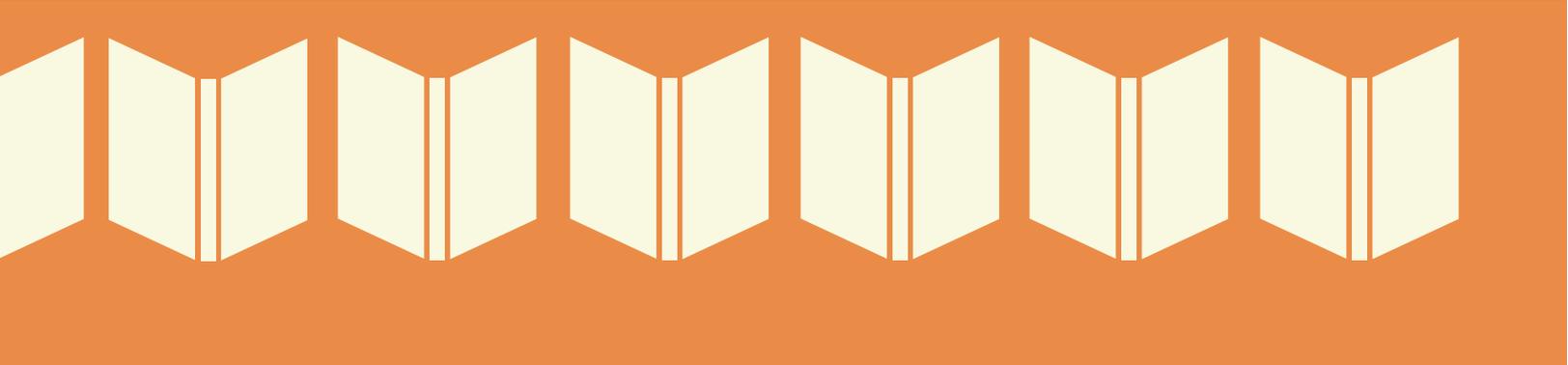


ISSN No.
0146-9283

**Fall
2000**

educational considerations

published at kansas state university college of education



Foreword¹

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Senior Research Associate, NEA - Washington, D.C.

This edition of *Educational Considerations* is devoted to education finance issues of national importance in the twenty-first century. There are many ways to conceptualize a special edition on this theme. Education finance is a relatively young field compared to many disciplines, and one might take a retrospective approach, to begin at the beginning, the early twentieth century, with the grand masters of education finance—Cubberley, Updegraff, Strayer, Haig, Mort, Morrison— and weigh their contributions along with those of others at key historical mileposts. Another approach might be more data-based, examining the advances in our field's ability to analyze and interpret education finance data in increasingly complex and sophisticated ways in order to deconstruct, for example, the “black box” of educational inputs, processes, and outcomes.

A third approach, the one selected here, presents an analysis of the more recent past, examining trends and issues that hold importance for the present and future, not only of education finance, but also of education more generally. These include long-term trends, such as the thirty year history of school finance litigation, as well as the vibrant but troubled charter school movement of the 1990s. Perennial issues, such as teacher compensation, still perplex policymakers, and after a decade of state standards, assessments, and high-stakes testing, compensation issues are again at the forefront. However, a greater appreciation of the role of professional development funding in enhancing teacher quality also is emerging. While the collection and use of appropriate data are key to gaining insight into what works and what doesn't, be it school-based resource allocation or a state education funding system, there is growing interest in our field in those issues that are so far ahead of the curve that they have slipped beneath the radar screen of systematic data collection. For these issues, qualitative methods complement traditional quantitative analyses.

While the above issues and trends focus on elementary and secondary education, the future of higher education finance may be instructive with its greater emphasis on distance education and collaborative, entrepreneurial ventures to increase student enrollments and reach time-pressed, place-bound professionals. Finally, it is sometimes more comfortable to focus on our own federal, state, and local funding issues than to look transnationally at the impact of a globalizing economy. Frankly, it is unsettling to contemplate the cost of illiteracy in lost opportunities to the economies of not only developing or unstable countries, but also to our own economy and standard of living. Education of the world's children is imperative, not only for reasons of social justice, but for global economic survival, and the United States, as a world power, shares responsibility for this enormous task. We, as researchers and practitioners in education finance, have much to contribute to that conversation.

The articles in this special edition are intended to be thought-provoking. For example, Thompson and Crampton challenge the efficacy of school finance litigation to achieve education finance reform in a study that tracks four states over a twenty-seven year period. Theobald analyzes the structure of teacher compensation and student achievement across three waves of education reform via a traditional framework of equity, efficiency, and liberty. Recognizing the constellation of societal and economic factors that have historically affected the teaching profession, Theobald's analysis is cautious, more descriptive than prescriptive, but ultimately he seems to embrace efficiency-enhancing structures, such as pay-for-performance, more warmly than equity or liberty. After Killeen et al., analyzed levels of professional development expenditures in school districts, they came to what will undoubtedly be a surprising conclusion for many: Urban school districts outspend their suburban and rural counterparts. Embedded in this study, although not directly posed, is the question, how can urban school districts spend more on professional development and still have such dismal student scores? The authors acknowledge the lack of complete data in this newly-researched area and are pursuing case studies to augment these findings. Picus and Robillard echo concerns about data collection in a pragmatic study based on a Los Angeles high school and reach the conclusion that given the difficulty and cost of collecting school-based data, student-based data collection may be a more realistic goal. Versteegen reminds us of the historical importance of federal policy and funding with regard to students with disabilities and details major changes in the fiscal provisions under the Individuals with Disabilities Education Act.

