students are assessed. Schools such as the **Lincoln Center of the Arts** and the **Urban Academy** had significant populations of students with limited English proficiency and shared information about their assessment practices.

About 20 percent of **Lincoln Center Middle School of the Arts**' students are enrolled in the two-way Spanish/English bilingual program; another five to seven percent come with Hmong or Lao as first languages. Both the school and district assessments may be completed in Spanish if that is the student's dominant language. For Hmong and Lao speakers with limited English proficiency, adaptations are made to assist students in completing assessments.

The **Urban Academy** has many students for whom English is a second language. Their native languages include Polish, Spanish, Russian, Bengali, Amharic, Mandarin Chinese, Portuguese and Rumanian. Other students come from impoverished backgrounds and have low level language skills. Urban Academy's assessment system helps place students in classes which challenge them at the appropriate levels. Further, all classes at Urban Academy are discussion-based and students are immersed immediately in classes that require conversation, debate and presentation skills. As a result, all students meet the stringent language standards and proficiencies required for graduation.

The **Charter School of Excellence**, through its school board's multicultural department, assesses students for limited English proficiency. All students must fill out the Home Language Survey when they apply for enrollment. The survey includes three questions, phrased in different ways, asking if a language other than English is spoken in

the home. If any one of the three questions is answered affirmatively, the child is tested to determine whether language assistance is needed.

At **Branford High School**, performance graduation expectations apply to all students, including those with limited English proficiency. A special review committee is established for limited English students. This committee may adjust the standard of performance and/or the graduation expectations.

At **Marblehead Community Charter School**, all students participate in developing an independent learning plan at the beginning of each year. Learning plan conferences with teachers, students and parents are scheduled every fall and spring to record individual goals and document progress. Additional conferences are often held as requested. When a student first enrolls, a more detailed articulation of the student's strengths and weaknesses is gathered from students and parents. This information is used to establish the initial goals and objectives for each participant. Each goal is accompanied by specific objectives identifying tasks assigned to the school, the student and the parent. These meetings offer excellent opportunities to discover potential learning barriers such as limited English proficiency. Caught early, such areas of concern can be built into students' individual learning plans.

Sixth Vital Feature:
All Students are Assessed

Nearly all of the participating schools report that they assess all of their students. This is a key issue because some researchers found that when states developed. Some high stakes testing programs, the number of students who were not tested increased significantly. As the federally funded National Center on Educational Outcomes points out, "Research has demonstrated that when special education students are excluded from school accountability measures, the rates of referral of students to special education increases dramatically." (NCEO, 1999)

No one would argue that a person who has just arrived in the US who speaks no English should be given a multiple choice, nationally normed standardized test. But as

non- or limited-English speaking students attend a school, it is vital to know how much progress they are making.

Moreover, all students, including those with various forms of disabilities, should be expected to make progress. So, although the forms of assessment may vary, schools should be expected to measure the growth of each student. As the National Center on Educational Outcomes suggests,

> System accountability should be just that – accountability for everyone in the system. Students with disabilities are part of the student body. Most of these students spend the majority of their time in the general education classroom, and receive instruction from regular classroom teachers. In addition, regardless of where students receive instruction, all students with disabilities should have access to the general education curriculum. Thus, all students with disabilities should be included in the measurement of progress toward standards. (NCEO, 1999)

Professor Jim Ysseldyke, former director of the National Center on Educational Outcomes at the University of Minnesota, has pointed out that all public schools, including charters, are required by federal law to report on the performance and progress of all students, including students with disabilities. Children with disabilities must be included in general state and district-wide assessments with appropriate modifications. Federal law further requires that the state education agency must report, with the same frequency it does for non-disabled students, the number of children participating in regular assessments and in alternate assessments, and their performance on regular assessments beginning not later than July 1, 1998. Finally, states and districts were required to have alternative assessments in place for students who were unable to participate in the regular assessments and to report performance on alternative assessments no later than July 1, 2000. (Ysseldyke, 2000)

Ysseldyke also says:

> Federal legislation expects that all students, including those with disabilities and limited English proficiency, will be working toward high standards. States, and in most cases districts, specify standards toward which all students will work. (Thus, charters and other public schools must be clear about what academic standards students are expected to reach.)
>
> There are three ways that students with disabilities participate in state and district assessments. Some take the regular test, some take the regular test with accommodations and some take an alternate test. The alternate assessment is intended for a very small percentage of students (less than two

