
What Does Private Management Offer Public Education?

by

F. Howard Nelson & Nancy Van Meter

I. INTRODUCTION

Education management companies seeking to operate public schools promise results to beleaguered districts and communities. They offer to bring private sector efficiency to the operation of schools, a package of instructional programs, and technology to improve student achievement. Experience thus far demonstrates, however, that these promises are just that—promises without demonstrated improvements in achievement or efficiency.

Nonprofit schools dominate private K-12 education. For-profit private schools find it tough to compete against schools that seek no profit, rely heavily on philanthropy, and usually have

[N]o independent evaluation of student achievement in schools managed by companies has shown superior performance, and some independent evaluations found failure.

religious affiliations. Education management companies such as Tesseract, Nobel, and SABIS own and operate private schools, but contracts between private nonprofit schools and management companies are rare. Nevertheless, nonprofit private schools operate in a marketplace relatively free of government regulation, the same condition in which most education management companies now operate. This article briefly reviews the behavior and track record of

nonprofit private schools, since it offers clues about the potential of educational management companies for public schools.

Education management companies made their first foray into public schools by contracting directly with school districts to manage existing public schools. Most public school districts had little experience contracting with management companies, except for support services—transportation, food, and custodial services. The experiment with these "contract" schools was dealt a near fatal blow with the terminations of several contracts. For example, from 1991 to 1995, Education Alternatives, Inc. (EAI) managed one public school in Dade County, Florida, nine public schools in Baltimore, Maryland, and all of the public schools in Hartford, Connecticut. During this time, EAI became embroiled in controversies over misrepresented student test scores, inflated attendance figures, disputes over expenses, and violations of federal and state special education

*F. Howard Nelson is Senior Associate Director of Research for the American Federation of Teachers, has a M.A. in Economic. and a Ph.D. in Educational Policy Studies from the University of Wisconsin. Dr. Nelson is principal investigator of the National Charter School Finance Study, a research contract award to the AFT Education Foundation by the US. Department of Education. Nancy Van Meter is Associate Director for the **Department** of Organization and Field Services America? Federation of Teachers. She received her B.A. from Princeton University. Ms. Van Meter coordinates the AFT's research on the growing role of for-profit companies in providing K-12 instructional services. She has 20 years of experience working with education and health care unions and community organizations.*

laws. Soon after the controversies arose, the Baltimore contract was cancelled. Hartford terminated its contract. Dade County chose not to renew.¹ School districts cancelled other controversial experiments with private education management companies as well. A contract with Alternative Public Schools to run a school in Wilkesburg, Pennsylvania, was not renewed.² The Minneapolis School Board chose not to renew a contract with Public Strategies Inc., a small education management consulting firm performing the functions of the superintendent. Currently, the only company that contracts directly with school districts to operate public schools is Edison Schools Inc.

Despite the generally poor performance of privately managed public schools, the charter school movement gave new life to the concept. State agents "chartered" new or converted schools, offering families options in addition to their neighborhood public school. Varying by state, authorizing agents could include school districts, state departments of education, state charter school boards, universities, and municipalities. Charter school legislation generally grants greater fiscal and educational autonomy from school district and state regulations in exchange for greater accountability for student achievement. One philosophy underlying the charter school movement is that competition will force school districts to improve generally.

Education management companies increasingly play a large role in charter schools. Typically, charter schools are nonprofit institutions, but they may contract with private education management companies. Some companies even help create the nonprofit school and its governing board. By the 1999-2000 school year, 36 states and the District of Columbia had enacted charter school legislation, and private education management companies operated about 13 percent of the resulting 1,500 charter schools.³ In Michigan, for example, researchers estimate that at least 70 percent of charter schools during the 1998-99 school year were involved with private education management companies.⁴ Moreover, since companies operate

charter schools averaging three times larger than nonprofit operators, the percentage of charter school enrollment in management company schools is much higher than 13 percent.⁵

Private education management companies involved with charter schools include Edison Schools Inc., SABIS, Advantage Schools, Tesseract Group (formerly EAI), the Leona Group, Nobel Learning Communities, Beacon School Management (formerly APS), Mosaica, National Heritage Academies, and others. Most are "small cap" companies and few are publicly traded. Many are backed by start-up money from wealthy individuals and venture capital firms who view education as a largely untapped and potentially lucrative market.

Though private management of charter schools is on the rise, the goals of parents, students, and the broader community are not necessarily furthered by the incentives for education management companies created by charter school legislation. The initial charter school concept envisioned small groups of teachers and parents starting innovative, experimental schools. Charter school laws, however, have created an attractive and protected environment for education management companies. These schools, and their management companies, are free from the supervision of elected officials and most regulations. In nearly all states, charter school teachers are at-will employees and often need no certification, creating a risk of lower quality education. "Educational accountability" as required by legislation remains a promise rather than a reality.

This article begins by reviewing material from Wall Street analysts and the business press about the potential public education market. The next section rebuts the myths of high-cost, dysfunctional public schools perpetuated by advocates of private education management. Finally, the article discusses potential contributions of private management and the track record to date of education management companies.

II. WALL STREET AND K-12 PUBLIC

EDUCATION

Wall Street analysts and educational entrepreneurs have promoted the education industry as an emerging opportunity for investment, where education can be improved, costs slashed, and profits gained. They tout the potential to transfer dollars from public coffers to private companies. The message is simple. "We believe this system will evolve from a failing, government-run monopoly with little accountability and, by definition, no competition, into a market-driven system that competes on price and quality."⁶ Proponents of the K-12 education market, such as the authors of the "Education Industry Fund," believe that for-profit investment in public education will reap not only financial benefits for investors, but academic benefits for students as well. "If existing schools can't take care of students, the marketplace will."⁷

A number of Wall Street firms such as Montgomery Securities, EVEREN Securities, and Smith Barney put forward a case for investment in the education sector.⁸ They offer the following arguments for investing in K-12 education:

- Very little K-12 spending goes to the private sector;
- The revenue stream in K-12 education is predictable and guaranteed;
- The demographics of the sector show continued growth;
- Education never goes out of style; in fact, education is counter-cyclical. In poor economic times, education is perceived to be even more important;
- Dissatisfaction with public schools, as evidenced by charter schools, vouchers, and other alternatives, encourages shifting public money to private providers; and
- Price flexibility allows providers to charge more and generate higher revenues.

Although several investment banking firms are attentive to opportunities in K-12 education, the Wall Street firms have failed to convince large numbers of investors to get into this arena due to some formidable obstacles. The first problem is that investors have very limited vehicles in which to put

their money. Less than two dozen education management companies now operate schools. Few of them have ventured into the public capital market with an initial public offering (IPO), despite the most bullish stock market of all time. Only Edison Schools Inc. (EDSN), Tesseract Group (TSST), and Nobel Learning Communities (NLCI) are publicly traded companies. Edison's IPO in November 1999 drew a lukewarm response, listing at \$18 per share, well below its expected offering price of about \$25 per share.⁹

Secondly, investment in for-profit education is perceived as high risk. A national survey of venture capitalists conducted by KnowledgeQuest Ventures in 1999 reveals that while potential investors are cautiously interested in the entire education industry, they have the lowest level of interest in pre-collegiate education, including K-12 education services.¹⁰ Investors viewed education management companies in K-12 education as riskier than the post-secondary and corporate training sectors.¹¹ A 1998 KnowledgeQuest survey also found investors deploring the lack of good investment opportunities in education management, noting that many companies lacked good business plans and suffered from poor administration.¹² Clearly many of the education entrepreneurs in the K-12 market have not convinced the investment community that they will deliver a strong return on investment.

Not surprisingly, the motives of investors diverge significantly from those of promoters. KnowledgeQuest asked venture capitalists to rank factors influencing their investment in education. Return on investment ranked first, tied with size and growth rate of industry.¹³ Concern about the state of U.S. education ranked last.¹⁴ While some venture capitalists profess altruistic motives, improving education is not part of their business objective, according to KnowledgeQuest.¹⁵ Given the ranking of motivations, it is hard to see how education management companies, that must answer to investors with very different goals, will contribute to quality of education.

III. WHAT WALL STREET SHOULD KNOW

ABOUT PUBLIC (AND PRIVATE) EDUCATION

Wall Street analysts offer a simplistic view of spending in public education, generally arguing that market efficiencies will tame ever-growing spending increases, lead to better service, and deliver a profit. While citing a rise in spending, analysts ignore well-known reasons for the increase. They rarely note the significant impact of special education on the cost of public education. In addition, they disregard data showing that private school costs, tuition, and teacher salaries have escalated at a much higher rate than similar public school costs. While accused of runaway costs, public K-12 education's share of the Gross Domestic Product (GDP) was 4.4 percent in both 1972 and 1996.¹⁶ Wall Street critics fail to recognize that education labor costs, which remain aligned with the costs of other workers in the U.S., have barely outpaced inflation. They also underestimate demanding teacher workloads. Moreover, investors and entrepreneurs, who blithely dismiss U.S. public education as dysfunctional, ignore the still-vigorous debate over the effectiveness of public education in this country.

A. THE LIMITED POSSIBILITIES OF COST CONTAINMENT

Some analysts claim that the demand for cost containment drives growth in private management of education - a concern that is second in importance only to improving student performance.¹⁷ Highlighting seemingly low tuition, policymakers and Wall Street analysts often compare existing private schools to public schools, and look to these comparisons for cost-effective answers to economic pressures. Private education, however, has struggled with cost containment even more than public education. In fact, the cost of private education has escalated at a higher rate than the cost of public education during the past three decades. Adjusting for inflation, while public school spending increased 155 percent since 1964, private K-12 education costs rose by 242 percent.¹⁸ From

1987 to 1994, private school tuition escalated at a rate double that of public school expenditures.¹⁹

Why have traditional private schools been just as unable as public schools to escape the rise in inflation adjusted costs? Both the private and public education sectors are quintessentially labor-intensive industries and are unlikely to increase productivity at the same rate as technology-driven industries. W.J. Baumol's "theory of unbalanced growth" helps to explain why education costs increased faster than inflation even with no apparent productivity gains.²⁰ Teachers and other education workers belong to one giant labor market composed of all workers in the economy. This competitive market yields a single wage for similarly skilled workers who are free to move across all sectors of the economy. Therefore, the costs of labor in education depend on the productivity and cost of labor in the economy as a whole, rather than productivity in a particular sector. The "unbalanced" aspect of the theory is that some sectors of the economy that are unable to benefit from productivity growth will diminish drastically in size or disappear-those sectors still provide price-sensitive goods or services. However, education is a critical sector, the key to personal and national wealth. Therefore, demand for it is not sensitive to price. Thus, according to the theory, costs *inevitably* increase more rapidly than capital- and technology-driven sectors of the economy.