Turning to what might be considered the single most important education reform of the 1990s, Muir et al., examine the impact of charter schools on the districts in which they reside, with a focus on funding issues. Their's is an important contribution as much charter school research has been ideological and anecdotal up to this point. In addition, the federally funded four year study of charter schools did not address these issues in such depth (Nelson et al., 2000). Arsen's study of Michigan charter schools paints a portrait of one state's experience and reaches a troubling conclusion: charter schools whose *raison d'être* has been innovative approaches to education spend significantly more on administration and less on instruction than regular public schools in Michigan. Crampton and Bauman address an emerging trend, educational entrepreneurship, and examine the fundraising activities of three Colorado school districts. They conclude that the most affluent, a suburban district, was the most aggressive and successful in generating entrepreneurial revenues, and they find that across the districts and schools studied, entrepreneurial revenues remain largely outside traditional accounting methods. This case study is nested in the larger context of conflicting paradigms that underlie education finance policy decisions, where values such as equity, based in the theory of social goods, clash with notions of markets and competition found in neoclassical economics. LaCost et al., describe a collaborative partnership between two units of their university and a regional accrediting agency that utilizes distance education coursework as a centerpiece to certify school administrators and teacher leaders as School Improvement Specialists. The article reflects a tentative enthusiasm that is perhaps indicative of the concerns public sector institutions bring to balancing the fiscal benefits and risks of such ventures. In the closing essay, McClure chides us for the narrow focus of our field and encourages us to broaden our vision to the effects of the globalizing economy on our collective future. All in all, this is a cautionary tale that warns us that we ignore global economic and education trends at our own risk.

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Vol. XXVIII, Number 1, Fall 2000

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Educational Considerations invites subscribers for only \$13.00. *Educational Considerations* is published and funded by the College of Education at Kansas State University. Write to EDITOR, Bluemont Hall, Kansas State University, Manhattan, KS 66506 or call (785) 532-5543.

Educational Considerations Design/Layout by Mary Hammel, Kansas State University

PUBLICATION INFORMATION

Educational Considerations is published at the College of Education, Kansas State University. *Educational Considerations* and Kansas State University do not accept responsibility for the views expressed in articles, reviews, and other contributions appearing in this publication. In keeping with the professional educational concept that responsible free expression can promote learning and encourage awareness of truth, contributors are invited to submit conclusions and opinions concerned with varying points of view in and about education.

Educational Considerations is published two times yearly. Editorial offices are located at the College of Education, Bluemont Hall, 1100 Mid-Campus Drive, Kansas State University, Manhattan, KS 66506-5301. Correspondence regarding manuscripts must be accompanied by a self-addressed stamped envelope.

No remuneration is offered for accepted articles or other materials submitted.

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Printed in the United States of America.

Available online at:
<http://www2.educ.ksu.edu/projects/EdConsiderations/>

“...Litigation is high stakes gambling.”

The Impact of School Finance Litigation*

David C. Thompson
Faith E. Crampton

Introduction

School finance litigation has been a hot topic for more than three decades. Starting in the 1960s, school districts began bringing suit in federal and state courts in an effort to force greater fairness in funding for schoolchildren. Although litigation involving school funds actually reaches back into the 19th century, the modern blitz of lawsuits aimed directly at school funding formulas has resulted in nearly every state being challenged for its method of funding public K-12 schools.

Whether litigation has made much difference on a grand scale has not been well known. There has been a belief that litigation forces states to fund schools more aggressively, but a definitive body of research evidence to support that belief does not exist. The research literature has mostly focused on the daily particularities of each state's own constitutional requirements and the details of each state-specific funding scheme so that larger questions about measurable impact have not been well addressed. In effect, much effort has been devoted to analyzing the behavior of individual federal and state courts from a legal theory perspective, but too little effort has been given to a deeper examination of the relationship between changes in funding and court decisions.

This present study went to the larger issues of whether a lawsuit is an effective way to rectify concerns about how schools are funded. The study first asked what the literature has to say about the impact of school finance litigation. The study then examined data from four states to consider whether litigation in fact improves funding equity and resource levels for schools. The ultimate purpose of the study was to provide new objective evidence on the efficacy of school finance litigation. These states—Arizona, Montana, Tennessee, and Washington—were selected in large part because they appear to have been less studied than others and hence offer a fresh perspective.

These states offered the added benefit of representing a spectrum of legal, political, and geographic experiences that enhanced the goals of the study. All four states had experienced dramatic rulings in the sense that the courts studied the entire educational system. Likewise, legislative changes to state aid schemes generally followed these court rulings. These states further offered a sustained view of litigation by covering several decades; for example, cases in Arizona and Washington first dated back to the 1970s, while newer actions were also included in this group so that the evolution of equity could be followed over time.

The article is divided into four sections. The first consists of a review of the relevant literature on school finance litigation, focusing on *direct litigation effect* studies. The second section describes the data sources and research methods used, including the criteria for selection of the four states studied. In the third section, the analysis of results is presented where trends internal to the individual states along with an analysis that

contrasts individual state results with national trends. The final section draws conclusions from this study *vis a vis* previous research and offers implications for those considering litigation as a means of achieving school finance reform.

