Renewal Inspection Report

Francis W. Parker
Charter Essential School
Devens, Massachusetts

SchoolWorks

February 21-24, 1999

SETTING

Francis W. Parker Charter Essential School, approximately 300 students in grades 7-11, occupies Building 2602, a former United States Army cryptology center in Devens, Massachusetts. Its building is predictably fortress-like but with attractive fields and vistas all around. Busses ferry students to physical education at the former Army gymnasium and to outdoor activities in the surrounding fields, ponds, and woodlands.

The school was founded by a group of parents, academics, and former school committee members living in the Harvard area. Named after the 19th century father of progressive education, Francis Parker bases its program on the Coalition of Essential Schools philosophy that students should master a limited number of essential skills and areas of knowledge rather than skim through a broad, superficial exposure to many disciplines. The democratically governed school organizes its instruction into extended topical units that integrate the academic domains and frames its academic program anew each year with a guiding investigative question chosen by the entire community for its unifying capacity.

Devens, formerly Fort Devens, occupies a tract of thousands of acres of cleared land and mixed forest in the central uplands of Massachusetts. Population radiation from Worcester thirty miles south and Boston thirty miles east is rapidly changing the rural character of what was formerly farm and orchard landscape. Until quite recently, the school building and its environs belonged to the United States Army but are now part of an enterprise zone in transition. Plans are well underway to relocate Parker to the former base elementary school for the next school year.

Francis Parker draws students from thirty surrounding school districts. Many of these communities are relatively affluent and middle-class with no significant minority population. Almost half of the students come from four districts—Acton-Boxborough, Groton Dunstable, Harvard, and North Middlesex. Families in these communities enjoy incomes well above the state average.

INSPECTION TEAM

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Ms. Mackin is a practicing visual artist and consultant to teachers and schools. Her organization, SmART, conducts workshops for teachers in all disciplines attempting to integrate right brain and left brain instruction. She is currently assisting in the revision of fine arts standards, The Practice of Creating, for the Commonwealth of Massachusetts.

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Dr. Mackin is currently a consultant to New England schools pursuing reform and reorganization, including both Boston City Schools and the Lawrence, Massachusetts school district. He was also the founding Principal of Souhegan High School, a member of the Coalition of Essential Schools in Amherst, New Hampshire.

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RENEWAL FINDINGS

Is the academic program a success?

1. **Ongoing classroom assessments and formal Gateway assessments indicate that most students are developing sound "habits of mind" and mastering "essential skills and areas of knowledge" as defined by the Parker School Criteria for Excellence.**

   In its first year, Parker School developed a well-defined and comprehensive set of standards, the Criteria for Excellence, to guide teaching and learning. These criteria are reflected in the instructions and rubrics associated with every classroom assessment. They accumulate as students arrive at a "Gateway," a portfolio collection and project exhibition that allows them to move on to the next higher division in the school. (Students are placed and move through three divisions, roughly corresponding with grades seven and eight, nine and ten, and eleven and twelve.) Assessment using these criteria is frequent within a unit and both comprehensive and rigorous at a Gateway. "Habits of mind" are not unique to a particular discipline or domain within the curriculum but are expected of students across the curriculum. They, too, are evaluated continually as part of discrete assessments and periodically as a component of each student's Personal Learning Plan.

   Narrative References: 1, 2, 3, 11, 12

2. **Student achievement on external academic assessments—Stanford 9 Achievement Test, Massachusetts Comprehensive Assessment System (MCAS), and the Preliminary Scholastic Aptitude Test (PSAT) has been consistently strong.**

   Standardized test scores at Francis Parker are as strong as, and in some cases somewhat stronger than, those of the many districts who send students to the school. Stanford 9 averages have ranged between the 75^{th} and 85^{th} national percentiles. MCAS averages at grades 8 and 10 are at least ten points higher than the average scaled scores for the entire state in each of the three subject areas: English and Language Arts, Mathematics, and Science and Technology. A PSAT average for sophomores around 1100 extrapolates to an eventual SAT total approximating 1200, 200 points above the national and state averages and consistent with, if not somewhat stronger than, sending districts. That said, Francis Parker makes it clear that their "emphases do not align with the subject and style of standardized tests." The school's renewal application

also points out that because the "students' average scores are so high to begin with," Parker's consequent expectation is that they "will maintain their standing on these tests," a goal seemingly at hand given early test results. The school plans to analyze MCAS results in the failing range, however, since high school graduation will be linked to the test after 2002. A Scholastic Aptitude Test (SAT) prep teacher has also been hired to prepare students for external assessments that remain entrenched at most colleges and universities.

Narrative References: 8, 9, 10

Is the school a viable organization?

1. **A commitment to democratic principles, ensuring that every voice is heard, has resulted in complex and at times stressful decision-making processes. In order to preserve the school's democratic foundation and improve its administrative practice, current efforts to define the role of a principal and hire the right person are commendable.**

   Two interdisciplinary domain leaders, one in Arts and Humanities and the other in Math, Science, and Technology, have had statutory responsibility for teaching and learning since the school opened. The absence of other administrators has enabled the school to realize its democratic vision and maximize teaching and classroom ratios. This arrangement proved unwieldy almost immediately and led to the assumption of increased administrative responsibility by a board member concurrently on staff in the first year, a full-time teacher in the second year, a principal teacher in the third and fourth years, and two full-time, pro bono administrators (also trustees) in the fourth and current year. The clarification and delineation of overall governance and the definition of administrative responsibility (particularly its continuity over time) within the school is now an appropriately high priority.