Management companies champion bringing efficiency to public education, but no company bids for a charter school or a contract asking for less money than other public schools receive. Instead, management companies promise more education-longer days, longer years, and additional coursework-for the same dollar amount. As suggested in the next section, however, productivity gains do not finance these promises. Instead, the business models of most education management companies generally do not include significant and expensive services that public schools must provide.

B. WHERE THE MONEY GOES

Do existing private schools provide the same or better education at a lower cost than public schools? If so, private management may be able to bring the same cost efficiencies to public education. However, if public schools taught the same students and provided the same services as private schools, average public school costs would look smaller and resemble those of private schools. If one accounts for the additional services that public schools must provide, the private schools with the best reputations, such as private-order Catholic high schools and nonsectarian schools, spend much more per pupil than public schools.²¹

Few existing private schools provide special education, federally funded compensatory education such as Title I, transportation (an extra charge or provided by public schools), government subsidized school lunch programs, vocational education, or desegregation programs. In public schools, these costs amount to more than 40 percent of the budget, clearly distorting public-private cost comparisons. Special education expenditures increased from 4 to 19 percent of spending between 1967 and 1996.²² In one study, spending on regular public education, excluding special education and programs for low-income students, declined from 80 percent to 57 percent of total spending from 1967 to 1996.²³ Forty percent of new inflation-adjusted funds went to special education over the same time period, nearly double the amount of new money flowing to regular education. Another study reached similar conclusions about the impact of special education on public school spending in New York state.²⁴ On the other hand, the much larger real increases in private sector education spending over the same 25-year period have been devoted to reducing class size and raising teacher salaries.²⁵

C. EMPLOYEE COSTS AND WORKLOAD

Some critics charge that salaries for teachers are too high, the benefits too generous, and the work week too short. They see excessive employee costs as part of the so-called efficiency problem in public schools. Most education management

companies have argued that public school teachers are overpaid, underworked and immune from market forces. Companies hire inexperienced teachers and pay them less, avoid state teacher retirement systems, increase work demands by lengthening the school day and school year, and often increase class size.²⁶ The early results from management companies' efforts to reduce salaries and increase workload can be seen in high levels of teacher turnover, which likely diminishes staff quality.²⁷

The data on teacher compensation and workload in the United States, as compared to teachers in other industrialized countries and other professions, confirm that employee costs in public schools are anything but excessive. Salaries for teachers and other educational staff in public schools have barely stayed ahead of inflation.²⁸ After adjusting for inflation, the 1997-98 average teacher salary of \$39,347 is almost identical to 1992-93 levels.²⁹ It is just \$1,900 more than the \$37,423 (measured in 1998 dollars) average teacher salary recorded in 1972.³⁰ The inflation-adjusted hourly wages of teacher aides, custodians, lunchroom workers, and bus drivers rose by less than 25 cents an hour since 1991.³¹ By contrast, over the past four years, salary offers for college graduates have grown at about twice the rate of new public school teacher salaries. New graduates received average salaries in excess of \$35,000, while beginning teachers cleared just \$26 '000.³²

In the United States, teacher pay is about average compared to other countries, and just below average measured relative to national standards of living (per capita GDP). Senior upper secondary teachers in the United States earned about \$38,000 per year in 1992.³³

After converting to U.S. dollars using Purchasing Power Parities (PPPs) to account for differences in purchasing power, their counterparts in 1992 earned \$43,000 in Germany (after 21 years), \$45,000 in Japan (after 32 years), and up to \$70,000 in Zurich, Switzerland.³⁴ The pay gap, however, is not so great for primary teachers³⁵ and U.S. teachers have less training.³⁶ Most European countries expect their high school teachers to have

five or six years of training before they begin their teaching career.³⁷ Unlike our international competitors, U.S. management companies tend to hire teachers with a basic four-year degree.³⁸

Benefits for public school employees are hardly excessive compared to those offered in other professions. Benefits for teachers in the U.S. made up 23.7 percent of total compensation in 1999.³⁹ In blue-collar occupations, benefits averaged 30.7 percent of total compensation, and in service occupations, the average was 26.2 percent.⁴⁰ Of the total pay package for teachers, 8.0 percent went to health insurance, slightly higher than the average for all workers.⁴¹ Another 6.2 percent went to retirement funds, and the remaining 5.5 percent went to legally required benefits including social security.⁴² Assessing international data on retirement, healthcare, and other fringe benefits proves difficult, but statistics show that employee contributions to state retirement funds and national social security generally exceed the amount paid by teachers in other countries.⁴³

Public school teachers face weekly work-time demands comparable to other professionals, although the work year of approximately 190 workdays is shorter than the U.S. average of approximately 220 days. The required workweek for teachers has remained steady for over thirty years, ranging from 36.5 hours in 1966 to 36.3 in 1996.⁴⁴ Additionally, teachers must grade homework, prepare for class, and perform extracurricular duties outside the required work week. In the private sector, 95 percent of employees in medium and large firms are required to work at least 35 hours a week, but not more than 40 hours.⁴⁵ A recent Bureau of Labor Statistics study found that teachers work on average 44 hours a week (including preparation time and grading homework) - an equivalent work week to engineers and somewhat less than physicians.⁴⁶ These statistics dispel the myth that teachers "don't work as hard" as others and have extra time to squeeze out added productivity by, for example, lengthening the school day.

Increasing class size and classroom hours are not acceptable ways to improve efficiency. The

reduction in class size in the U.S. has been comparable in the public and private sectors. The pupil-teacher ratio declined from 29 to 1 to 15 to 1 in the nonprofit-dominated private school sector over the past 35 years, while it declined from 25 to 1 to 17 to 1 in the public sector.⁴⁷ Still, the U.S. has a higher pupil-teacher ratio at both primary and secondary levels than a majority of European nations.⁴⁸ Japanese teachers have larger classes, but they teach fewer classes, so the pupil-teacher ratio is not much larger than the U.S. ratio. Most European teachers also spend less time in the classroom and a considerable amount of their workweek is devoted to planning and preparing. As a result of the disparity, U.S. primary teachers spend more time with students than teachers in most other nations, and U.S. secondary teachers have the largest number of instructional hours per year.⁴⁹ One has to wonder if education management companies that cut teacher salaries and increase workload severely threaten the quality of their product.

D. ACCOUNTABILITY AND PUBLIC EDUCATION

The appeal of private management of schools thrives on the perception of dysfunctional public schools that are unable to change. The attack frequently invokes international comparisons showing the poor academic performance of U.S. students.

Those who criticize public education, however, ignore recent positive trends in the quality of public education.⁵⁰ Under intense pressure to improve student achievement for at least fifteen years, reform-minded educators and policymakers implemented innovative and demanding changes and significant performance improvements have been recognized. State takeovers and reconstitution for low-performing schools are popular reforms. Most states now have comprehensive testing programs. A wide variety of national indicators show performance gains, both short-term and long-term:

- Students are taking more rigorous subjects and

courses. The percentage of high school graduates taking biology, chemistry, and physics has doubled, rising from 11 percent in 1982 to 19 percent in 1990 and 21 percent in 1994.⁵¹ The number of students taking advanced placement (AP) exams rose from 24 per 1,000 11th and 12th graders in 1984 to 66 per 1,000 in 1995;⁵²

- The National Assessment of Educational Progress (NAEP) shows long-term gains in student achievement in math since the late 1970s.⁵³ The improvement in math was equivalent to at least one grade level. The achievement gap between white and minority students narrowed substantially over the period;⁵⁴
- College admissions test scores have improved, even as the numbers and diversity of test-takers increased. The American College Testing (ACT) Program's national composite score increased from 20.7 in 1992 to 21.0 in 1997.⁵⁵ On the Scholastic Aptitude Test (SAT), combined verbal and math scores increased 19 points from 1982 to 1997, with 15 points of the increase occurring between 1992 to 1997. In 1997, the average mathematics score was at its highest level in 26 years; and⁵⁶
 - Dropout rates have declined, particularly for minority students. For blacks, the dropout rate fell from 18.4 percent in 1982 to 12.1 percent in 1995—a 34 percent decrease.⁵⁷ For whites, the rate fell from 11.4 to 8.6 percent over the same period, a 25 percent decrease.⁵⁸

IV. WHAT PRIVATE MANAGEMENT PROMISES TO BRING TO PUBLIC EDUCATION

Given the modest compensation and demanding jobs of education workers, public demand for small class size, and continuing improvements in student performance within public schools, what can private contractors contribute to public education? Can management companies limit ever-increasing costs, improve labor productivity, provide nurturing educational environments, stimulate innovation, and raise student achievement? This section first addresses what private management might offer to the business side

of schooling: namely, capital to improve infrastructure, technology-driven productivity, reduction in labor costs, management expertise, and economies of scale. Then, the examination turns to the potential contributions of private management to educational programs.

A. WHAT MANAGEMENT CONTRACTORS BRING TO THE BUSINESS OF SCHOOLING

It is no surprise that most management companies bring private financial resources. EAI (now the Tesseract Group) raised \$36.7 million in a stock sale.⁵⁹ Edison Schools Inc. raised almost \$232 million from private investors,⁶⁰ and raised another \$122 million in its initial public offering.⁶¹ Advantage Schools has venture capital backing from Chase and Fidelity.⁶² These companies use capital largely to finance their own start-up operations, but some also is used for up-front investments in the schools they manage for facilities and technology. Although the capital is appealing to cash-strapped districts, schools can borrow money or acquire debt at far more favorable rates than any private entity by selling tax-exempt securities.