State of the Literature on the Impact of School Finance Litigation

Depending on one's perspective, the literature has much to say about the impact of litigation on school funding, or it has little to say at all. Using the first perspective, it can be said that nearly all literature in school finance actually deals with litigation. This view argues that since school funding is a legislative issue in each state and since the foundation of school finance is the study of legislative actions affecting how schools are funded, then scholarly scrutiny of legislative funding acts is a *de facto* analysis of litigation since nearly every state has experienced a challenge to its school aid formula. This view has practical value since legislatures are sensitive to the potential for lawsuits and may give greater attention to the constitutionality of changes to school aid schemes. In contrast, it is possible to argue that the literature has little to say about litigation effects. This does not dispute the pervasiveness of litigation in the literature, but it discriminates among studies by asking which analyses have actually attempted to assess the impact of litigation on fiscal equity. Using this view, most do not actually try to measure the impact *per se*.¹

A reasonable position is that no part of the literature can be ignored when asking about the effects of litigation. As a result, the authors acknowledged the contribution of the entire knowledge base which is comprised of the *general* literature, *single-state* studies, and *multi-state* studies, and *direct litigation effect* studies. However, this review focuses on the last category, direct litigation effect studies, given its particular relevance to this study.

Direct Litigation Effects Studies

There is a body of literature that has gone directly to the question of the effectiveness of litigation. The literature search for this current analysis identified 28 works judged useful to the goals of this study. While the studies vary in approach, all make a contribution to the knowledge base about the risks and potential outcomes when suing over school funding.

Favorable Impacts of Litigation

The 1990 yearbook of the American Education Finance Association dealt in part with the topic of litigation impacts. Salmon and Alexander examined state supreme court decisions and compared them on pre- and post measures of percentage of state aid and whether the aid formula structure became more equitable on its face.² They argued that revenue increases were greater in plaintiff states, while no clear pattern emerged in defendant states, *i.e.*, plaintiffs gained an average 21% compared to defendants' gain of 11%.

The idea that litigation forces legislatures to accept funding concepts that otherwise might receive a cool rejection gained support in the work of Henderson in 1991.³ His study indicated that the benefits of forcing the issue in the contentious context of a lawsuit included more equitable tax bases, implementation of specific educational improvement standards, and increased state percentage shares of total revenue to school districts. Support for the same idea was offered by Goetz and Debertin, who suggested that intensive reform as seen in Kentucky can lead to gains despite an initially reluctant legislature.⁴ Their presentation of data indicated that court-ordered reform resulted in inclusion of aid to economically disadvantaged students and a beneficial move toward funding pupils instead of classroom units.

The most data-intensive studies favoring lawsuits have appeared in just the last few years. Hickrod and colleagues probably pioneered the effort to measure litigation effects in two useful studies covering long periods. In 1983, Hickrod and Goertz examined approximately ten years of data in

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reform states and concluded that litigation had had some benefit, although they admitted that litigation, reform, and equity will never be a finished product.⁵ In 1992, Hickrod and several colleagues looked at data covering 1970-1990,⁶ arguing that reworked data from another study showed that winning plaintiffs gained more dollars than losers or nonlitigants. Hickrod also argued that litigation may actually serve tax equity better than it serves adequate funding, and that revenue shifts may be the greater result than any real funding increase.

Dayton's analysis in 1993 examined every supreme court case up to that time,⁷ arguing that cases seem to turn on whether a court can find a positive correlation between educational opportunity and fiscal resources. His thesis was that litigation has been effective since the majority of cases at the state level had found such correlation. The most important aspect of his analysis lay in making the case that there is evidence to support the notion that courts often accept the argument that spending does have a positive impact on students and that an indisputable correlation need not be absolutely settled.

An important analytical work pointing to benefits of litigation was produced by Evans and colleagues.⁸ They examined data on all districts in 46 states over five years, finding that court intervention led to a 22% increase in state funds while local shares remained unchanged and that revenue increased by 29% in the poorest districts. They concluded that the worst inequality is no longer within states, but rather that concern for fairness should be refocused toward interstate inequality. Subsequent analysis by Evans, Murray, and Schwab resulted in reiteration of their earlier conclusions.⁹ Additionally they noted that their analysis showed spending to be 34% lower in nonreform states; however, they observed that gains among lower spending districts were not uniform across all states after reform.

Questionable Impacts of Litigation

The overall observation of direct-effects litigation studies finding a positive impact of lawsuits is that such works are relatively few and are almost always cautious in their conclusions. A large body of studies raises questions about whether lawsuits represent wise investment, at least in terms of confidence in the outcome of a court challenge.

The work of Berne and Stiefel surfaces when considering the measurement of litigation effects. In 1983 these authors conducted a meta-analysis of general equity studies from 1940 to the 1970s at the national level, concluding that improvement trends were strong until the 1960s but mixed to poor results were seen thereafter.¹⁰ Although the context of their study was larger than litigation effects *per se*, it provided a background on the evolution of equitable performance of aid formulas and simultaneously suggested that the increase in litigation has not been accompanied by undisputed increases in equity.

Several authors holding optimistic views of litigation have also advocated caution. Dayton considered whether rural schools should launch lawsuits over fiscal disparity, making the point that rural schools should not hastily join the reform frenzy in that reform success has been blurred by variations in the economy and that courts refuse to legislate or to make public policy decisions such as whether maintaining rural schools is a wise use of public funds.¹¹ Dayton suggests that in reality courts can only bluster in the face of legislatures, and that legislatures can thwart reform if they wish. A similar note was sounded by Hickrod as he analyzed national data from 1973-1993.¹² Hickrod concluded that it is risky to challenge an aid formula because it is expensive and time-consuming, and there may be unanticipated effects if an adverse ruling is issued.