   Narrative References: 20, 40, 41, 42, 47, 48, 49

2. **Broadly educated and talented teachers are devoted to the personal and intellectual development of their students. The faculty has been highly resourceful in response to challenging circumstances; however, the demands of energy and time so expended have contributed to exhaustion and turnover.**

   Francis Parker students profit immensely from close contact with and coaching by a young, energetic faculty who hold multiple degrees from highly prestigious liberal arts colleges and universities. An additional cohort of administrative and classroom interns, mostly from Harvard, reduce already low teacher-to-student ratios even further. However, the school's curriculum development cycle requires the constant generation of new materials, and student work is evaluated carefully and constantly. Teachers who are themselves products of rigorous and challenging programs hold out, in turn, high hopes for their students and the vision of the charter school itself. A unique curriculum, constant student coaching, and democratic decision-making at the school exhaust even the heartiest. Only a few founding faculty members remain at Francis Parker, and one reliable estimate places end-of-school-year faculty attrition in the Math, Science and Technology domain at nearly fifty percent. In contrast, three of four Spanish teachers, and eleven of twelve Arts and Humanities teachers intend to return for the 1999 – 2000 school year.

   Narrative References: 21, 22, 31, 32, 33, 34, 35, 36, 43, 44, 45, 46

Has the school been faithful to the terms of its charter?

1. **The school's mission—to be an "Essential School" that places students at the center of the learning experience—is clearly and successfully realized.**

   Learning at Francis Parker is based on a model of continuous student progress with an elaborate system of assessment benchmarks. All student work is classified as just beginning, approaching, meeting, or exceeding the criteria of one of the three divisions. Students with enough work that meets a division's criteria may elect to complete the "Gateway" exhibition in that division and move on to the next division. Every student in the school follows a Personal Learning Program acknowledging his or her unique needs and goals within this curricular model. Classroom activities and teacher expectations are similarly individualized, with teacher-centered instruction at a minimum and individual student projects and pursuits widely in evidence.

   Narrative References: 13, 14, 15, 16, 17, 18, 19, 34, 35, 36

2. **The school is committed to an "engaging and challenging interdisciplinary curriculum." This has been achieved within the Arts and Humanities domain and within the Mathematics, Science, and Technology domain in Division I. However, such a curriculum is less evident in the Math, Science and Technology domain in Divisions II and III *and* between the two domains at all Divisions.**

   Parker's original charter projected two interdisciplinary domains as described above, including a Spanish program integrated within the Arts and Humanities. Within two years, the Spanish program was extracted and reorganized to stand alone because repeated attempts to incorporate conversational language acquisition within a constantly changing humanities core had met with limited success. Higher-level mathematics in the upper two domains has been similarly reorganized in an attempt to meet its needs as a cumulative and sequential field of study. (Its integration at the pre- and early algebraic levels is more easily accomplished in Division I.) Curriculum development and assessment within the domains, as well as scheduling requirements, have limited academic pursuits across the domains despite the formulation of annual essential questions specifically chosen to transcend the boundaries of any particular discipline or domain.

   Narrative References: 5, 21, 22, 23, 24, 25, 26, 27, 28, 29, 37, 38

3. **The juxtaposition of two elements of the mission—"mastery of essential skills and areas of knowledge" on the one hand and "less is more" on the other—has led to significant curricular and instructional challenges:**

   - **the fragmentation and dispersal of historical skills and knowledge**

     Although history and social science are significant components of every interdisciplinary, topical unit in the Arts and Humanities domain, no standards exist to measure student learning within a division or at its Gateway. The development of interdisciplinary units referenced to an essential question, the annual alternation between domestic and international foci, and the increasingly frequent mid-year promotion of a student from one division to the next all operate to the detriment of systematic and chronological acquisition of skills and knowledge in this discipline.

     Narrative References: 4, 29, 30

- **the continual creation of new curriculum from new essential questions each year**

  One month of curriculum planning each summer allows teachers to generate a rough outline, with supporting materials, of one-half of the year's curriculum. At the time of the inspection, teachers were working frantically on an upcoming domain unit in Arts and Humanities to begin the next week. Not only were topics and activities still under development, primary sources and readings for much of the unit had not yet been identified. The constant, often last-minute, demand for new units and new materials does not allow faculty to refine and perfect curriculum after its introduction. Perhaps more importantly, the overwhelming burden of non-stop curriculum development is wearing and, according to some faculty, ultimately taxing on morale.

  Narrative References: 21, 22, 23, 24, 25

- **the need for coherent and incremental sequences of topics in each area of knowledge**

  The Parker curriculum is interdisciplinary, topical, and constantly changing to reflect the annual essential question selected by faculty and students. Student engagement, consistent with the school's philosophy, runs high in such a personalized and carefully integrated program. Without any intended judgment about the wisdom of one approach against any other, it remains clear that a template which illustrates and records student coverage in such a fluid environment is an organizational requirement. When combined with the rate of faculty turnover and the school's democratic reliance on a face-to-face program development, such a curriculum organizer seems all the more imperative to assess students' prior learning and their ongoing progress. The Math, Science, and Technology domain is preparing such an overview to insure adequate coverage of "essential skills and areas of knowledge." A reorganized Spanish department is undertaking a similar delineation but no document of this sort currently exists in the Arts and Humanities domain.

  Narrative References: 23, 24, 25

- **instructional, curricular, and organization consequences of mid-year Gateway transitions**

  The philosophical appropriateness of mid-year Gateways for students is indisputable within an instructional system espousing continuous progress. However, the practical ramifications of this policy are cumbersome at present. Students who move from one division to the next in such a non-repeating, non-cumulative course of study may miss valuable prior learning in the division they have entered. Parker, when possible, organizes new student sections for mid-year Gateway graduates but these often take on an accelerated character inconsistent with the heterogeneous, individualized instructional philosophy of the school. Dedicated teachers often design unique instructional materials and assessments for students so promoted, further burdening their already bulging set of responsibilities.