> percent of all students, a figure that translates to about 15-20 percent of students with disabilities.) Decisions about how students are to participate are made by their IEP teams.
>
> The purpose of an accommodation is to level the playing field for a student with a disability: to allow the student to demonstrate his or her skill or knowledge rather than his or her disability. Decisions about the kinds of accommodations that students with disabilities are to be allowed to use are made by IEP teams. In most states the student is permitted to use in assessment the kinds of accommodations provided in instruction. For example, if a student typically has math problems read to them in instruction, then math problems on tests would be read to them.
>
> Specific criteria for making participation, accommodation and reporting decisions have been developed by the National Center on Educational Outcomes (NCEO) at the University of Minnesota. NCEO has published documents on best practices in making assessment and accountability decisions, and these are available at the NCEO web site, www.coled.umn.edu/nceo/. (Ysseldyke)

Students at **Central Park East Secondary School** receive detailed narrative reports on their progress four times over the course of a year. These reports are discussed at family conferences to collaboratively develop goals. One-third of the school's students are resource room or special education mandated. Their resource room support teacher (all of the students are mainstreamed) is a part of their conference and their individual education plan (IEP) is developed from these meetings.

New Visions Charter examines every student's learning style using a site-developed instrument. The results help New Visions teachers make learning more individualized. Then the school uses a combination of group-administered norm-referenced tests (Gates/MacGinitie) and an individualized reading test (the Slosson Oral Reading Test). The school also issues an annual report showing how students have progressed on various measures. The annual report is widely distributed to families, legislators, foundations, neighborhood organizations and social service agencies. (See *Appendix O* for a copy of the report's table of contents.)

At **Summit Middle School**, every student is assessed in the mastery of the curriculum in his or her classes, and all students take the Terra Nova every year. At **Integrated Day Charter School**, all students are assessed, and information is shared through two student-led conferences per year. Teachers and students write narrative reports two times a year.

The **North Dade Center for Modern Languages** administers local, state, national, and site-generated tests to all students. Due to the school's excellent daily student attendance (over 96 percent), assessment of all students is successfully achieved. In addition, the school system's office of educational planning produces individual student reports to share with parents and school personnel. North Dade students also receive progress reports during the third and sixth week of each grading period, which means they receive one more progress report than the school district requires.

Assessment of students with disabilities is an important task for virtually all public schools since nearly all schools have students who have some form of disability. Detailed information about how to assess such students is beyond the scope of this booklet. However, the authors encourage educators to examine materials developed by the National Center on Educational Outcomes at the University of Minnesota. (See *References Cited* section.) This center has developed a vast array of practical information which schools will find useful, including issues to consider, what to measure and possible sources of data.

The Massachusetts Charter School Resource Center encourages each school to ask the following questions as it designs its data management system:

- What baseline information is needed on all students in order to begin an assessment system?
- How will the school manage the assessment process? Will a staff person be hired to coordinate the assessment process (or as this report suggests, will the school hire an outside person to do this?)
- Should all the test information be housed in one database management system?
- In what format should performance data be examined?
- How will external test data be linked to other forms of student performance data?
- What questions do teachers and administrators have about the relative performance of particular groups of students, for example, girls versus boys, those whose first language is English and those whose first language is not, students on free or reduced lunch and those who are not? If subgroup information were desired, how would demographic information about the student population be gathered and housed? (Nahas and Brigham, p. 42)

First Valuable Feature:
Outside People Help Judge Student Work

Many schools have found that having an outside person helping to judge a student's work has important benefits. First, it offers a broader perspective. People who work in community, government or business organizations may have a somewhat different view of a public presentation than a person who teaches speech. People who are professional writers may judge a student's essay somewhat differently than a person whose job is to teach writing.

Asking outside people to help judge student work also gives greater credibility to the review. People not directly associated with a school can be expected to offer (or may be viewed as offering) a more neutral view than those employed by the school. Many of the schools involved in this project agreed that having people "from the outside" helping to assess student work helped give their students more useful feedback and helped the school's credibility.

Options for Youth has worked closely with Dr. James Catterall at UCLA, who has tested students in various ways since 1988 using both norm referenced tests and performance assessments in reading and mathematics. Because of the school's commitment to its students, Dr. Catterall's test results (from the pre-test and post-tests) have become an integral part of the school's program. The results are used to identify the school's successes as well as areas where instruction needs to be improved. His recommendations are instrumental in long-range planning for programmatic changes.

The use of an outside person to help judge student work varies among the schools. Several schools ask parents or other community members to help them assess student exhibitions or portfolios. Other schools contract with independent consultants for the purpose of evaluation and for identifying successes and areas that need improvement.

Monticello High School's Connect Four Program has community evaluators, as well as educators, assessing the public presentations which students must make as part of their graduation process. The school has found that bringing community members in helps both the students and the school. Students learn more about expectations of local businesses and community groups. And community members learn much more about

what is actually happening in the school. (See *Appendix I* for information about junior and senior exit exhibition criteria.)