The aftermath of litigation has been of some interest. Heise considered litigation trends, arguing that when lawsuits succeed, other factors are triggered in ways that offset or even nullify the court's intent.¹³ In the same vein, Mintrom argued that people who are frustrated by a lack of

school finance reform do not understand political economies and thus underestimate the barriers to change.¹⁴ Mintrom argued that inescapable realities exist: politicians must obey constituents, taxpayers try to minimize taxes, and parents see education as a rival good. These realities produce a Tiebout-style market¹⁵ where, as equalization begins to work through an aid formula, wealthy parents pressure legislators to maintain the status quo. If this fails, wealthy parents then vote to increase local funding. Mintrom's point is that as long as local tax leeway is possible, equalization will be thwarted in the end. He uses New Jersey to show that for each \$1,000 in new equalization aid, low and medium wealth districts reduce local shares by about \$500, while wealthy districts spend more by matching new dollars. He then tested political will to vote for reform, finding that in wealthy districts a 1% reduction in support for equalization occurs for each \$5,000 per capita increase in property value. He then argued that these shifts are sufficient to unseat legislative incumbents, thereby thwarting equalization in the end.

Similar effects were observed by Manwaring and Sheffrin. They argued that litigation and reform can have different effects depending on the approach to how inequalities in spending are addressed.¹⁶ They first argue for a *state* effect, *i.e.*, changes in funding follow naturally after moving control to the state, a thesis first examined by Fischel¹⁷ who found that Proposition 13 in California actually reduced support since taxpayers had previously paid for a local system based on preferences that was no longer available once the state took control of school funding. They then argue for a *legislative* effect, *i.e.*, a positive or negative outcome based on changes in legislative representation, a thesis examined by Leyden¹⁸ who found that whichever group of voters controls the legislature will determine the level of school fiscal support. Manwaring and Sheffrin then argue for an *income* effect, *i.e.*, fiscal centralization leads to an increase in spending as a fraction of income. They then argue for a *budget status* effect, *i.e.*, where schools compete with other agencies for the same dollars. Manwaring and Sheffrin add a *base* effect which captures the effects associated with litigation, *e.g.*, the phenomenon of the higher profile that education takes on after a court decision or after legislative reform. Manwaring and Sheffrin's findings were that the base effect is positive for both litigation and reform, while the state effect is negative. The income effect is negative in that citizens' desire to spend falls by 40% after centralization, while the budget status effect is positive, although expenditures track the economy closely. Their conclusion was that litigation has had a negative impact in eight states and a positive effect in fourteen states. Their ultimate findings were that centralized control leads to lower levels of funding compared to other kinds of state aid plans such as foundation, power-equalized, or multi-tier funding systems.¹⁹

One of the more exhaustive litigation effects studies is Joondeph's work on school finance reform.²⁰ Studying the states of Arkansas, California, Connecticut, Washington, and Wyoming, Joondeph argued that litigation has produced mixed results. On the positive side, litigation has been moderately able to produce a more equal distribution of resources, but the bad news is that in four of the five states funding grew more slowly than the national average. Moreover, he found a negative correlation between equalization and overall school expenditures such that those states which most dramatically reduced disparities were the same states that increased funding levels the least. If generalizable to litigation as a strategy for educational improvement, such correlations could suggest a relationship between equality and funding that could erase the effectiveness of litigation-based school finance reform, *i.e.*, reform that assures a more equal distribution of funds may trigger forces that pressure overall spending downward. Joondeph's overall conclusion was not encouraging to school finance reform as he considered California, arguing that despite significant equalization, poor districts might have been better off under the pre-reform financing system.

Findings from the Literature

There is no question that the literature does not encourage plaintiffs to see litigation as a fail-proof strategy to increase school funding. Rather, as Crampton notes in an analysis of trends in school finance litigation over the past twenty-five years, litigation is "risky business."²¹ Gains have not been remarkable on average, raising the question of whether comparable gains might have been achieved legislatively under more amicable conditions. Litigation is by nature adversarial, time-consuming, and often expensive. Often, the children on whose behalf a suit was filed may well have left school before the benefits of a plaintiff victory become reality.

Litigation cannot be dismissed, however, as having such low benefit that it is completely useless. The literature speaks strongly regarding increased public, legislative, and judicial sensitivity to fiscal equity flowing from litigation. The literature also indicates that while equity gains have not been enough to delight reformers, there is substantial evidence that equity has increased in ways that reflect the impact of public and judicial pressure. The literature also points to equity gains due in part to legislative choice, as well as the force of law. As Banks explained, there is a fine line to be observed when considering a strategy likely to produce reform.²² The balance seems to lie in finding the right combination of constitutional force, judicial activism, and legislative voluntarism supported by an informed electorate. Banks points out that reformers will fail if they believe courts are tools by which to create legislation since courts have said they will intervene only when it is clear that a legislature is unwilling or unable to pass effective remedial legislation. He adds that political realities really do exist, including the method by which judges are selected, the political orientation of the court in terms of its doctrine and activism, and the social values of a state's people. As a result, the debate about the impact of litigation is not resolved and will continue to need investigation well into the future.

Data Sources, Selection Criteria, and Method

Data for the study were taken from multiple sources. The NEA *Estimates of School Statistics* provided the best source for longitudinal data at the national level. Standardized by a single agency across a long period, these data permitted comparison of the selected reform states against all other non-reform states to estimate changes following litigation. The NCES *Common Core of Data* also was used to descriptively and qualitatively profile the selected states. Data from state departments of education also aided descriptive analysis and provided one of the few ways to understand the peculiarities of states' historic and current aid schemes.