  Narrative References: 6, 7

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

Note: Given the prospective nature of this renewal question, no references are included to the school inspection and resultant narrative.

1. **The school has not adequately described how the performance objectives of its accountability plan for the next five years of its charter are aligned with the current State Curriculum Frameworks.**

   This is merely an issue of compliance with the structure of the Renewal Application guidelines. Francis Parker's results on the MCAS demonstrate successful instructional alignment in those disciplines currently assessed. A brief description of this alignment and/or further efforts to align the curriculum is requested with the new accountability plan.

2. **Constant efforts to evaluate its practice and disseminate its success throughout the educational community are an outstanding feature of this innovative and vigorous school.**

   Francis Parker has taken full advantage of its affiliation with the Coalition of Essential Schools and the membership on its board includes four people who have been involved in the Coalition. The creation of the Parker Teacher's Center and a steady stream of interns from nearby colleges and universities

have strengthened faculty ranks. Many visitors to the school, including invited educators asked to review the program, have given Parker substantive and ongoing feedback. Several longitudinal studies have been funded and are already underway to clearly and objectively gauge student learning using the philosophies and practices of the Coalition *ab ovo,* rather than as educational reorganization or reformulation. The excitement and sense of pride for students and faculty alike within this environment is palpable.

I. STUDENT

Criteria for Excellence guide student learning within and across each of the school's domains. These standards are carefully referenced in assignments, assessment rubrics, and daily discourse by faculty and students alike. Parents participate in individual student goal-setting, a Personal Learning Plan, and each student is thoughtfully supported as he or she moves through the school's three divisions toward transition Gateways. Gateways are Exhibitions of a student's work in one division and a demonstration of his or her capacity to move to the next. Progress toward individual and school goals is carefully monitored and elaborate narrative feedback from faculty as well as an extensive Portfolio of student performances is maintained and reviewed methodically by the student in collaboration with faculty members and parents.

ACADEMIC STANDARDS AND GOALS

1 Francis Parker Charter Essential School (FPCES) bases its overall school design, particularly its academic program, on the *Common Principles* of the Coalition of Essential Schools, an international network of forming and reforming schools dedicated to these principles. The Chairman of the Coalition (now based in Oakland, California, and led on a day to day basis by an Executive Director) is a trustee of the school and interim co-principal for the 1998-99 school year. The founders and pioneer faculty used these principles to generate a set of academic standards for students, *Criteria for Excellence*, in the school's first year. In particular, principle two of this document suggests formulating "simple" academic goals and that "each student should master a limited number of essential skills and areas of knowledge." "Thorough student mastery and achievement," rather than an "effort merely to cover content," drives all curricular decisions. This "less is more" approach is an academic hallmark of the school and its Coalition affiliates.

2 The Criteria for Excellence are clearly and coherently organized and stated, so much so that students themselves articulate academic expectations, and often discuss and adapt them to particular assignments, freely and frequently. Criteria are divided into twelve different areas with the most universal standards devoted to *Habits of Learning*. *Habits of Learning* are predispositions and behaviors associated with academic success such as intellectual curiosity, collaboration, involvement, and reflection. A series of academic competencies follow in the Criteria for Excellence, including *Writing, Reading, Oral Presentation,* and *Listening. Research* and *Technology* skills are also included. A number of discipline specific criteria complete the academic framework, including *Artistic Expression, Spanish, Scientific Investigation, Mathematical Problem Solving* and *Mathematical Communication.*

3 Criteria remain the same across Parker's three divisions (roughly grades seven and eight, nine and ten, and eleven and twelve). However, the school expects increasingly sophisticated student performance and constructs assignments and rubrics accordingly. *Holistic Rubrics* describe acceptable and exemplary work for each standard in each division, but Division II and III tasks are generally "more complex" and require "more autonomy and initiative" on the student's part. For example, a research project requires more and different types of sources. Analytic reading requires framing questions generated by the student rather than the teacher. Student "awareness of their own and others' work will increase." Relative novices are expected to expand and refine their sensitivities toward acknowledged models and experts in the various fields.

4 Explicit criteria in History and Social Science are absent from the Parker framework, although many standards associated with these disciplines appear across the broader Humanities Domain in the school's design. Research and analysis, so central to historical inquiry, is practiced extensively in a more interdisciplinary context. Exposure to multiple historical and humanistic sources is also most evident and supportive of historical comprehension and the development of multiple viewpoints and interpretations of historical questions. However, there is a limited requirement of chronological thinking and an appreciation of historical contingency and/or causation within the criteria as written. The school's own "chief measures" of academic progress, as conceived in its first year and refined thereafter, have paid considerable attention to the "recommendations of both state and national standards" with this exception to both the Massachusetts Curriculum Frameworks and the National History Standards (Revised Edition).

5 Teaching and Learning occur within two large interdisciplinary academic divisions, or ***Domains***, within the curriculum: Arts and Humanities (AH) and Math, Science, and Technology (MST). A modular schedule permits four two-hour intensive blocks in each of these domains per week. Additionally, all students have a Health and Adventure block weekly (for which Criteria of Excellence are just being prepared) and Spanish, formerly part of the Arts and Humanities block but now taught separately. Additionally, Math and Science, formerly taught as an interdisciplinary unit across all three divisions, are now taught independently in Divisions II and III.