Private capital may be more appealing to charter schools, which usually have difficulty maintaining cash flow, procuring facilities, and securing start-up funding. Charter schools are generally unable to take advantage of the low-cost financing available to school districts. Furthermore, lenders and investors often regard charter schools as high-risk, charging a premium for funds or refusing to do business altogether. Researchers Jerry Horn and Gary Miron report that charter schools may choose to work with management companies to improve schools' access to capital and to reduce budgetary problems.⁶³

Though appealing, the mixture of private capital and public funding raises troublesome issues for charter schools. Most states allow charter school boards to own property. Only a few contracts with management companies, however, leave the ownership of physical property to charter school boards, while many clearly state that the school's physical assets belong to the management

company.⁶⁴ If charter schools change management companies, schools may be left with no physical assets.

Computing power, telecommunications, and the Internet are behind the sizable real productivity gains in the U.S. economy in the 1990s. Mimicking the technological sizzle of the private sector, management companies offer technology to public schools to make their contracts attractive. The technology works primarily as a sales tactic, however, rather than promoting management and education productivity gains through innovative use of technology. For example, computer labs and classroom telephones were a big component of EAI's program.⁶⁵ The computer labs, however, were no different than the ones used in thousands of other schools.⁶⁶

Edison Schools Inc. is the only company struggling to do something different with technology. Edison originally promised to put a computer in the home of every student, but facing cost pressures, the company now issues computers to students in third grade or higher, during the second year of operation.⁶⁷ Additionally, every teacher receives a notebook computer.⁶⁸ Many other public schools also provide computers for every teacher and encourage electronic communication between parents and schools, but few can match Edison's attempts.

Based on their market orientation and championing of competition, cost reduction and performance-based contracting logically should be at the core of private sector involvement in education. So far, this has not been the case. While frequently basing teacher pay on performance, management companies generally do not operate through a performance-based fee schedule linked to the accomplishment of educational goals. Management companies generally make money simply by spending less than the revenue they collect. A review of management contracts by the Charter Friends National Network reveals that some companies keep the surplus (i.e., the excess of revenues over expenditures) as their fee.⁶⁹ Other contractors charge a percentage of revenues or expenditures, usually in the seven to twelve percent

range, but many of these contracts allowed the contractor to keep the surplus anyway.⁷⁰ Only a few contracts have incentive bonuses (in the 2.5 to 3.5 percent range) for improving student achievement or meeting other performance standards.⁷¹ The Charter Friends study points out that the surplus payment method leads management companies to earn money by cutting costs, not by improving performance. Private grants and contributions may simply go to the company's bottom line. The study also raises potential compliance problems with federal programs that stipulate how funds are to be spent.⁷²

The cost-cutting formula for most management companies focuses on resource reallocation, primarily the reduction of labor costs. Companies cut labor costs by increasing class size, hiring less experienced and less qualified teachers, and reducing compensation costs in other ways. Teacher experience and turnover rates are important measures of teaching quality in a school, and practices that lead to low experience and high turnover are detrimental to educational quality. Multiple examples illustrate how management companies have reduced costs through a reduction in labor quantity and quality.

A primary example is Education Alternatives, Inc. (EAI) in Baltimore. EAI managed preexisting public schools using school district teachers, but it had the power to set staffing levels. During the first two years of the contract, 56 of 205 teaching positions at EAI elementary schools were cut.⁷³ As a result of the reduction in staff, the pupil-to-certified-teacher ratio in elementary schools managed by EAI rose from 16.5 to 1 to 22 to 1.⁷⁴ EAI replaced teacher aides with lower-paid "interns" hired through a temporary employment agency.⁷⁵ In some instances, the \$6,000 to \$9,000 per year interns took on responsibilities formerly handled by certified teaching staff.⁷⁶

Edison Schools Inc. has lower costs primarily due to hiring less experienced teachers. Edison selects or hires teachers for both its charter schools and its schools managed under a contract with school districts. Somewhat like EAI's approach in Baltimore and Hartford, Edison often retains

teachers as school district employees in its school district contract schools. Typically, half of their teaching force has fewer than five years of experience, in comparison with the national average in public schools of 16 years of experience.⁷⁷ High teacher turnover rates in Edison schools result, in part, from teacher inexperience. The company revealed a 23 percent turnover rate in 1997-98, twice the 1994-95 national average for urban public schools.⁷⁸

Alternative Public Schools (APS) (now Beacon Education Management) serves as yet another example of a management company cutting labor costs in public schools. After contracting with the management company, the school district board fired or reassigned all 24 of the Turner School's teachers in Wilkinsburg, Pennsylvania.⁷⁹ APS replaced the 24 school district teachers with only 20 teachers.⁸⁰ The company used six teacher assistants or aides to handle some of the workload.⁸¹ APS's 15 teachers were each paid \$44,000 per year regardless of experience, which approximately matched the school district average.⁸²

Michigan, where management companies run a majority of charter schools, demonstrates labor cost cutting. Half of charter school teachers in the southeastern area of the state were under age 30 during the 1997-98 school year, and the median teaching experience was three years.⁸³ As an indication of turnover, 22 percent of teachers in this survey said they were not planning to return.⁸⁴ In the Western Michigan study, 48 percent of teachers outside the Detroit area were under age 30 in the 1997-98 school year.⁸⁵ Teachers averaged 6.4 years of experience⁸⁶ compared to about 16 years nationally. Only about one in five had earned a Master's degree or higher, compared to 50 percent nationally.⁸⁷ While actual data on teacher turnover school district's budget.⁹¹ EAI used only 5.6 percent of its spending for special education, which was approximately half of the district's budget for the schools.⁹²

The administrative and overhead costs of Edison Schools Inc. also raise serious questions about promises of administrative efficiency. Edison tells school districts that it can deliver a longer

is not available, 36 percent of teachers were "insecure" about their future at their particular school.⁸⁸ In the southeastern part of the state, one result of using inexperienced teachers was that salaries averaged about \$30,000 in schools managed by private companies, compared to \$44,933 in surrounding schools.⁸⁹

In addition to reducing labor costs, management companies generally promise a reduction in administrative overhead. The perception of administrative bloat in public schools proves an easy target, but few companies have achieved this goal. Unlike public schools and nonprofit private schools, management companies must seek a return for investors, pay taxes and fees, and contribute to corporate overhead before any improvement in efficiency frees resources for educational uses. When they contract with public schools, management companies introduce inefficiencies by overlapping with some existing school district administration and support services. In addition to the obvious costs of travel and administrative overlap, multistate school management companies also must spend resources to acquire specific knowledge of each state and school district's regulations, reporting requirements and student achievement testing programs.

EAI did not fulfill its promise to save money on non-instructional services and redirect dollars to the classroom. Instead, EAI cut instructional staff and redirected the resources to non-instructional costs, including lawyers, accountants, project administration, corporate travel, improvement of the physical plant, and profit.⁹⁰ The Baltimore school district's internal review found that EAI spent only 62.5 percent of its budget on regular instruction, compared to 72.3 percent of the

school day, a longer school year, a technology-rich environment, and other enhancements for the district's average per-pupil revenue by reducing administrative overhead.⁹³ Edison claims that 86 percent of revenue remains at the school site.⁹⁴ The Edison comparison, however, is somewhat misleading. In Pennsylvania, for example, district expenditures for management and business office

expenses comprise only five percent of spending.⁹⁵ Expenditures in Pennsylvania include pupil support (six percent), teacher support (one percent), program support (three percent), non-instructional pupil services (five percent), out of district obligations for student placements (four percent), and facilities (nine percent).⁹⁶ Second, corporate subsidies need to be included in the calculations. Edison's 1999 SEC filing indicated that during 1998-99, Edison expended private capital equal to 38 percent of its public revenues.⁹⁷

The prospect of efficiency and economies of scale may be brighter in the charter school arena. Management companies provide assistance with state reporting requirements and "running the business." Most charter school boards struggle to understand and comply with lengthy and complicated state paperwork. Charter school operators must meet a payroll, set a budget, track expenditures, and perform other personnel and financial functions. Management companies gain experience in reporting and administration and can apply this expertise efficiently to multiple schools.

In some cases, this function has been so useful that some management companies only provide administrative and financial services, not educational services. Arizona Benefits Solutions provides reporting and business services to more than 100 charter schools in Arizona, but leaves the educational and day-to-day operations to the charter schools.⁹⁸ Charter school authorizers may also find it advantageous to have schools work with management companies because the management companies will have access to capital and also fewer budgetary problems.⁹⁹

Many studies note that charter schools have higher administrative costs, which are usually attributed to their small size.¹⁰⁰ Some evidence indicates that management companies may be less effective than other charter schools in keeping administrative costs down. The PSC/MA5(CIMUS study of Michigan revealed that there were considerable differences in how "chain" schools spent money compared to "single entity" schools.¹⁰¹ Single entity schools include for-profit companies operating only at one site, while a chain school is

one of many schools operated by a single management company such as Edison or Advantage Schools. Chain schools in Michigan spend a much larger percentage on administrative expenses (33 percent compared to 22 percent in single entity charter schools, and 11 percent in host school districts).¹⁰² They spend much less on instruction (35 percent compared to 51 percent in single entity charter schools, and 54 percent in host public school districts).¹⁰³ However, these figures overstate administration costs for both chain and single entity charter schools because facilities leases and payments to private contractors for instructional support are misleadingly classified as business and administration expenditures by Michigan's uniform accounting system.