This study examined selected states that have not received much scrutiny in the literature. Four qualifications were used in evaluating states for inclusion in the study. First, a ruling on the constitutionality of the state school finance plan must have been issued by the state's highest court. Second, some time must have elapsed after the opinion of the court in order to assume some impact of any legislative changes to the state aid scheme that might have followed. Third, the ruling of the state supreme court must have been for plaintiffs. Fourth, eligible states had to be among those which had not been subjected to much analysis in the belief that knowledge about 'new' states would make a useful contribution to the literature.

The study was guided by the following research question:

- *What can be determined from longitudinal data in each selected state regarding changes in resource levels: i.e., were there changes that seem to be associated with a state supreme court decision favoring plaintiffs?*

To answer this question, a data analysis model was constructed to look more closely at the four selected states individually and comparatively. The study is grounded in a descriptive analysis of major legislative and judicial events in each state that resulted in changes in state aid plans.

The quantitative analysis examined trends in student enrollment, per pupil expenditure, average salaries of professional staff, capital outlay expenditure, and the number of school districts from 1970-1997. For the purposes of the analysis, student enrollment, more specifically, average daily attendance, served as a contextual variable where it was recognized that, for example, rapidly increasing enrollments can place pressures on state resources. The remaining variables served as outcome variables. Per pupil expenditure and average salaries of professional staff, more specifically certified staff, are key indicators of the level of resources dedicated to education within a state. Capital outlay expenditure was selected as an outcome variable first for its key role in Arizona litigation, but also because it served as a complement to operating expenditures, which were captured in the per pupil expenditure and average salaries of professional staff. The final outcome variable, number of school districts, that is, a reduction of school districts over time, represents a potential efficiency measure that legislatures may turn to in an attempt to achieve a more efficient allocation of existing resources through greater economies of scale. It was hypothesized that a legislature might have a stronger interest in school district consolidation after a supreme court decision favorable to plaintiffs as a means to minimize the amount of new funding needed to meet the court's demands. Evaluation analyzed changes within each state over time using only trends internal to each state itself, followed by a second analysis focusing on relative changes in these states compared to changes in all other states.²³ The latter point addressed a criticism that the majority of existing studies have been state-specific and noncomparable.

Statistical measures were chosen to estimate the magnitude of variability within the selected states and to permit interstate comparisons to all other states during the time period. The range, mean, and standard deviation were derived and used to profile all 50 states for baseline purposes. These measures formed the basis for comparisons wherein selected states were analyzed in terms of their performance over time. Changes were plotted two ways. The first set of plots yielded an internal trend line for each selected state from 1970-1997, while the other set of plots tracked a trend line for the four states in relation to all other states for the same period.

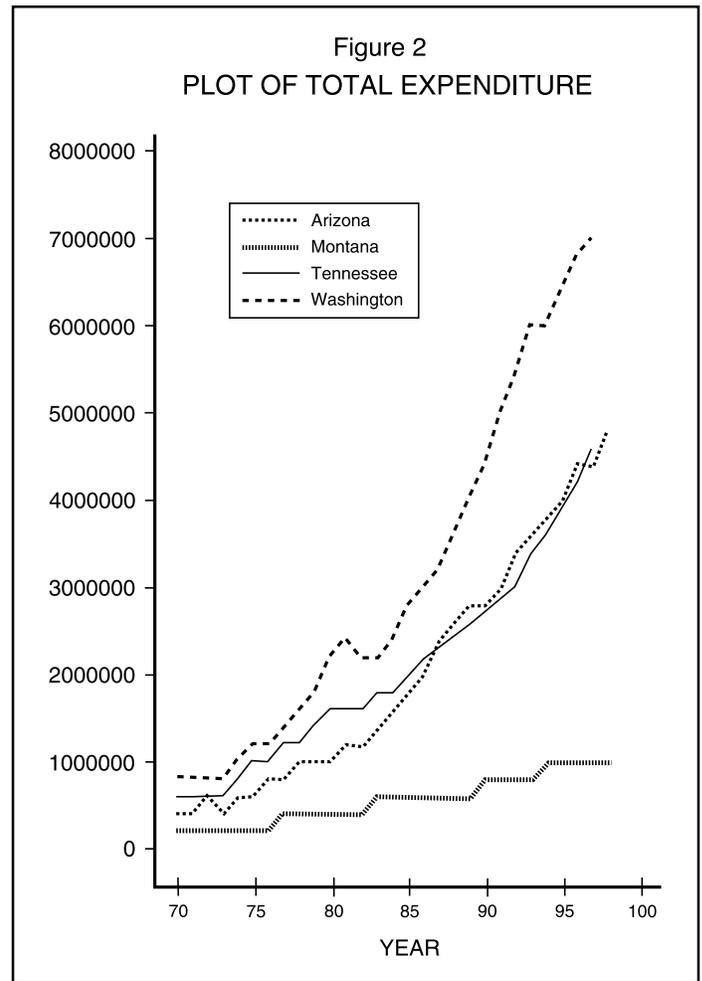
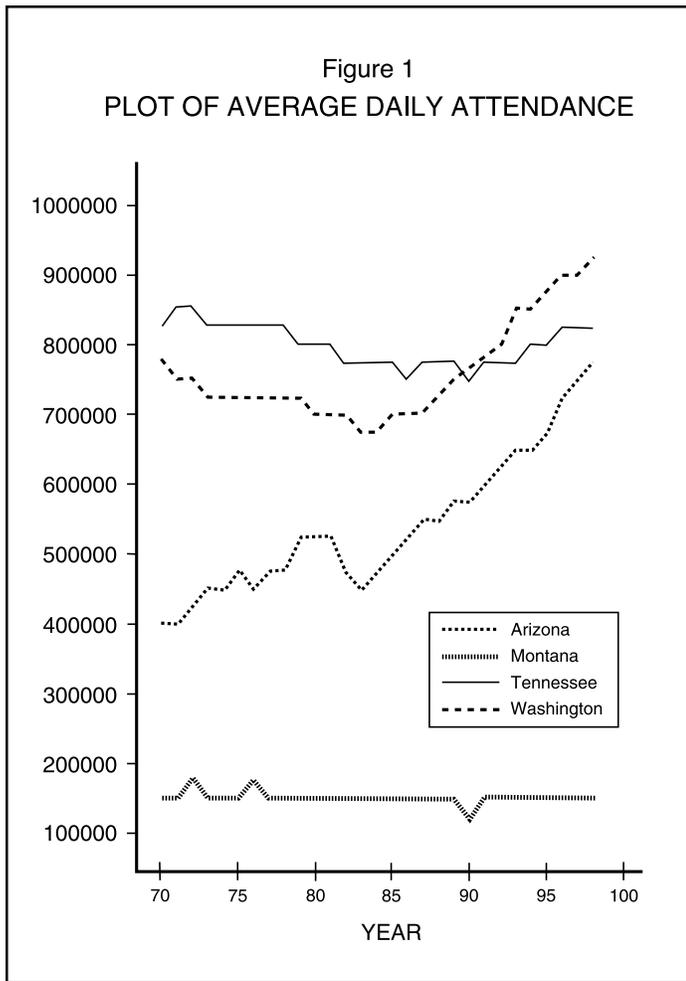
Results of the Data Analysis