ATTAINMENT AND IMPROVEMENT

6 Each division at Parker consists of a mixed age grouping of students roughly equivalent to two grades. The curriculum within that division cycles every two years and students are ordinarily expected to display a readiness to move into the next division by the end of a cycle. However, consistent with Coalition principle six, promotion follows a student's "demonstration that (he or she) can do important things" rather than the attainment of credits or time logged in a classroom. Consequently, students may move from one division to the next when prepared to do so, whether a cycle has been completed or not (or, hypothetically, after a second two-year cycle has begun in that division).

7 Individual student performance at Francis Parker is measured against detailed holistic descriptions of attributes that characterize work that is "just beginning," "approaching," "meets," or "exceeds" the standards of the Criteria for Excellence. Each year, students assemble a *Year-End Portfolio* for evaluation as the basis of their year-end report. This student work should demonstrate that the student is making progress in both domains appropriate with his or her needs and goals. When a student has amassed enough qualified work across the relevant standards to qualify for promotion to the next division, he or she assembles a *Gateway Portfolio*. A *Gateway Exhibition* celebrates selected work or a project based on his or her studies and is explained to advisors, faculty members, students, parents, and other interested community members. Gateway opportunities for all students exist at the end of the school year and in January. Students who successfully complete their Gateway at mid-year move into a new division with new classmates and a curriculum cycle already underway. Mid-year Gateways (there were 87 in 1998-99) allow students to progress at a highly personalized pace consistent with Coalition principle four, but present problems of scheduling and instruction not yet surmounted by the school.

8 Although the school's "emphases do not align with the subject and style of standardized tests" per principle two, their students have performed very well on the Stanford 9 Achievement tests. Because "students' average scores are so high to begin with" and because peer performance in the sending districts is also high, FPCES places a much, much greater emphasis on internal rather than external assessments. The school "does not expect to see improvement," based on data from other Coalition schools, but rather that "students will maintain their standing on these tests." Results from the sophomore class across a two-year period confirm this hypothesis. The average entering seventh grader scored in the 87^{th} national percentile for reading, the 81^{st} for mathematics, the 83^{rd} for language, the 86^{th} for science, and the 85^{th} for social science. Two years later, in May, 1998, the national percentiles had become 85^{th} for reading, 90^{th} for mathematics, 77^{th} for language, 80^{th} for science, and 86^{th} for social science. The overall percentile change for the two-year period was less than one percentile with normal fluctuations in the different sub-scores.

9 MCAS results from the baseline administration at grades 8 and 10 in May 1998 were at least as strong if not stronger than the Stanford 9 results. Students at FPCES outperformed students in 22 of the 25 sending districts, including all three districts (Acton-Boxborough, Groton Dunstable, and Harvard) which comprise 40% of the student body. Parker's weighted average for both grades 8 and 10, was 246 against Acton Boxborough's 243, Groton Dunstable's 239, and Harvard's 245. Only the Harvard average at grade 8, 247, was higher than Parker's 243. The grade 8 and 10 weighted average for all of the 25 sending districts was 237.

10 Preliminary Scholastic Aptitude Test scores (PSAT), precursors to performance on the College Board and Educational Testing Service's Scholastic Aptitude Test (SAT I), are well above the national average and consistent with other external assessment patterns at the school. The mean score for the current 'juniors' was 54.4 on the verbal portion of the test, 52.7 on the quantitative, and 54.7 on writing skills. Approximately one-quarter of the class had scores above 600 in each of these three reporting categories. Because standardized testing is prevalent in state assessment systems and in the college admissions process, the school has begun an SAT prep course for its juniors conducted after the school day by an outside consultant. All but four or five students have enrolled in this program.

11 FPCES measures academic progress through its elaborate system of rubrics and benchmarks toward criteria in each division. Every assignment is disseminated using these standards and related achievement criteria and subsequently returned to students with clear feedback against the standards, in both sequential and narrative terms. The sheer volume and detail of assessment provides students with an almost momentary sense of the progress being made through the curriculum toward the ultimate Coalition goal of "the student-as-worker," principle number five which ultimately "provokes students to learn how to learn and thus teach themselves."

12 Gateway expectations differ considerably from division to division and domain to domain. Eligibility criteria almost always involve the collection and organization of work that exhibits "meets" criteria against the standards. The number and type of assignments required of individual students depends upon the unique Personal Learning Plans they follow, but in general the quantity and quality of work increases with each divisional Gateway. In the Division Three Arts and Humanities Gateway, for example, students must submit 26-28 pieces of work evidence in the "meets" range. Additionally, they must design and execute a special project created from and synthesizing their personal Division Two academic experience

13 A belief in the student-as-worker and the teacher-as-coach results in classrooms that are hubbubs of activity. A Division II Science laboratory is awash in colored pipe cleaners as students attempt to model the sequential steps of cell mitosis. A range of Biology textbooks, from lower-level high school to standard college survey, is available for student consultation before they begin the complex exercise in lab table groups or at any point along the successive stages. Some students combine and recombine their pipe cleaner DNA strands swiftly and others have not yet begun the model building when class concludes. They will continue their genetic explorations at a more comfortable pace at home or in class the next day.

14 Budding Division I aeronautical engineers design paper airplanes in groups of four, rotating responsibilities as builders, recorders, and measurers. Optimal distance is the aim of the design development, and careful records are kept and design adjustments made between each of four consecutive 'flights" with bystanders at peril! At project's end, student groups draw conclusions about the most effective design and then draw scientific inferences about the factors appearing to influence flight based on their limited results. In addition to this combined mathematics and physics activity, a Challenge of the Week, an interdisciplinary math problem, is prominently displayed in the classroom.