Management companies claim to serve special education students more effectively and efficiently than public schools. Management companies, however, generally serve a lower percentage of students with disabilities, especially those with high-cost disabilities, because the companies seek to provide services provided only in regular classroom settings. Researchers in Massachusetts found that for-profit charter school operators including SABIS, Advantage Schools, and Edison have "counseled out" students with high-cost disabilities.¹⁰⁴ EAI reduced expenditures on special education in Baltimore, though they touted inclusion of special needs students.¹⁰⁵

Evidence from a Michigan study, where companies managed half of state charter schools in 1997-98, indicates that charter schools are not adequately serving special needs children. Spending on these students is significantly less in charter schools than in public schools. Charter schools in southeastern Michigan spent 4.2 percent of their budget on "added needs students," a category that includes special education and compensatory education programs for low-income children.¹⁰⁶ Surrounding public school districts devoted 18 percent of their budgets to added needs students.¹⁰⁷

B. WHAT MANAGEMENT Contractors BRING TO EDUCATIONAL PRACTICE

It is valuable to consider the concerns of parents when judging the effectiveness of educational practice. Perhaps more than public schools, management companies rely on parent satisfaction as an important accountability measure. Parents often evaluate education differently than researchers and prognosticators. When parents refer to quality and standards, they do not necessarily mean the highest possible achievement for their children. Instead, some may seek to match their child's achievement to that of students of similar motivations and ability, or search for specific pedagogy and curricula.¹⁰⁸ Parents typically prefer small class size, assuming it will promote a nurturing environment and individual attention.¹⁰⁹ To parents, school selectivity--attained either by school selection or neighborhood location-is important for shaping their child's peer group as well as the child's academic experience. While some researchers and policy experts deplore the selectivity resulting from school choice programs, selectivity appeals to parents.

Charter schools often have fewer students than public schools, which is appealing to parents. The average public elementary school has about 475 students, and the average charter school enrolls fewer than 140 students.¹¹⁰ Management companies, however, often sacrifice the feel of small schools for economies of scale. The subset of charter schools operated by management companies tends to operate schools much larger than either the average charter or other public schools. The typical Edison Schools Inc. elementary school serves more than 600 students, and some enroll more than 1,000 elementary students.¹¹¹ Advantage Schools also operate elementary schools of about 600 students.¹¹² The large school size is often viewed as antithetical to the charter school movement and a replication of the standardized, bureaucratic public school system. In 1997-1998, the average school size of management company schools was 397 students.¹¹³

Management companies contribute little to the innovative educational programs and curricula

promised by the charter school movement. In fact, they sometimes implement off-the-shelf programs already widely used in other public schools such as Success for All (SFA) or Direct Instruction (DI).¹¹⁴ While centralization can contribute to efficiency, charter schools were envisioned as a way to try innovative practices unlikely or impossible in traditional public schools. Private managers, however, are giving the public something else.

Many education management companies are organized into "chains" of look-alike or "cookie cutter" schools, with uniform school design and pre-packaged curricula. For example, Edison uses SFA in its elementary schools, a widely admired reading program designed to raise student achievement in low-performing schools that have high concentrations of disadvantaged children.¹¹⁵ SFA was developed by researchers at Johns Hopkins University and is also used in approximately 1000 traditional public schools throughout the U.S.¹¹⁶ Advantage Schools employs DI, a highly prescribed teaching technique in which students learn reading and math through recitation. This instruction method has been used in many traditional public schools nationwide.¹¹⁷ National Heritage Academies uses "Back-to-the-Basics" approach with a strong emphasis on moral values.¹¹⁸ Both Advantage and National Heritage schools resemble the "traditional academies" offered by many public school systems as part of their magnet school programs.

"An Educator's Guide to Schoolwide Reform," a study conducted by the American Institutes for Research (AIR), is a helpful tool for comparing innovation in educational design. The report rates 24 approaches to educational reform based on statistically reliable evidence supporting higher academic achievement. The Success for All and Direct Instruction programs, used by hundreds of public schools as well as some management companies, received top ratings from AIR.¹¹⁹ Although involved in the AIR study, Edison Schools Inc. was not evaluated.¹²⁰ None of the other management companies discussed in this article participated in the AIR study. The use of well-known, off-the-shelf programs that are already

extensively used by traditional public schools raises serious questions about what educational innovations management companies have to contribute.

The selectivity of charter schools, inherent in the concept of school choice, appeals to parents. Selectivity is a primary reason why parents choose to enroll their children in non-traditional schools, including those managed by private companies.¹²¹ Several reasons may contribute to parents' attraction to selective schools. Psychologically, parents may feel embraced and rewarded when their children are admitted by such institutions, even if the admission comes by winning a lottery rather than through academic competition. Parents may perceive selective schools as safer and more orderly because they assume that parents with children in the schools share motivations similar to their own. Similarly, parents assume that trouble-making students will be separated, forced out to the local non-selective public school. Parents' contributions in charter schools are exhibited in many ways. Many charter schools find it infeasible to provide transportation or federally subsidized lunch programs, and parents handle those responsibilities themselves. The concern and effort exhibited by parents in getting their children into schools of choice can have positive effects on student achievement. If the exercise of choice is a proxy for highly motivated parents, then that characteristic can be reflected in their children and contribute to high student achievement.

Research indicates that charter schools tend to attract students based on self-motivation rather than race or income. Early statistical reports indicate that the racial and economic makeup of charter schools is representative of the racial and economic environment of the states in which they are located.¹²² In Michigan, where private companies operate a majority of schools, the average charter school enrolls a higher percentage of minority students than the state average.¹²³ One reason for this finding is that charter schools concentrate in urban areas with higher minority populations.¹²⁴

Michigan's privately managed charter schools, however, enroll fewer disadvantaged students than

traditional public schools. Students eligible for free lunch programs in Michigan automatically generate about \$600 each. Schools managed by private companies obtained at-risk funding of only \$69 per pupil enrolled (averaged across the entire membership, not just at-risk students), compared to \$281 in surrounding school districts.¹²⁵ The smaller amount shows that charter schools managed by private companies enroll fewer low-income children. Similarly, few privately managed schools qualified for federal aid for low-achieving needy children (Title I), while host school districts received an average of \$386 per pupil in federal Title I funding.¹²⁶ Clearly, traditional public schools continue to bear the responsibility for serving students with more expensive needs.

V. THE TRACK RECORD OF MANAGEMENT COMPANIES IN IMPROVING STUDENT ACHIEVEMENT

According to an analysis of the education industry by Montgomery Securities, improving academic achievement and the need for a more knowledgeable and better-trained workforce will drive the growth of management companies.¹²⁷ So, is student achievement increasing in privately managed schools? This section begins by reviewing the track record of nonprofit private schools since they too compete for students in a marketplace. Student achievement data from voucher programs in Milwaukee and Cleveland also provide evidence on the effectiveness of private schooling and management companies in situations involving public funding. The record of private managers with school district contracts, principally EAI and Edison Schools Inc., is then examined. Early evidence on the effectiveness of management companies in operating charter schools concludes the discussion.

Early research found that private schools were superior to public schools in producing academic achievement, but later research questions this conclusion. In the first study of its kind, researchers found Catholic schools superior to public schools in promoting academic achievement.¹²⁸ However, some voiced skepticism as to whether the Catholic

school advantage was attributable to the performance of the schools, or to the differences in student characteristics within those schools.¹²⁹ In a later study, researchers considered the effects of initial student achievement, but still found that private Catholic schools contribute a significant advantage to academic achievement.¹³⁰ More recent research also concludes that Catholic schools produce higher achievement and a more level distribution of achievement than public schools.¹³¹

Contrasting results in other studies, however, casts some doubt on the advantages of Catholic schools. Two recent studies suggest that private schools do not offer such advantage to academic achievement. One study shows no advantage for secular private schools, and an advantage for Catholic schools only in math.¹³² Yet another researcher concludes that in no case is there a statistically significant positive effect favoring Catholic private schools.¹³³ The best summary of this research is that any advantage toward academic achievement offered by private schools is too small to have any policy importance.¹³⁴

Voucher programs similarly show little significant advantage for students, and some studies even suggest that traditional public schools are more likely to improve student achievement. An evaluation of the Milwaukee voucher program, funded by the Wisconsin legislature, found no impact on student performance.¹³⁵ Sharply critical of this evaluation, another study found directly contrasting results, with large test gains in math and reading for students who had been in voucher schools for at least three years.¹³⁶ In this study, the gains of voucher students who remained in the program were compared to students who sought a voucher unsuccessfully and decided to remain in Milwaukee public schools. The authors of the original evaluation reassessed the conflicting results of the two studies and once again concluded that no math or reading advantages existed for the voucher students.¹³⁷ Yet another study in Milwaukee confirmed no advantage in reading.¹³⁸ An advantage in math in some comparisons for voucher program students depended on the expansion of the data set to include information on students with very high

levels of missing data.¹³⁹ In subsequent published research, the same researcher found that students from voucher schools (pupil-teacher ratio of about 15 to 1) and students in several Milwaukee public schools experimenting with pupil-teacher ratio (17 to 1) compared to a system-wide average of 20 to 1) significantly outperformed students from other public schools in math.¹⁴⁰ Furthermore, the public schools with the smaller classes outperformed the voucher schools in reading.¹⁴¹

Experience from Cleveland's voucher program also demonstrates little advantage for student achievement. One analysis of voucher schools managed by a private company claimed that the two Cleveland voucher schools, the Hope Schools, realized "moderately large" gains in reading and "even more substantial" gains in math.¹⁴²

The usefulness of this study, however, is questionable because it evaluated the school before it completed its first year of operation. Further, the school did not participate in the Ohio Department of Education's first year evaluation of the Cleveland voucher program.¹⁴³ The second-year evaluation included these for-profit schools. Academic performance was significantly lower in each tested area than that of their public school peers or voucher students who attended established private schools.¹⁴⁴ Overall, the state's evaluations indicated that voucher students in the numerous nonprofit private schools did not make greater or lesser academic progress than had they remained in public schools.¹⁴⁵

Management companies have been unable to demonstrate increased student achievement in the few instances where they have contracted with school districts to manage existing public schools. EAI is a prime example. Over the three years of EAI management in Baltimore, standardized achievement test scores for EAI schools decreased, and then increased to about the preprogram level.¹⁴⁶ The company insists that student achievement was just starting to show big improvements. EAI battled over test scores elsewhere. The Dade County Public Schools' evaluation of the program concluded, "South Pointe students do not differ significantly in the area of achievement from students at the

comparison school.¹⁴⁷

Nor have public schools managed by Edison Schools Inc. demonstrated increased academic achievement. The company has issued two glowing self reports.¹⁴⁸ However, the few available independent studies show otherwise. Edison contracted with an independent evaluator to study the Success For All (SFA) reading program in four of the 51 schools it operated in 1998-99.¹⁴⁹ The study of students in grades K-3 shows mediocre performance at best.¹⁵⁰ In Wichita, Kansas, and Mt. Clemens, Michigan, kindergarten students in Edison's full-day academic programs were the most successful.¹⁵¹ But Edison first-graders did less well.¹⁵² Compared to a national study of several SFA programs operating in other public schools, Edison's results generally are not as good.¹⁵³ In Sherman, Texas, and Colorado Springs, Colorado, Edison students performed worse or no better than control groups.¹⁵⁴ Dade County public schools conducted an evaluation in 1996-97, showing that Edison students performed less well than predicted at statistically significant levels in all four grades in math and in three of four grades in reading.¹⁵⁵ The following year, Edison students still performed below in all grades, but only three of the six comparisons found statistically significant differences. In both evaluations, groups of comparable students met or exceeded predicted scores.¹⁵⁶

The lack of results may relate to provisions in the contracts between management companies and school boards that limit the authority of the management companies. A Montgomery Securities analysis claims that teachers' unions and local school boards have forced management companies to sign agreements that limit their ability to influence key management areas, but that management companies will eventually have enough independent control to establish a track record of performance.¹⁵⁷ Charter schools offer this freedom, and it is now possible to assess the impact of management companies with independence from local politics.