This current study sought to add to the discussion about whether litigation has observable effects on how well schools are funded. In the belief that states having high court plaintiff victories are the best cases about which to ask such questions, this study examined four states where plaintiffs prevailed and examined funding gains in these states during the period 1970-1997, both internally and in relation to the rest of the nation. Such an approach permitted observation about whether winning or losing made a difference, as well as inviting speculation about whether the presence or absence of litigation seemed to make much difference.

Results of this study are organized by state around two sections. The first section provides a descriptive analysis of the relevant aspects of reform in each selected state and presents the research findings by first discussing observations about internal changes in each state, followed by presentation of findings on changes relative to national trends. The second section presents an overall analysis of trends.

Arizona²⁴

Like several other states, Arizona has been the subject of longstanding dispute about how schools are funded. One of the earliest modern school finance equity suits occurred in Arizona, as the case of *Shofstall*²⁵ was decided by the Arizona Supreme Court in 1973. Despite the court's opinion that education is a right under the state constitution, the court nonetheless ruled for the state, effectively leaving plaintiffs no redress for a constitutional guarantee nor any room on which to file a new cause of action since the high court had voiced its approval of the status quo.



As the reform tide swept the country, however, Arizona's legislature began to take greater interest in education. Recent reform in Arizona is marked as beginning in 1990, as a task force appointed by the governor proposed over sixty education reform items at a cost of more than \$200 million. By 1994, significant reform legislation had been approved, but funding was not available without significant tax increases, and by 1992 voters had also approved Proposition 108 requiring a two-thirds majority of the legislature to increase taxes. Forces were clearly in place to suggest that reform would not be funded easily and in fact faced some uncertainty, especially if it depended entirely on money to guarantee its success.