15 Students in a Division III Arts and Humanities classroom conclude the Prologue to Shakespeare's *Julius Caesar*. The teacher invites several of them into the center of the classroom in a 'fishbowl' format. Other students seek their interpretations of the just-concluded scene and extensive student-to-student discussion takes place. One boy tires and a girl taps his shoulder and takes his place. In time, a new interpretive question emerges and an entirely new team moves forward to answer questions and guide discussions. The teacher helps occasionally with question clarification, keeps track of time, and shifts interpretive focus when appropriate. The questions and the responses emanate almost exclusively from the students.

16 Most students relish the responsibility and freedom afforded by the Coalition principles, but every classroom exhibits a handful of students who are less engaged than their peers. This persistent minority, estimated by the school to be between ten and fifteen percent, has yet to engage with the school's predominant "student-as-worker" metaphor. Motivation in a system without grades seems to peak as a logical Gateway date approaches (the end of the second year in a division) and wanes immediately thereafter. (The next Gateway is eighteen to twenty-four months away.) Most students, however, make steady progress toward Gateway requirements and many prefer to accelerate toward a mid-year, rather than year end, transition.

INDIVIDUAL NEEDS AND DEVELOPMENT

17 95% of all FPCES parents/caregivers report that their child has developed a "caring relationship" with at least one teacher or staff member. Extended class and school contact with a small, deeply committed faculty explains, in large part, this extraordinary survey result. Additionally, each day begins with a fifteen-minute advisory where faculty members discuss a host of issues individually and collectively with their small group (ten to twelve) of advisees. Every new Division I student at Francis Parker, in addition to small classes and an advisor, undertakes a *Directed Studies* program to help internalize the school's distinctive philosophy and learn its basic procedures and practices.

18 The Directed Studies curriculum also serves the institutional purpose, through its many activities and skill development exercises, of identifying those students who may have previously undiagnosed or unreported special needs. The school has a four-fifths time Director of Student Services, and one other administrator and two teachers are certified in Special Education. The total Special Education population at FPCES is under 11%. While no student requires constant support, individual counseling and instruction is available as warranted. The school has also begun to consider ways to provide all faculty members with additional strategies for a more effective response to these students' needs. The Director of Student Services believes this training is necessary, particularly the development of a broad repertoire of instructional strategies for such a heterogeneous student body.

19 Each student, in consultation with his or her advisor and parents who are considered "essential collaborators", and possibly with support staff and administrators as well, develops a Personal Learning Plan (PLP) each school year. The PLP self-identifies student strengths and sets a series of academic and personal goals with a number of associated attainment strategies. PLP's are complemented by Parker's quarterly progress reports from all domain teachers, two of which are discussed at face-to-face meetings between parents and advisors. "Satisfactory" progress for a student consists of three elements: completion of required domain work, fulfillment of the PLP, and demonstrated progress toward the Criteria of Excellence, particularly the Habits of Learning, as ultimately expressed in their portfolios.

20 Each individual student's personal and intellectual development is addressed through these teacher-student ratios, special programs, support staffing, and carefully and collaboratively constructed monitoring systems. Concomitant attention to the development of *civitas*, a broader community ethos transcending individual students, has proven more elusive for the school. Each annual report and each site visit has noted the tension between individual freedom and group responsibility, occasionally manifesting itself in discourteous and sometimes dangerous behavior. Again, an irresponsible few may blemish the good deeds and attitudes of the many. While eating a luncheon generously prepared by volunteer parents, for example, visitors to the school hear a string of bellowed unpleasantries. Without an adequate community meeting space and with students jammed into the front hallway of a poorly ventilated, somewhat stifling physical

facility, the school has been unable to establish the tone of civility and respect in which it believes so profoundly. The development of a "Rights and Responsibilities' contract for all students, as well as the increased activity of a Community Congress, promises to address this issue more directly.

II. CLASSROOM

Teaching and Learning at FPCES are conducted within several broad interdisciplinary domains, guided in all areas by a unifying "essential question" for the entire community and the entire school year. Teachers spend a month each summer designing an entirely new project-based curriculum for the following school year, based on the question chosen by the community the previous spring, and keep apace of interdisciplinary expectations all year long. Materials for each unit in each domain are assembled from a broad, eclectic range of resources and presented in lively, engaging instructional formats. Classrooms are comfortable, informal, and brimming with interesting displays and lots of books and equipment. The campus-wide resources, in contrast, are limited with no effective library space and an underutilized computer system.

CURRICULUM AND ASSESSMENT

21 Instruction across both of the major Domains, Arts and Humanities and Math, Science, and Technology, as well as instruction in Spanish and Health and Adventures, is organized around an *essential question*, chosen from a range of proposals deliberated by the entire school community the previous spring. Each essential question for Parker's first four years enabled sweeping interdisciplinary investigations and coherent discourse across the specific domains and across the school's three divisions. The new school community in its first year chose as an essential question, appropriately enough, "what is community?" The second year question addressed change and the third year balance. This 1998-99 question is "where are the patterns?" Over the summer, the faculty meets for a month to design projects within each domain and across all domains to allow students to pursue their thinking and learning about this question in a coherent way. Not all projects and not all assignments fit neatly into the framing question—more traditional instruction ensues in mathematics and Spanish, for example—but every subject, domain, and the entire school reflect on the question systematically and frequently.

22 Major themes and topics are new in each domain each year, but the essential skills and concepts identified in the Criteria for Excellence are constant. Both AH and MST domains also organize teaching and learning in two-year cycles to allow students adequate time to prepare to 'gateway' into the next division. Each Domain in each division designs its own units that reflect the essential question in consideration of the division's rubrics and standards, as well as any external frameworks such as the Massachusetts Curriculum Assessment System in grades 8 and 10. Several variables in several domains across several divisions make curriculum development a complex and time-consuming enterprise at FPCES. United States and global studies alternate in the AH two-year cycle and MST must consider both life and physical sciences in some order. Each student has a PLP that directs his or her learning and the entire school follows pathways toward the essential question. Consequently, the school's first four years are steeped in continuous curriculum development, with little or no opportunity for content recycling until the first class graduates in 2000.