Many states continue to pass legislation authorizing charter schools and expanding their

numbers, despite the acute need for evidence that charter schools improve academic performance. Since 1991, 36 states and the District of Columbia have passed charter school legislation.¹⁵⁸ Only Texas has established a system for evaluating charter school student performance or achievement that meets even the simplest academic standards (e.g., experimental control groups or statistical controls for student and school demographics). The Texas system exists only because charter schools participate in the same academic monitoring system in which all public schools in the state participate and this system compares schools with similar student characteristics.¹⁵⁹

Because no state has analyzed student achievement in charter schools managed by private managers separately from other charter schools, this brief review deals only with charter schools as a whole. In Arizona, the first study of student achievement showed few patterns, no consistency across grade and subject matter, and few statistically significant differences.¹⁶⁰ The most recent Texas evaluation of 17 charter schools operating in 1997-98 found that only 40 percent of charter schools had an acceptable academic rating compared to 91 percent of public schools.¹⁶¹ In Massachusetts, newspapers generally carried negative stories about the performance of charter schools on statewide tests, but these conclusions were drawn without the benefit of a serious research analysis.¹⁶²

Michigan provides the best indication to date of the academic contributions of privately managed charter schools. Management companies run 10 to 15 percent of charter schools nationwide, but in Michigan more than half of charter schools are privately managed.¹⁶³ The Michigan track record is no better than in other states. While the PSC/MAXIMUS study of Detroit area charter schools declares, "It is too early ... to definitely assess the charter school's effect on student academic achievement," the authors conclude that the average charter school performs lower than schools in surrounding school districts.¹⁶⁴ Scores in the first year of operation were the worst.¹⁶⁵ The study also found that Detroit area charter schools

scored lower than host districts and also showed less improvement over a two- or three-year period.¹⁶⁶

VI. LESSONS FROM PRIVATIZATION OF HEALTHCARE

Investment advisors frequently compare education to healthcare, an industry that experienced enormous growth in for-profit companies over the past 30 years. Although significant differences exist between the education and healthcare industries¹⁶⁷ and the motivations behind demands for their reform,¹⁶⁸ important lessons for education policymakers can be drawn from the experience of the healthcare industry regarding adverse selection, improving quality, improving efficiency, and consolidation.

Adverse selection may be a trend to monitor with management companies in education. In healthcare, insurers have an economic incentive to screen out the sickest and most expensive patients in order to reduce costs. As a consequence, many states operate publicly subsidized insurance pools for those hardest to insure. The Michigan charter school studies reveal that as the percentage of charter schools operated by management companies expanded, charter schools served fewer minority students and fewer special education students.¹⁶⁹ Researchers in Massachusetts also sounded a warning that for-profit companies in education are less likely to enroll children with complicated disabilities.¹⁷⁰ If it continues in other states, this trend has disturbing implications.

Management companies in education claim to reduce administrative costs and promise to redirect savings into classrooms. Healthcare companies also promised efficiencies, but the result from a consumer standpoint was degradation of the quality of care from primary caregivers. In the early 1990s, it was hoped that healthcare reform would improve efficiency and that the savings could be used to care for millions of uninsured. When President Clinton's healthcare reform plan failed and managed care swept the country, for-profit insurers and HMOs squeezed physicians' income, reduced labor costs

through use of less skilled personnel, closed some hospitals, and merged others. The "savings" were channeled into shareholder profits, marketing, and overhead, not into covering the uninsured.¹⁷¹ As in healthcare, management companies in education are squeezing labor costs and channeling the savings into marketing, overhead, and investment returns, not higher quality education.

Finally, many analysts refer to education as a fragmented cottage industry, just like health care ten years ago. Education management companies, however, are not in the business of acquiring and consolidating existing public school districts to reduce the inefficiencies of fragmentation. While healthcare companies merged and consolidated to reduce market fragmentation, education management companies are actually increasing the fragmentation of the K-12 market. Only Edison Schools Inc. is willing to manage existing public schools. The charter schools run by management companies add to the total number of school buildings and school administrative structures. By funding a parallel set of schools, taxpayers now pay for two systems. Most management companies establish "chains" of schools, in effect creating their own districts. For example, the Leona Group operates 35 schools in Arizona and Michigan.¹⁷² Edison operates 79 schools scattered across 16 states.¹⁷³ Advantage Schools has a network of 16 schools spanning 9 states and the District of Columbia.¹⁷⁴ While operating multiple schools provides some economies of scale for companies to compete more efficiently with stand-alone charter schools, chains of schools scattered across the country do not have the economies of scale found in public school districts.

VII. CONCLUSION

Wall Street investors see the public K-12 education system as a huge, stable industry with high profit potential. Private management firms and their industry groups argue that they can make important contributions to improving U.S. education and make money doing it. These companies argue that they can bring much needed

capital to schools, contain runaway costs, reduce administrative overhead, and change academically dysfunctional schools into world class learning institutions.

This article matches data to the questionable myths about public schools perpetrated by management companies. Private school costs have been rising much faster than public school costs. By international standards, U.S. teachers face tough schedules and working conditions. The fringe benefits of education employees are about average. The alleged academic failure of public education is belied by consistent improvements in academic course participation, reduced dropout rates, and improved scores on college entrance exams and other national testing programs.

This article also raises doubts about the strategies management companies use to improve public education. Management company contracts guarantee that the companies themselves reap all of the benefits of cost containment and bear none of the burden of poor performance. Class sizes tend to be no lower than in public schools and are frequently larger. The big schools and standardized education programs of management companies duplicate the urban education models attacked by education reformers. Instead of management efficiency, evidence indicates a reallocation of resources from instruction to administration and business operations.

Last, and most important, is the track record. Management companies have shown little willingness to enter private sector education and compete against traditional nonprofit K-12 educational institutions. The business of contracting with public schools suffered after the initial failures of several efforts by management companies. Outside the charter school setting, only one company now contracts with school districts. Education management companies multiplied 4 only under the protection of state charter school laws. Most importantly, no independent evaluation of student achievement in schools managed by companies has shown superior performance, and some independent evaluations found failure.

NOTES

¹ CRAIG E. RICHARDS ET AL., RISKY BUSINESS: PRIVATE MANAGEMENT OF PUBLIC SCHOOLS ASCHER ET AL., HARD LESSONS: PUBLIC SCHOOLS AND PRIVATIZATION 44-49, 76-81 (1996)

² Amy Visrshup, Schools and Capitalism 101, WASH. POST

Apr. 7, 1996 at W11

³ William C. Symonds, *For-Profit Schools: They're Spreading Fast. Can Private companies do a Better Job of Educating America's kids?* 3667 BUS. Wk. 64, 65 (2000)

(reporting data on for-profit schools); BERYL NELSON ET AL., U.S. DEP'T OF EDUC., NATIONAL STUDY OF CHARTER SCHOOLS: THE STATE OF CHARTER SCHOOLS 2000: FOURTH-YEAR REPORT

11 (2000) (reporting data on charter schools; also available at

<http://www.ed.gov/pubs/charter4thyear/>)/ For the 1999-2000

school year, there were approximately 200 for-profit schools-about 13 percent of 1,500 charter schools.

⁴JERRY HORN & GARY MIRON, EVALUATION OF THE MICHIGAN PUBLIC SCHOOL ACADEMY INITIATIVE 98 (1999) ALSO available at http://www.mdede.state.mi.us/reports/psaeval19901/wmu_finalrpt.pdf.

⁵ B. NELSON ET AL., supra note 3; F. Howard Nelson ET AL., SURVEY AND REASSESSMENT OF EDUCATION FINANCE AT THE START OF THE MILLENNIUM tbl.2 (Stephen Chaikind & William Fowler eds., forthcoming 2001). The median enrollment in charter schools during 1998-1999 was 137 students compared to 475 for all public schools. In 1997-1998, the average size of management company schools was 397 students. Data includes five Leona schools, nine Edison schools, two Advantage schools, two SABIS

schools, nine Beacon schools, one Mossaica school, and five National Heritage Academy schools.

⁶Lisa Benavides, *For-Profit Education Creating Big Business* (visited Mar. 28, 2000)

<http://www.amcity.com/boston/stories/1997/01/13/story3.html>)quoting Michael Moe, analyst at Merrill Lynch & Co).

⁷ *Id.* (quoting Michael Sandler, CEO of Edu Ventures).

⁸ SMITH BARNEY, EDUCATION INDUSTRY: PARTICIPATING IN THE GROWING IMPORTANCE OF INTELLECTUAL CAPITAL 15-16 (1996); EVEREN SECURITIES, EDUCATIONAL SERVICES INDUSTRY 5-11 (1999); MICHAEL MOE & R. KEITH GAY, MONTGOMERY SECURITEIES, THE EMERGING INVESTMENT OPPORTUNITY IN EDUCATION 3-4 (1997).