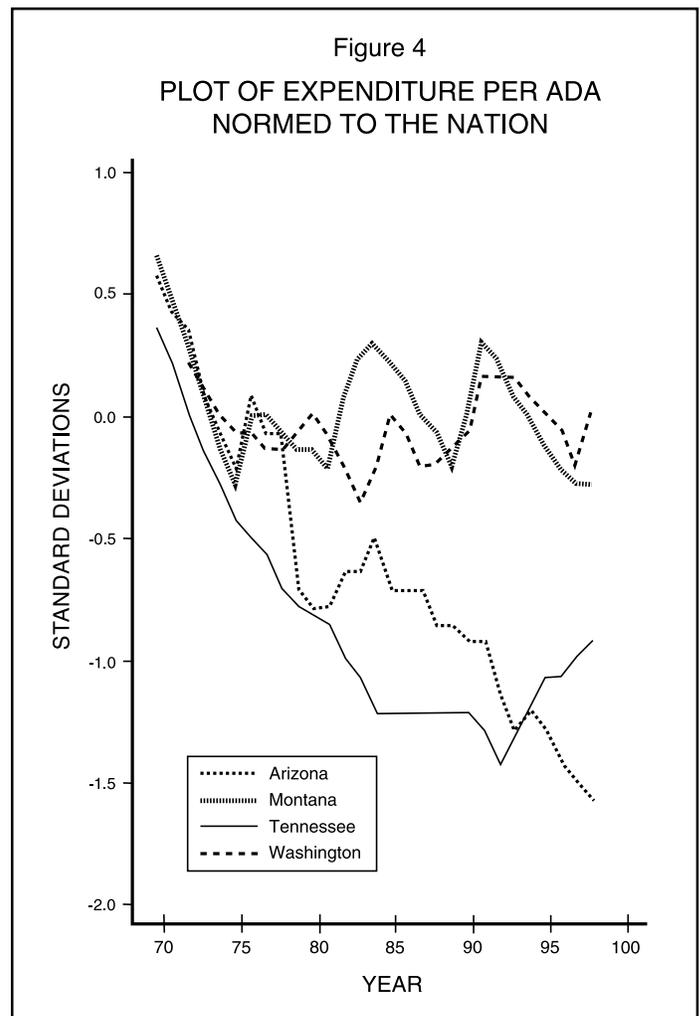
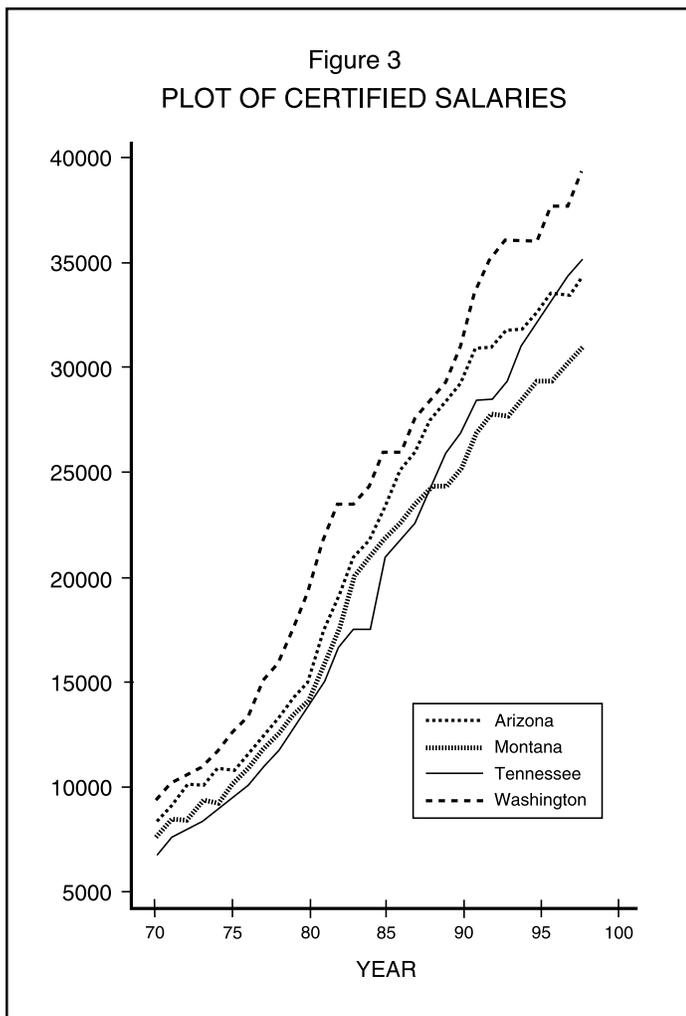
The matter was further complicated by a new court challenge to Arizona's school finance formula. Decided in 1994, *Roosevelt*²⁶ challenged the capital outlay provisions of the school finance system, alleging constitutional violations and deplorable school facility conditions based on differences in local ability to raise taxes for school purposes.²⁷ The legal basis for the challenge argued that the state had failed to observe its duty to provide a system of general and uniform schools under the state constitution and that it violated students' equal protection guarantees by allowing differential treatment based on district wealth. In a highly unusual move that completely reversed its stand from 21 years earlier, the state supreme court ruled not only on the limited scope of the complaint but also held the entire school finance system unconstitutional because it failed to meet general and uniform provisions. The legislative response was to provide immediate funds for capital improvements that included continued increases across several years, but it simultaneously ignored the order to revise the remainder of the school finance plan, leading to

judicial rebuke that the system would have to be fixed by 1998 or the court would take further action.

The formula disputed in *Roosevelt* had been in place since 1980, with significant revision in 1985. In 1994, the state's foundation aid formula provided only 39% of general fund revenues and was heavily dependent on sales and income taxes appropriated from the state's general fund.²⁸ Property taxes constituted the entire local tax base. Key features of the formula called for resource equalization based on weighted average daily memberships, stemming from assumptions about costs of education related to economies of scale for similar-size districts. Other adjustments were also in place, including aid to high growth districts, aid for higher salaries of more experienced teachers, aid to small and isolated schools, and other off-formula adjustments which benefited approximately 10% of districts in the state. Total general fund state aid in 1993-94 when the ruling was handed down by the court was \$1.46 billion.

Plaintiffs in Arizona and equity advocates around the nation were greatly encouraged by the state supreme court's action in 1994. By 1999, the state legislature had reacted to *Roosevelt* and to conditions in schools by leaving the basic foundation formula mostly unchanged but with new monies for capital outlay purposes. General fund state aid had risen to about \$2 billion unadjusted for inflation or enrollment changes, with 79.4% of total appropriations earmarked for equalization through the formula and the remaining 20.6% reserved for categorical and other programs.