23 The notion of an annual essential question, when combined with the school's decision to create projects "an inch wide and a mile deep" consistent with its "less is more" metaphor, has led to some professional tension at the school. In the AH Domain in particular, Spanish teachers attempted to conform instruction to the essential question and interdisciplinary unit topics at the expense of a systematic and cumulative approach to language acquisition. The domain soon decided to segregate language instruction. A newly configured Spanish department still addresses the annual essential question in its course designs, but now structures language teaching and learning in a more sequential, less topical approach. The current Spanish program continues to take place in a culture-rich, but culture-specific, environment, but much more target language use is possible and students are more actively engaged in language development

24 The MST domain has also reorganized around the question of sequential and cumulative instruction against topical and project-based units. In particular, mathematics instruction beginning with Algebra (early Division II) was constrained by interdisciplinary projects whose mathematical applications, in tandem with specific scientific and technological topics, did not follow a logical sequence of instruction. Division II mathematics and Division III mathematics (in its first year) are now taught independently. However, with respect for the strong interdisciplinary potential of mathematics and science at some junctures and the learning preferences of individual students, advanced algebra in Division III is taught in two 'styles' from different textbooks, one an 'applied, hands-on' approach and the other more 'traditional.' Units of instruction in mathematics are now reorganized using the four strands of the Massachusetts Curriculum Frameworks.

25 Essential questions, two-year curriculum cycles, and project-based instruction remain to guide the science curriculum, but the science faculty has taken an additional step to develop a content grid to insure that, across a cycle or a division, students have covered the information necessary for subsequent scientific investigation. This content checklist, in both physical and life sciences, serves as a supplement to the schoolwide FPCES Standards for Scientific Investigation. These standards measure students' ability to frame scientific questions, conduct an investigation of the question, evaluate scientific observations, arrive at an explanation, communicate results, and reflect on their importance and broader implications.

26 The Arts and Humanities Domain uses the annual essential question to generate an appealing and stimulating range of units for each division. The 1998-99 Division I AH Framework has a global focus, with half of the year devoted to ancient civilizations and half to more contemporary societies. The four units further address specific questions emanating from the 'patterns' focus for the year. They include:

1. What do people need?
2. What do people create?
3. Can we all just get along?
4. What do people do when things get disrupted?

27 Each unit skillfully weaves 'strands' of investigation together toward a culminating activity or exhibition. An initial study of both Paleolithic and Neolithic civilizations includes the movie, *The Gods Must Be Crazy,* as well as the *Odyssey* and Edith Hamilton's *Mythology.* Artistic investigation introduces ceramics, the storage vessels of the first riverine city-states, and students learn basic hand-coiling. (The absence of an art studio and a significant number of practicing artists on the faculty limits most work in this discipline to its introductory dimensions.) The second unit compares belief systems and cultural creations in Greece and dynastic China. The third unit examines a culture that doesn't get along (this unit was just beginning and still under development at the time of the visit), as evidenced by Shakespeare's *Romeo and Juliet* as well as some that do, a kibbutz and the !Kung Bushmen of the Kalahari Desert The fourth unit examines the disruption of epidemics from the Plague to AIDS and includes possible reading from Chinua Achebe's *Things Fall Apart* and/or *The Diary of Anne Frank.*

28 Assessment activities are designed to accompany this humanistic approach in similar interdisciplinary fashion. The Division I Arts and Humanities students present as their first unit's concluding project a Parker Museum of Ancient Cultures. Each student chooses an 'ancient culture' and prepares an exhibit including a research process paper of its 'major aspects' which includes a summary of the research process itself. Each student then investigates and reports on a specific aspect of the culture, creates a "clay piece" representative of the culture and organizes both written reports and the artifact for presentation accompanied by a curator's statement. All division students take a culminating "field trip" to the museum and 'reflect' on the entire exhibit. Similarly, a Division II unit culminates with the student design of a modern charter school patterned after one of the classical Chinese 'schools' of thought: Taoism, Buddhism, and Confucianism.

29 Every assessment takes full advantage of the student's individual interests and creative potential. Instructions for successful completion of the project and descriptions of model work are clear and copious, suggesting timetables for completion but allowing individual students and student groups to organize study and investigation in the most individually appropriate ways. Of particular note is the interdisciplinary thinking and research required of students within the domain. Content and skills in literature, art, and history merge seamlessly throughout the unit and in the culminating activities. However, in the absence of discrete History standards, assessment of important historical skill development does not take place. There is no requirement of historical depth or change in the museum rubric, and no expectation that students will explain a civilization's evolution before or beyond a particular point in time. Similarly, the design of a twentieth-century school from centuries-old Chinese philosophies totally decontextualizes student understanding of a great civilization.

30 The AH curriculum's historical shortcomings perhaps pale before its interdisciplinary strengths, but the lack of chronological awareness is present in the design of both project units and assessments. Students complete a study of modern Northern Ireland without first learning of the historical antecedents contributing to the current 'troubles.' Year-End and Gateway Portfolios contain precious few products among many with a significant historical component, let alone explicit historical goals. A Division I student portfolio, for example, contains an elegant real estate brochure for the Mesa Verde pueblo, with elaborate freehand design, well-articulated persuasive writing, and minimal historical information. Similarly, an essay on South Africa addresses the recent racism of apartheid but demonstrates no understanding of its historic roots.