⁹ Edward Wyatt et al., *Education Pays Off Royally*, NY TIMES, Nov. 17, 1999, at B15; DOW JONES NEWSWIRE, Edison Schools Ups IPS to 6.8M C1. A shares from 6.0M Shares (Oct. 5, 1999).

¹⁰ Mark Walsh, *Though Investors See Opportunity in*

Education, K-12 Ranks Low, 19 EDU. Wk. 12, 12 (1999). Also available at

<http://www.edweek.org/ew/ewstory.cfm?slug=05biz.h19>.

¹¹ *Id.*

¹² Mark Walsh, High-Risk Investors Eye Education Opportunities, 18 EDU. Wk. 1, 12-13 (1999). Also available at

<http://www.edweek.org/ew/1998/03ventur.h18>.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.* at 12.

¹⁶ National Ctr. For Educ. Stat., *The Digest of Education Statistics*, Table 31 (visited March 30, 2000) <http://nces.ed.gov/pubs99/digest98/>.

¹⁷ MOE & GAY, *supra* note 8, at 15.

¹⁸ F. Howard Nelson, *Trends in Private School Cost and Tuition: No Immunity from the cost Disease* (visited Mar. 12, 2000)

<<http://www.aft.org/research/reports/private/privcost/index.htm>> [hereinafter *Trends in Private School Cost and Tuition*].

¹⁹ NATIONAL CTR. FOR EDUC. STAT., U.S. DEP'T OF EDUC., DIGEST OF EDUCATIONAL STATISTICS 72 (1995); NATIONAL CTR. FOR EDUC. STAT., U.S. DEP'T OF EDUC., DIGEST OF EDUCATIONAL STATISTICS 70 (1993-94).

²⁰ See generally W.J. Baumol, *Macroeconomics of Unbalanced Growth: The Anatomy o Urban Crisis*, 57 AM. ECON. REV. 415, 420-421 (1967)

(Discussing a growth model with illustrations from higher education that applies to all sectors considered technologically nonprogressive). See F. Howard Nelson, *Six Myths About Productivity and Education*, EDUCATIONAL THEORY 179-190 (Summer-Fall 1983) (providing detailed application of the model to K-12 education).

²¹ F. Howard Nelson, What Bargain? Private School Expenditures Revealed, (visited Feb. 23, 2000)

<http://www.aft.org/research/vouchers/reseach/budget/index.htm>. In 1993-1994, spending on "regular"

public education was \$3,137 compared to tuition in private order Catholic schools of \$3,634, and non-sectarian private schools \$4,567. This figure is based on comparison of tuition to spending in public schools on regular education and excludes expenditures for special education, compensatory education, vocational education, school lunch, transportation, desegregation and similar programs.

²² RICHARD ROTHSTEIN, ECON. POLY'S INST., WHERE'S THE MONEY GOING? CHANGES IN THE LEVEL AND COMPOSITION OF EDUCATION SPENDING, 1991-96 AT 10 (1997)

²³ Richard Rothstein, *Tracking the Growth in Special*

Education Spending, SCH. BUS. AFF. 13, 13-19 (1998)

²⁴ Hamilton Lankford & James Wyckoff, *The Allocation of Resources to Special Education and Regular Instruction in New York State*, FUNDING SPECIAL EDUCATION 147, 154 (1999).

²⁵ *Trends in Private School Cost and Tuition*, *Supra* note 18.

²⁶ See *infra* notes 59-96 and accompanying text.

²⁷ See *infra* notes 71-87 and accompanying text.

²⁸ KRISTA SCHNEIDER & F. HOWARD NELSON, AMERICAN FED'N OF TCHRS.,

SURVEY & ANALYSIS OF TEACHER SALARY TRENDS 1998, at 20 (2000). Also available at <http://www.aft.org/research/survey/tables/tableII-3.html>.

²⁹ *Id.* at tbl. II-1.

³⁰ *Id.* at tbl. II-3.

³¹ *Id.*

³² *Id.* at 38

³³ *Id.* at tbl. II-6

³⁴ F. Howard Nelson, *How and How much K-12 Spending: International Comparison*, 62 SCH. BUS. AFF. 14, 18 (1996).

Also available at

<http://www.aft.org/research/reports/internatl/sba.htm>.

³⁵ See *id.* at 17 (finding that although the salaries of primary school teachers with at least 15 years experience in the United States (\$34,213 in 1992) are slightly higher than most other countries, they are below average if measured relative to national standards of living (per capita GDP)

³⁶ *Id.*

³⁷ *Id.*

³⁸ F. HOWARD NELSON & TIMOTHY O'BRIEN, U.S. TEACHERS MEASURE UP INTERNATIONALLY, A COMPAATIVE STUDY OF TEACHER PAY, TRAINING, AND CONDITIONS OF SERVICE 35 (1993).

³⁹ Bureau of Labor Stat., U>S> Dep't of Labor, *Employment Costs for Employee Compensation* (visited Mar. 3, 2000)

<http://stats.bls.gov/news.release/ecec.t02.htm>.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ See F. Howard Nelson, *Conditions for Employment for*

Teachers in the United States, 68 CLEARING HOUSE 82, 87 (1994) (noting that in some nations teachers and their employees pay little towards retirement and/or health benefits, which are funded through value-added or income taxes).

⁴⁴ NATIONAL EDUC. ASS'N, STATUS OF THE AMERICAN PUBLIC SCHOOL TEACHER, 1995-96 at 40 (1997).

⁴⁵ BUREAU OF LABOR STAT., U.S. DEP'T OF LABOR, EMPLOYEE BENEFITS IN MEDIUM AND LARGE PRIVATE ESTABLISHMENTS 16 (1998).

⁴⁶ Daniel Hecker, How Hours of Work Affect Occupational Earnings, 121 MONTHLY LABOR REV. 8, 11 (1998). Also available at <<http://www.bls.gov/opub/mlr/1998/10/contents.htm>>.

⁴⁷ *Trends in Private School Cost and Tuition*, *supra* note 18.

⁴⁸ *Id.*

⁴⁹ *Id.* at 16.

⁵⁰ See generally David C. Berliner, Educational Reform in an Era of Disinformation, 1 EDUC. POL'Y ANALYSIS ARCHIVES 1 (Feb. 2, 1993) (also available at <http://epaa.asu.edu/epaa/v1n2.html>); Gerald Bracey, Are U.S. Sudents Behind? 37 AM. PROSPECT 64 (1998), also available at

<http://www.prospect.org/archives/37/37bracfs.html>; Richard Rothstein, *The Myth of Public School Failure*, 4 AM. Prospect 20 (1993), also available at <http://www.prospect.org/archives/13/13roth.thml>; RICHARD ROTHSTEIN, THE WAY WE WERE? THE MYTHS AND REALITIES OF AMERICA'S STUDENT ACHIEVEMENT (1998) (arguing that contrary to popular belief, American public schools are performing as well as ever).

⁵¹ NATIONAL CTR. EDUC.STAT., U.S. DEP'T OF EDUC., THE CONDITON OF EDUCATION 1997, AT 98 (1997) (explaining that indicator 24 is based on high school transcript study). Also available at <<http://nces.ed.gov/pubs/ce/>>.

⁵² *Id.* at 100.

⁵³ NATIONAL CTR. FOR EDUC. SAT., U.S. DEP'T OF EDUC., NAEP 1996 TRENDS IN ACADEMIC PROGRESS iii-iv (1998). Also available at <http://nces.ed.gov/nationsreportcard/96report/97986.shtml>. This report analyzed trends in average performance for students at ages 9, 13, and 17 for the science, mathematics, and reading assessments, and or students in grades 4, 8, and 11 for the writing assessment.

⁵⁴ *Id.* at xii. (finding that although in 1996 White students attained higher average scores than their Black peers in each age group across the four subject areas studied, there was some indication that the gaps between White and Black students' average scores in science, mathematics, and reading have narrowed since the inception of NAEP assessment reports (1969/1970 in science, 1973 in mathematics, 1971 in reading, and 1984 in writing).

⁵⁵ AMERICAN COLLEGE TESTING PROGRAM, INC., THE 1997 ACT HIGH SCHOOL PROFILE REPORT – NATIONAL NORMATIVE DATA (1997) (*on file with the Stanford Law and Policy Review*). Also available at <http://www.act.org/news/data/97/tsum.html>.

⁵⁶ College Board, *Mean SAT/SAT I Scores for college-Bound Seniors, 1972-1997* (visited Mar. 28, 2000) <http://www.collegeboard.org/sat/cbsenior/yr1997/nat/72-97.html>.

⁵⁷ NATIONAL CTR. FOR EDUC. STAT., U.S. DEP'T OF EDUC., DIGEST OF EDUCATION STATISTICS, 1998, at 124 & tbl. 105 (1999). Also available at <http://nces.ed.gov/pubs99/digest98d98t105.html>.

⁵⁸ *Id.*

⁵⁹ AMERICAN FED. OF TCHRS., HOW PRIVATE MANAGERS MAKE MONEY IN PUBLIC SCHOOLS: UPDATE ON THE EAI EXPERIMENT IN BALTIMORE 37 (1995) [hereinafter HOW PRIVATE MANAGERS MAKE MONEY IN PUBLIC SCHOOLS].

⁶⁰ Joseph Pereira, *Edison Schools Files to Make Initial Offering*, WALL ST. J., AUG. 3, 1999

⁶¹ Symonds, *supra* note 3, at 67.

⁶² *Id.* at 65.

⁶³ The need for administrative efficiency of authorizers is especially acute in Michigan, where universities authorize most charter schools. HORN & MIRON, *supra* note 4, at xv, 60. They are also responsible for directing funds to charter schools, financial reporting, and all other aspects of monitoring and supervision, for which they assess a three percent fee.

⁶⁴ BRYAN HASSEL & MARGARET LIN, CHARTER FRIENDS NAT'L NETWORK, CHARTING A CLEAR COURSE: A RESOURCE GUIDE FOR BUILDING SUCCESSFUL PARTNERSHIPS BETWEEN CHARTER SCHOOLS AND SCHOOL MANAGEMENT ORGANIZATIONS 51 (June 1999) (*on file with the Stanford Law and Policy Review*). Also available at <http://www.charterfriends.org/partnerships.html>.