At **Minnesota New Country School**, community members often assess student demonstrations utilizing a staff-developed rubric. Students are expected to make these presentations every six weeks.

The **School Without Walls** incorporates outside people in students' exhibition committees. Committees are usually comprised of two teachers, a parent (not related to the student), two students and at least one professional person from the community. The committee reviews, evaluates and interacts with each student before discussing the student's performance and reaching an assessment summary decision.

The **Urban Academy** uses external evaluators as part of its performance-based proficiency system. Students meet with outside assessors to discuss and analyze literary work, present and defend scientific experiments and have research project work reviewed. External reviewers consider creative work and evaluate students' community service work.

Every senior at **Branford High School** must successfully complete an independent project with the support of a faculty advisor and a *content consultant.* The consultant is an individual in the community who has some expertise about the subject the student is studying. The consultant works with that student during the project. The student must make a presentation of his/her project to a panel and possibly to an audience. Students must also make a visual presentation of their projects for a special open house to which the public is invited to see the results of student work.

At the conclusion of each 13-week trimester there is a public exhibition of student work at **Marblehead Community School**. This exhibition reinforces the importance of the students' academic experience, serves as an assessment tool and celebrates student work. Adults (other than the students' teachers) use a *public exhibition evaluation rubric* to formally evaluate student work.

At **Flagstaff Arts and Leadership Academy**, all students must make periodic public presentations. The school has asked local business people and community artists to help judge these speeches. This practice has helped the school gain support in the community. People who normally would have no contact with the school have come in to help assess student presentations. In so doing, they learn more about the school.

Another example of involving outside experts as part of the assessment team is the International Baccalaureate program (www.ibo.org). Thousands of students around the world attend schools with IB programs. The students' work is assessed, in part, by their classroom teachers, and in part by experts around the world who read essays students have prepared.

The discussion above has focused on ways schools can use in outside resource people to help provide information for accountability. State and local policy-makers are also interested in setting up accountability systems. In considering how to evaluate a school, charter or otherwise, state and local policy-makers might well consider the process Massachusetts has developed to determine whether to renew a charter.

The state has an extremely well developed process that includes a three to four day onsite evaluation of every school that is applying for renewal. The state brings in a small team of educators from other schools, along with researchers. During the course of several days, schools are asked to answer the following key questions:

1. Is the academic program a success? Has the school made reasonable progress in meeting internally established educational goals during the term of its charter? Has student performance significantly improved and/or been persistently strong on internal and external academic assessments?

2. Is the school a viable organization? Is the school financially solvent and stable? Is enrollment stable and near capacity? Is school governance sound, and are professional staff members competent and resourceful?

3. Is the school faithful to the terms of its charter? Have the school's program and operation been consistent with the terms of the charter? Is the school within the bounds of applicable statutory and regulatory requirements?

4. If the school's charter is renewed, what are its plans for the five years of the next charter?

5. Please attach the results of any independent review of the school (studies, surveys and evaluations) that may shed light on the school's performance during the term of its charter. (Commonwealth of Massachusetts)

Second Valuable Feature:

Assessment Systems Include Program Graduates

People who have gone through a school are one of the best sources of information about how well a school functions. Not many schools currently survey in a formalized way the attitudes of people who have graduated from their programs, although several schools expressed an interest in doing so in the future or are currently working to develop a way to do so. Some gather this kind of information informally.

Every three years, **Greely Junior High School**'s district contracts with an outside consulting firm to conduct surveys about various aspects of the district's programming. Parents and community members are surveyed, as are teachers, students and recent graduates. This information is then used to help guide curriculum, instruction, assessment and other aspects of school reform including facility and climate needs. As a whole, students who have completed their two years at the school feel as if they have been very well prepared for high school both academically and socially. The same holds true when recent high school graduates are surveyed.

St. Paul Open School periodically has surveyed graduates and used the results to refine its program. For example, one survey some years ago found that graduates recommended increasing the amount of writing expected of students. This was done.

Peacham School invites graduates (usually seventh graders) to fill out surveys and attend meetings where food is served to review their experience after one year.

At **Summit Middle School**, the Accountability, Accreditation, and Assessment Committee (AAA) administers an alumni survey. The results indicate that Summit graduates do well in high school and believe that they are well prepared.

Branford High School plans to assess alternate year classes to identify issues that need to be addressed. The school also has a program where recent graduates return to share their experiences with the present seniors. Branford seeks feedback from these graduates on how well prepared they are compared to other students at their colleges. Overall, the assessments have found that students are as well, if not better, prepared than most of their college classmates. Branford's data on its graduates generally indicates that the school has had a very positive impact on students' futures.