TEACHING

31 Faculty members at FPCES are broadly educated with a wide range of professional experiences, from the National Outdoor Leadership School to entrepreneurial business opportunities. The two schools most frequently represented on the faculty are Brown and Harvard, not surprising given the school's formal intern relationships with Harvard, Antioch, and Lesley and the current co-principal's tenure at Brown and Harvard. Many other liberal arts colleges are represented in the faculty ranks, including Wesleyan, Middlebury, Williams, Washington University, Penn, Rutgers, the University of Virginia, Columbia, and the University of Chicago.

32 The liberal arts proclivities of the faculty lend themselves well to the several Coalition principles directing professional practice, particularly the eighth. Teachers should "perceive themselves as generalists first…and specialists second." The ambitious breadth of the curriculum and the wide range of resources incorporated into project units does not permit any individual teacher to cast himself or herself as "experts in but one particular discipline." Teacher learning progresses as surely as student learning in many units and faculty are encouraged to become "scholars in general education." Teachers continually adjust their contributions and coaching opportunities within this team framework.

33 The school is increasingly aware of requisite subject-specific expertise within a domain, resource persons who can design materials and units for colleagues as well as advise them about good self-education materials and formal opportunities in other fields. For example, FPCES hired its first chemist for the 1998-99 school year as a Division III MST program began. Another recruiting initiative has begun to bring a formally-trained, practicing visual artist to the school to expand the artistic component of AH units beyond the introductory level.

34 To the extent that Coalition principle eight requires teachers to broaden their education and expand their pedagogy, principle nine caps total student load at eighty, often halved by the presence of two teachers in each classroom plus the occasional intern or parent volunteer. Consequently, the frequent, detailed evaluation of student performance so

characteristic of the school is less burdensome, with a total evaluation load for any one assignment in the range of twenty-five to forty students, rather than a figure four or five times as high in many traditional high schools. This principle also proposes "substantial time for collective planning by teachers," realized by FPCES with one of three two-hour intensive blocks free for a domain team each day. Early dismissal after lunch on Wednesday provides additional time for faculty meetings and curriculum planning.

35 Much has already been noted about the interdisciplinary, self-paced projects at the heart of the Parker curriculum. Students have a significant choice of activities or approaches to activities on almost every assignment. For a culminating activity in a mathematics unit on logarithms, for example, students may either summarize their understanding of logarithms by creating a study sheet for a quiz *or* designing a quiz itself complete with answer sheet and detailed response paradigms. Two to three hours of homework a night to accomplish challenging tasks like these is not unusual.

36 More traditional instructional approaches are also used from time to time. A Division I AH teaching team uses fashion design as an artistic entrée into human 'patterns' of shelter across 30,000 years of history. Clothing's function is weighed against its structure, or style, from fur-wearing Upper Paleolithic hunters to 1985 fashion on a handout and in class discussion interspersed with faculty explanation and instruction. Class conversation ends at the Renaissance as students are asked to hypothesize about life in the Renaissance, the topic of the just beginning interdisciplinary unit, from the clothing worn by the elite of the era.

RESOURCES

37 Teachers scavenge for materials and many photocopies (such as the aforementioned costume design timeline), handouts, and non-textbook sources characterize the classroom library. Trade books and monographs characterize commercial materials in the AH domain and a range of textbooks serve as basal sources and background reading in the MST domain. Classroom shelves and tables are stacked with these materials and walls and white boards are filled with posters, maps, charts, and other illustrative materials. Omnipresent are the brightly-hued cardboard posters which enumerate, area by area, the Criteria for Excellence which frame and reinforce learning constantly.

38 Well-stocked, attractive classrooms invite purposeful intellectual activity, but in a relaxed, informal manner. Many students are on a first-name basis with their teachers, consistent with the principles of teacher-as-coach and co-learner, and the overall institution is relaxed enough to boast a school dog, Blue, often found lounging in a classroom easy chair or rug. Faculty members and students also enjoy their time with the school baby, Zander, when his mother is at work in the Teachers Center.

39 The now-defunct Fort Devens Base Library gave a collection in excess of 20,000 volumes to Francis Parker, but the school has nowhere to display the collection until it relocates this summer. Books are now 'shelved' in subject-area boxes in a large room in the basement. FPCES has a highly favorable ratio of computers to students, as well as a computer specialist on staff, but limited usage was made of these resources during the visit. (This was probably a direct function of the inspection calendar. The visit to Francis Parker followed a semester break and vacation and many units were just beginning. Computer research and paper preparations logically occur later in a unit cycle.)

III. SCHOOL

The founders' vision of a community-based school has led to collective decision-making whenever possible. However, a faculty fully engaged in student lives and curriculum development has found this approach less and less manageable and the school presently seeks its first full-time head. Meanwhile, faculty and founders alike pursue their mission as an 'essential school', and Parker already serves as a training ground for new teachers and administrators. Parents appreciate the school's innovative and engaging philosophy and support its mission in a host of ways. Longitudinal research projects about teaching and learning in the school's unique style are also underway and, isolated geographically from a community of any size, the school systematically develops ties with institutions and organizations in neighboring cities such as Fitchburg, Worcester, and Boston.

ORGANIZATION AND MANAGEMENT

40 In the words of one of its founders, Francis Parker Charter Essential School had to "form before its decisions could be made." To honor the requirements of a community-based institution and to proceed democratically, the first faculty of the school, in concert with the founders, developed a system of governance for the school in much the same careful and prudent way that the academic program itself evolved. Additionally, a frugal eye was turned toward "reduction or elimination of some services" (Coalition principle nine) in order to maximize teaching and planning. In particular, administrative positions were minimized and administrative decision-making shared collectively whenever possible.