⁶⁵ See HOW PRIVATE MANAGERS MAKE MONEY IN PUBLIC SCHOOLS, *supra* note 59, at 26.

⁶⁶ *Id.* at 26

⁶⁷ American Fed'n of Tchrs., Edison Schools inc. 1 (Oct. 1999) (unpublished paper on file with the *Stanford Law and Policy Review*).

⁶⁸ *Id.*

⁶⁹ HASSEL & LIN, *supra* note 64, at 43.

⁷⁰ *Id.*

⁷¹ *Id.*

⁷² *Id.* at 45.

⁷³ AMERICAN FED. OF TCHRS., THE PRIVATE MANAGEMENT OF PUBLIC SCHOOLS: AN ANALYSIS OF THE EAI EXPERIENCE IN BALTIMORE 13 (1994).

⁷⁴ ASCHER, ET AL., *Supra* note 1, at 46; HOW PRIVATE MANAGERS MAKE MONEY IN PUBLIC SCHOOLS, *supra* note 59, at 39.

⁷⁵ *Id.* at 27.

⁷⁶ ASCHER ET AL., *supra* note 1, at 46; SCHNEIDER & NELSON, *supra* note 28, at 27-28.

⁷⁷ F. HOWARD NELSON, AMERICAN FED'N OF TCHRS., STUDENT ACHIEVEMENT IN EDISON SCHOOLS: MIXED RESULTS IN AN ONGOING ENTERPROSE 2 (1998) [hereinafter STUDENT ACHIEVEMENT IN EDISON SCHOOLS]. Also available at

<http://www.aft.org/research/edisonproject>.

⁷⁸ EDISON PROJECT INC., RESPONSE TO THE AFT REPORT ON STUDENT ACHIEVEMENT IN EDISON SCHOOLS 13 (1998) (also available at <http://www.aft.org/research//edisonproject/edrespon/d/edresp2.htm>); NATIONAL CTR. FOR EDUC. STAT., U.S. DEP'T OF EDUC., CHARACTERISTICS OF STAYERS, MOVERS AND LEAVERS: RESULTS FROM THE

TEACHER FOLLOW-UP SURVEY 1994-95, AT 8 (1997).

⁷⁹ AMERICAN FED'N OF TCHRS., BEACON EDUCATIONAL MANAGEMENT 2 (1999) (*unpublished report on file with the Stanford Law and Policy Review*); Eleanor Chute, *New Page Turns on Revisionist Tale: outcomes Debated as School District Resumes control of Turner Elementary*, PITTSBURGH POST-GAZETTE, June 29, 1998, at A1 (also available at <http://www.post-gazette.com/regionstate/19980629bturner3.asp>).

⁸⁰ Monica Hayes, *Educational Experiment APS Staff Ready for First Attempt at Privatization in public School*, PITTSBURGH POST-GAZETTE, Aug. 31, 1995, at B1.

⁸¹ *Id.*

⁸² *Id.* at A1.

⁸³ PUBLIC SECTOR CONSULTANTS, INC. & MAZIMUS, INC., MICHIGAN'S CHARTER SCHOOL INITIATIVE: FROM THEORY TO PRACTICE 48-49 (1999) (on file with the Stanford Law and Policy Review). Also available at http://www.mde.state.mi.us/reports/psaeval19901psc_fullreport.pdf.

⁸⁴ *Id.*

⁸⁵ HORN & MIRON, *supra* note 4, at 41.

⁸⁶ *Id.* at 43.

⁸⁷ *Id.* at 42.

⁸⁸ *Id.* at xi, 45

⁸⁹ PUBLIC SECTOR CONSULTANTS, *supra* note 83, at 54.

⁹⁰ ARTHUR ANDERSEN & CO., EDUC. ALTERNATIVES, INC: REPORT OF INDEPENDENT PUBLIC ACCOUNTANT (1993); RICHARDS ET AL., *supra* note 1, at 117; F. HOWARD NELSON, *How Private Management Firms Seek to Make Money in Public Schools*, 9 J. SCH. BUS. MANAGEMENT 65, 69 (1997) (also available at <http://www.aft.org/research/reports/private/jsbm/jsbm.htm>).

⁹¹ S. RUFFINI ET AL., BALTIMORE CITY PUBLIC SCHOOLS, THE EARLY IMPLEMENTATION OF TESSERACT 1992-93 EVALUATION REPORT 7 (1994).

⁹² *Id.*

⁹³ See EDISON PROJECT INC., *supra* note 78, at 13-15 (noting that the Edison School day is one hour longer than the typical public school day, has a month longer school year, and promises technological facilities that public schools cannot match-gains that are promised to be gotten from more efficient use of current per-pupil spending).

⁹⁴ SEC S-1/A Registration Statement, Edison Schools Inc. 35 (1999) (listing 86 percent of revenue from Educational Services as Direct Site Expenses).

⁹⁵ William T. Hartman & Edward C. Keller, *Your Schools, Your Money: An analysis of School and District Level Spending Patterns* 11 (Mar. 1999) (*unpublished paper on file with the Stanford Law and Policy Review*) (explaining that Edison calculations do not incorporate other school district expenditure items that are often considered administrative overhead such as a out-of-district obligations for student placements (4 percent) and facilities (9 percent)

⁹⁶ *Id.* at 11, tbl.5.

⁹⁷ SEC, *supra* note 94, at 31.

⁹⁸ Telephone Interview with Arizona Benefits Solutions, Cottonwood, Ariz. (Apr. 6, 2000).

⁹⁹ HORN & MIRON, *supra* note 4, at xv, 60 (reporting that in Michigan, universities authorize most charter schools. They are responsible for directing funds to charter schools and financial reporting, for which they assess a three percent fee).

¹⁰⁰ Hank Prince, *Follow the Money: An Initial View of Elementary Charter School Spending in Michigan*, 25 J. OF EDUC. FIN. 175, 181 (1999); AMY BERK ET AL., *A STUDY OF CHARTER SCHOOL FINANCE ISSUES FINAL REPORT* 1 (1998).

¹⁰¹ PUBLIC SECTOR CONSULTANTS, *supra* note 83, at 82.

¹⁰² *Id.*

¹⁰³ *Id.* at 80, 82.

¹⁰⁴ Nancy J. Zollers & Arun K. Ramanathan, *For-Profit Charter Schools and Students with Disabilities: The Sordid Side of the Business of Schooling*, PHI DELTA KAPPAN, Dec. 1998, at 298.

¹⁰⁵ American Fed'n of Tchrs., EAI's Mismanagement of Federal Education Programs: The Special Education and Chapter 1 Track Records in Baltimore (Dec. 1994) (*unpublished manuscript on file with Stanford Law and Policy Review*).

¹⁰⁶ PUBLIC SECTOR CONSULTANTS, *supra* note 83, at 80.

¹⁰⁷ *Id.* at 80. Figures refer to management companies operating at more than one site. In Michigan, most special education is provided through direct state appropriations to Intermediate Service Districts. However, state special education aid provided directly to charter schools and school districts, could be a barometer of the provision of special education services.

¹⁰⁸ John F. Witte, *School Choice and Student Performance*, in HOLDING SCHOOLS ACCOUNTABLE: PERFORMANCE-BASED REFORM IN EDUCATION 149, 155 (Helen F. Ladd, ed. 1996).

¹⁰⁹ See Alex Molnar, *Smaller Classes Not Vouchers Increase Student Achievement* (1998) (unpublished paper on file with *Stanford Law and Policy Review*). Only recently has class size reduction emerged as a popular reform among policymakers. Nevada passed a class size reduction act in 1989, but California's ambitious implementation of a class size reduction act typified the new-found political support for small classes.

¹¹⁰ B. Nelson et al., *supra* note 3, at 20.

¹¹¹ American Fed'n of Tchrs., *supra* note 67, at 2.

¹¹² American Fed'n of Tchrs., *Advantage Schools, Inc. 1* (1999) (on file with the *Stanford Law and Policy Review*).

¹¹³ B. Nelson ET AL., *supra* note 3; F. NELSON ET AL., *supra* note 5.

¹¹⁴ American Fed'n of Tchrs., *supra* note 67, at 1-2; American Fed'n of Tchrs., *supra* note 112, at 2.

¹¹⁵ American Fed'n of Tchrs., *supra* note 67, at 1; see also

Edison Schools Inc., *Edison Schools* (visited Feb. 23, 2000)

<http://www.edisonschools.com> (providing information on

Edison Schools); see also *Success for All Every child, Every*

School (visited Feb. 23, 2000)

<http://www.successforall.net>

(providing information on the *Success for All* program).

¹¹⁶ American Fed'n of Tchrs., *supra* note 67, at 2.

¹¹⁷ American Fed'n of Tchrs., *supra* note 112, at 2; see also

Advantage Schools: Transforming Urban Public Education

(visited Feb. 23, 2000) <http://www.advantage-schools.com/>

(providing additional information on *Advantage Schools*).

¹¹⁸ American Fed'n of Tchrs., *National Heritage Academies 1*

(unpublished paper on file with the *Stanford Law and Policy*

Review); see also *Welcome to National Academies*, (visited Feb. 23, 2000) <<http://www.heritageacademies.com/>>

(providing information on *National Heritage schools*).

¹¹⁹ REBECCA HERMAN, *AMERICAN INST. FOR RESEARCH, AN EDUCATOR'S GUIDE TO SCHOOLWIDE REFORM* (1999), also available at (visited Feb. 23, 2000)

<http://www.aasa.org/reform/index.htm>

(reporting research conducted under contract to the American Association of School Administrators, American Federation of Teachers, National Association of Elementary School Principals, National Association of Secondary School principals, and national Education Association).

¹²⁰ Only two independent evaluations had been conducted in

schools operated by Edison Schools Inc., both of which failed to show superior performance. See Robert Mislevy, *Primary*

Reading Studies (visited Mar. 3, 2000)

<http://www.aft.org/research/edisonproject/sfa>

(describing three primary reading studies in

Wichita, Kansas and Mr. Clemens, Michigan, two in Colorado Springs, Colorado and one in Sherman, Texas): see also DADE COUNTY PUBLIC SCHOOLS OFFICE OF EDUCATIONAL EVALUATION & MANAGEMENT OF THE EDISON PROJECT SCHOOL FIRST INTERIM REPORT: 1996-97 SCHOOL YEAR 33 (Feb. 1998) (reporting the two independent evaluations that have been conducted in schools operated by Edison Schools operated by Edison Schools Inc., both of which failed to show superior performance) [hereinafter EVALUATION OF THE EDISON PROJECT.]

¹²¹ During the 1999-2000 school year, all privately managed schools are charter schools, except for some schools managed by Edison Schools Inc. under contract with public school districts. A few of these Edison schools are required to enroll children in the neighborhood who choose the school, but all Edison schools also enroll some students outside the neighborhood attendance zone. By drawing students from outside the attendance zone, Edison is able to maintain the maximum classroom and school size.

¹²² BERYL NELSON ET AL., U.S. DEP'T OF EDUC., NATIONAL STUDY OF CHARTER SCHOOLS: THE STATE OF CHARTER SCHOOLS 2000: THIRD-YEAR REPORT (1999).

¹²³ PUBLIC SECTOR CONSULTANTS, *supra* note 83, at 16.

¹²⁴ *Id.*

¹²⁵ *Id.* at 78.

¹²⁶ *Id.* at 76

¹²⁷ MOE & GAY, *supra* note 8, at 15.

¹²⁸ See J. COLEMAN ET AL., NATIONAL OPINION RESEARCH CTR., PUBLIC AND PRIVATE SCHOOLS (1981) (describing student composition within public and private schools and the outcomes for students in the schools.).

¹²⁹ Karl L. Alexander & Aaron M. Pallas, School Sector and Cognitive Performance: When is a Little a Little? 58 SOC. OF EDUC. 115 (1985).

¹³⁰ Thomas Hoffer et al., *Achievement Growth in Public and Catholic Schools*, 58 SOC. OF EDUC. 74, 74-97 (1985).

¹³¹ See ANTHONY S. BRYK ET AL., CATHOLIC SCHOOLS AND THE COMMON GOOD (1993)

(describing characteristics of effective Catholic schools).

¹³² Adam Gamoran, *Student Achievement in Public Magnet, Public Comprehensive and Private City High Schools*, 18 EDUC. EVALUATION AND POL'Y ANALYSIS 1, 1 (1996).

¹³³ Dan D. Goldhaber, *Public and Private High Schools: is School Choice an Answer to the Productivity Problem?* 15 ECON.OF EDUC.REV. 93,98 (1996).

¹³⁴ John F. Witte & *supra* note 108, at 149.

¹³⁵ John F. Witte & Christopher A. Thorn, *Fourth-Year Report: The Milwaukee Parental Choice Program* (1994) (visited Feb. 23, 2000) http://dpls.daccwisec.edu/choice/choice_report94oc.html.

¹³⁶ Jay P. Greene et al., *The Effectiveness of School Choice: The Effectiveness of School Choice in Milwaukee: A Secondary Analysis of Data from the Program's Evaluation* (visited Feb. 23, 2000)

<http://data.fas.harvard.edu/pepg/op/evaluate.htm>.

¹³⁷ John F. Witte, *Achievement Effects of the Milwaukee Voucher Program*,iii (jan. 1997) (unpublished manuscript on file with the *Stanford Law and Policy Review*). Also available at

<http://dpls.dacc.wisc.edu/choice/aea97.html>.

¹³⁸ Cecilia Elena Rouse, *Private School Vouchers and Student*

Achievement: An Evaluation of the Milwaukee parental Choice Program, Q.J. OF ECON. 533 (1998).

¹³⁹ *Id.*

¹⁴⁰ Cecilia Elena Rouse, *Schools and Student Achievement: More Evidence from the Milwaukee Public Choice Program*,

ECON. POL'Y REV. 61, 68 (March, 1998). Also available at

http://www.ny.frb.org/rmaghome/econ_pol/398crou.pdf.

¹⁴¹ *Id.*

¹⁴² JOHN F. KENNEDY SCH. OF GOV'T, HARV. UNIV., OFFICE OF COMMUNICATIONS AND

PUBLIC AFFAIRS, GAINS IN THE TEST SCORES IN THE CLEVELAND VOUCHER PROGRAM FOUND, (June 24, 1997) (releasing findings of a study conducted by professor Paul Peterson).

¹⁴³ Kim K. Metcalf et al., A Comparative Evaluation of the Cleveland Scholarship and Tutoring Grant Program: Year One 1996-1997, (1998) (unpublished paper on file with the *Stanford Law and Policy Review*).

¹⁴⁴ Kim K. Metcalf et al., Evaluation of the Cleveland Scholarship Program: Second-Year Report (1997-1998) (1998). (unpublished paper on file with the *Stanford Law and Policy Review*).

¹⁴⁵ *Id.*

¹⁴⁶ Lois C. Williams & Lawrence E. Leak, The UMBC Evaluation of the Tesseract Program in Baltimore City 26 (1995) (unpublished manuscript on file with the *Stanford Law and Policy Review*).

¹⁴⁷ DADE COUNTY PUBLIC SCHOOLS OFFICE OF EDUC. ACCOUNTABLE, RODOLPHO ABELLA, EVALUATION OF THE SATURN SCHOOL PROJECTS AT SOUTH POINTE ELEMENTARY SCHOOL 100 (1994).

¹⁴⁸ Edison Project, Annual Report on School Performance (visited Feb. 23, 2000) <http://www.edisonproject.com/annualframe.html>.

¹⁴⁹ Robert Mislavy, *supra* note 120.

¹⁵⁰ STUDENT ACHIEVEMENT IN EDISON SCHOOLS, *supra* note 77, at 30 (citing, and later disputing, an Edison press release that “at the end of year one [of the Edison program], primary reading achievement is slightly above nationally normed grade levels in kindergarten, on grade level in first grade, and slightly below grade level in second grade.”)

¹⁵¹ *See id.* at 14 (attributing the success of these Edison schools to the fact that they are essentially “neighborhood magnet school” which benefit from the influx of children whose parents went through the trouble of sending them to a school out of the neighborhood).

¹⁵² *Id.* at 30-32 (finding that in two years assessment, only Edison’s Wichita first graders performed at their grade level).

¹⁵³ Robert E. Slavin et al., ‘Whenever and Where We Choose’ *The Replication of ‘Success for All’* PHI DELTA KAPPAN Apr. 1994, at 643-647.

¹⁵⁴ STUDENT ACHIEVEMENT IN EDISON SCHOOLS, *supra* note 77, at 30-37 (arguing that overall Edison has been less successful than the average SFA school).

¹⁵⁵ *Id.* at 37.

¹⁵⁶ DADE COUNTY PUBLIC SCHOOLS OFFICE OF EDUC. EVALUATION, JOSEPH GOMEZ & SALLY SHAY, EVALUATION OF THE EDISON PROJECT SCHOOL SECOND INTERIM REPORT: 1998-99 SCHOOL YEAR 39-40 (March 1999); STUDENT ACHIEVEMENT IN EDISON SCHOOLS, *supra* note 77, at 37.

¹⁵⁷ MOE & GAY, *supra* note 8, at 16.

¹⁵⁸ B. Nelson et al., *supra* note 3, at 1.

¹⁵⁹ *See* Texas Educ. Agency, 1998-99 AEIS Reports, (visited Apr. 9, 2000)

<http://www.tea.state.tx.us/perfreport/aeis/99/>.

¹⁶⁰ LORI MULHOLLAND, ARIZONA CHARTER SCHOOL PROGRESS EVALUATION 29 (1999). Also available at

<http://www.ade.state.az.us/schools/charterschools/CharterSchoolStatusMainReport3-15-99.pdf>.

¹⁶¹ Texas Educ. Agency office of Charter Schools, Texas Open Enrollment Charter Schools: Second Year Evaluation, 1997-1998 (visited Feb. 3, 2000)

<http://www.tea.state.tx.us/charter/eval98index.html>

¹⁶² *See* Jordana Hart, *MCAS Scores of charters Fail to Meet Expectations*, BOSTON GLOBE, Dec. 14, 1998.

¹⁶³ PUBLIC SECTOR CONSULTANTS, *supra* note 83, and 59.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 66.

¹⁶⁶ *Id.*

¹⁶⁷ Healthcare spending represents a growing portion of the GDP, currently as much as 13 percent, while education (including childcare, higher education, and adult training) represents approximately eight percent of GDP. MOE & GAY,

supra note 8, at 11. Twenty years ago, private nonprofit and some public institutions provided most healthcare. Today, huge companies dominate the healthcare industry. These companies frequently own providers encompassing all aspects of healthcare-physician practices, hospitals, home care agencies, and managed care entities.

¹⁶⁸ Quality is the focus of debate about public education. The push for healthcare reform in the early 1990s, however, was driven by the demand to lower costs by both business and government, not by a perception of poor healthcare quality. K-12 education clearly has not presented cost problems on the same scale as healthcare. The public K-12 education sector, for example, represented about 4.4 percent of GDP in 1972 and in 1996. National Ctr. For Educ. Stat., *supra* note 16. While they frequently feature it in the rhetoric, education entrepreneurs do not focus on cost reduction. Instead they argue that the market will transform education and provide a higher quality product that will improve customer satisfaction. Management companies want as much revenue as they can capture from districts. In fact, companies aggressively seek more funding to cover start-up and capital cost.

¹⁶⁹ HORN & MIRON, *supra* note 104, at 298.

¹⁷⁰ Zollers & Ramanathan, *supra* note 104, at 298.

¹⁷¹ Robert Kuttner, *The American Health Care System-Wall Street and Health Care*, 340 NEW ENG. J. MED. 664 (1999) (describing the demands of investors in health care services).

¹⁷² Leona Group, LLC, *K-12 School Management* (visited Feb. 23, 2000) <http://www.leonagroup.com>.

¹⁷³ American Fed'n of Tchrs., *supra* note 67 (stating that they had 79 schools in Fall, 1999).

¹⁷⁴ Advantage Schools, *Advantage Locations* (visited Feb. 23, 2000) www.advantage-schools.com/locations/index.htm.