41 Almost four years into the school's history, its current co-principal chuckles in hindsight as he remarks that "we're inventing ourselves as we go and have this notion that everyone should be in on everything." This strong democratic inclination has worked well in some decision-making areas and not so well in some others, always consuming precious faculty hours. During this same period, the leadership structure of the school has changed annually. Initially, the two domain leaders shared leadership for the school's academic program in consultation with several founders who were also faculty or staff members. By the second year, a Principal Teacher was appointed, but both teaching and administrative responsibilities were difficult to carry and to balance, and he returned to teaching at the end of the year. Husband and wife co-principals, also trustees of the school, have come out of retirement on a *pro bono* interim basis in the 1998-99 school year and have brought stability and continuity to the school's leadership as experienced school leaders. Additionally, they have begun a college counseling program for current juniors and are active participants in the process to select a single head of school for the 1999-2000 school year and beyond.

42 Despite these successive changes in the description and structure of leadership at FPCES, faculty morale has remained high although energy has lagged somewhat because of the time consumed in decision-making and rethinking the decision-making algorithm itself. Throughout the four-year period, the role of the respective domain leaders, analogous perhaps with that of academic deans or curriculum coordinators at other schools, has remained constant and vital. Their primary responsibility has been the identification, nurturing, and evaluation of an exemplary faculty.

FACULTY AND STAFF

43 A constantly growing school, with one new grade a year and a new division every two years, serves itself well by identifying seasoned and talented faculty. In addition to the broad range of talents evidenced by this faculty with a liberal arts cast, they boast an average of seven years in the classroom. The Arts and Humanities Domain faculty average eight years of experience in all schools and two and one-half years at Parker, including four founding faculty members. The Math, Science and Technology Domain faculty averages six and one-half years of total experience and two years on average at Parker. Only two founding teachers remain, and some estimates place anticipated 1998-99 attrition in this domain as high as fifty percent. Eight teachers, almost one-quarter of the faculty, have taught for more than ten years.

44 Professional development, particularly in an interdisciplinary, team-taught environment, is constant. Beyond the preparation of project units and their requisite background, all teachers are paid for one month of summer curriculum development work, often interspersed with visiting consultants. The school also affords *Portfolio Roundtables* for all faculty, a chance for individual teachers to pose reflective professional questions and receive feedback from colleagues. Visiting professors from Harvard and New York University have also evaluated the academic program during site visits. Two longitudinal studies of the mathematics, science, and technology curriculum have been initiated, one at the middle school level and one funded by a publisher to study "skills, attitudes, and future choices" of students in an applied mathematics program. In the 1998-99 school year, five interns were working at the school as well as one half-time intern principal.

45 Teacher evaluation is a primary responsibility of the Domain Leaders. Students also evaluate each of their teachers annually and, at the teacher's request, each semester. "Interventions," or mediations by a Domain Leader or an invited colleague, are also used to resolve teacher-to-teacher tension which may easily arise with such intimate teaching arrangements. Parker teachers are trained in the role of "critical friends," offering "warm" and "cool" feedback to colleagues informally or through more formal and structured *Tuning Protocols* and other forms of structured dialogue**.**

46 Daily meeting and planning time is built into the FPCES daily schedule, with each division/domain teaching team free for one two hour block. Wednesday afternoons are also available, because of early student dismissal, for more structured planning and meetings. Generally, a school week includes one domain meeting, one division meeting, and two days with a teaching teammate. The school's required personalization of instruction, frequency and detail of assessment, and originality of curriculum force teachers to devote considerable time to planning and collaborating beyond the eight available hours, however. Several teachers laughingly comment that they carpool together to the school from Cambridge in order to fine tune the academic affairs of the upcoming day on the way out to school and debrief them on the way home.

PARENTS AND COMMUNITY

47 Parents are extremely positive about the school for many reasons. First, its distinctive approach was carefully and thoroughly explained to them and their children before they entered the lottery. Secondly, and certainly more importantly over the student's time at the school, communication about his or her progress is constant and parents are invited to play as active a role as they wish as *essential collaborators* in their children's education. 'Friday Announcements,' which often run to six pages, detail the events of the week for parents unable to visit school and set out upcoming events and calendar items clearly. Parent Forums are held every four to six weeks and almost always include a professional presentation and breakout discussion on an important adolescent or educational issue. Four or five times a year, Café Wednesday offers performance and readings of original work for everyone in the community.

48 For their part, parents support the school in a variety of ways. One mother organizes a carpool for thirty students, almost ten percent of the student population, whose end of day schedule is staggered to include meetings, tutorials, sports, and other activities. Other parents type the notes of trustees' meetings, hold bake sales, run craft fairs, and sponsor T-shirt design contests, all to raise money for the Parker Essential Fund as a tangible way of saying thank-you for the time and care invested in their child's education by the faculty. Even with this parental support, though, the current co-principal, also a trustee, must still raise donations in the six-figure range for the school annually in order to meet its budget.

49 The geographic isolation of a school on a remote onetime military base, in turn located in farm and orchard country, has not deterred Francis Parker from building its own network of professional and community alliances. Beyond the already mentioned relationships with educational organizations and institutions familiar with the Coalition of Essential Schools, the school sends its students to a local nursing home, to math classes at Mount Wachusett Community College, and to the Fitchburg Art Museum. In this same spirit of community outreach, it hopes ultimately to enrich an already lively and intellectually provocative campus with more socioeconomic and ethnic diversity. In so doing, Francis Parker will "honor diversity and build on the strength of its community" (Coalition

principle ten), though a principle that has thus far proven difficult to implement in such a homogeneous setting without targeted recruitment efforts.