The question, of course, is how a supreme court victory for plaintiffs in a state with a history of little sympathy for school finance complainants measures up against other states in the nation, as well as how it has



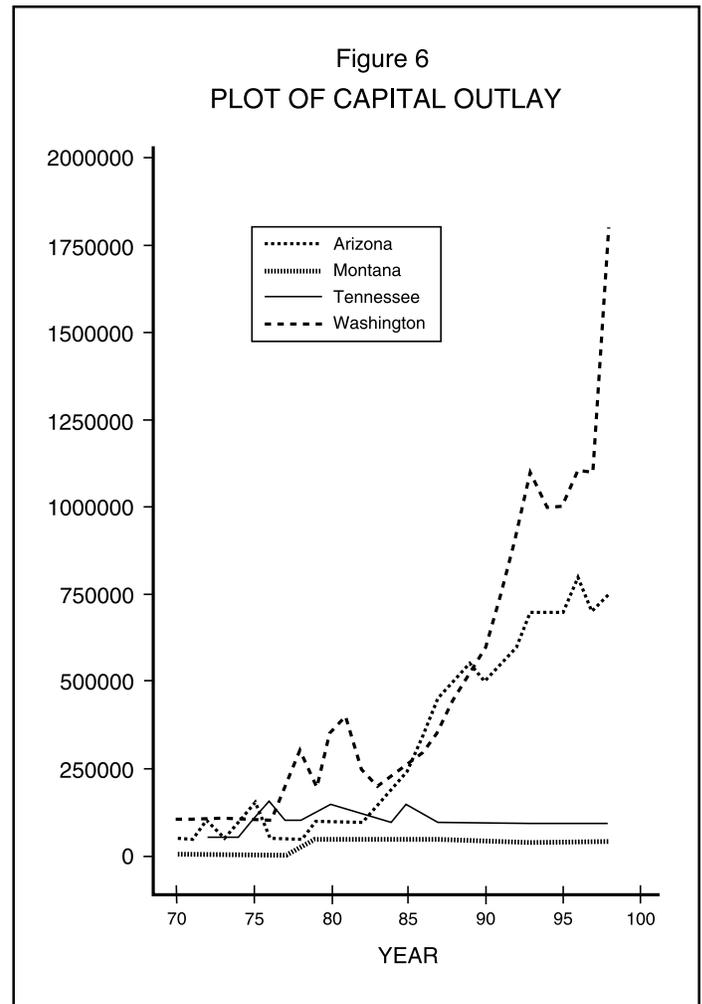
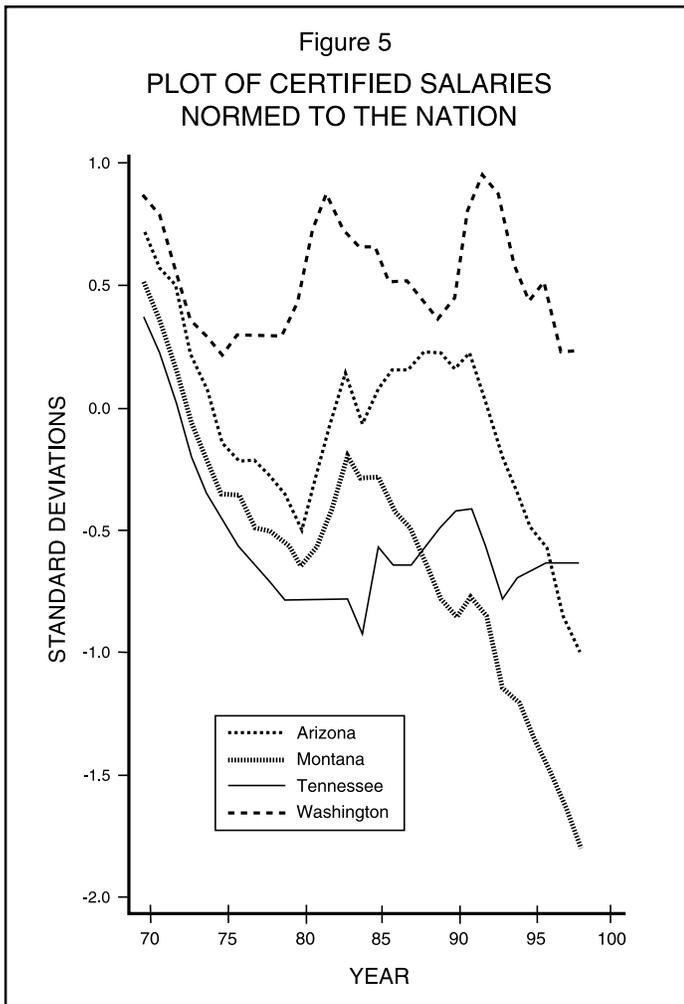
performed in the context of its own fiscal effort trend line. To place the analysis in context, it is important to note that since the early 1970s, Arizona has experienced substantial student enrollment growth, and beginning in the mid 1980s, the increases accelerated. (See Figure 1.) This long-term sustained enrollment growth undoubtedly places pressure on state and local funding sources. Still, average per pupil expenditure and salaries for professional staff, in nominal dollars grew steadily. (See Figures 2 and 3.) However, from a national perspective, the picture is quite different. (See Figures 4 and 5.) Over time, Arizona has lost substantial ground in both. While in the early 1970s, average per pupil expenditure was pegged at approximately one-half standard deviation above the national average, by 1997, it had fallen to one and one-half standard deviations below the national average. The decline in average salaries for professional staff was not quite as severe or as linear. However, while average salaries stood at approximately three-quarters standard deviation above the national average in 1970, they fell to one standard deviation below by 1997. Neither litigation nor legislative reform seemed to slow or reverse this decline, and the passage of Proposition 108 seemed to accelerate it. At the same time, expenditures for capital outlay have increased modestly over time. (See Figure 6.) In fact, the *Roosevelt* decision was preceded by several years of growth in capital outlay expenditures, but in the wake of the decision capital outlay expenditure actually declined for a short period before rising once again. Comparatively speaking, Arizona has consistently spent above the national average on capital outlay, and since the mid 1980s, the level of expenditure has grown to one standard deviation above the national

average. (See Figure 7.) Finally, while the number of school districts has remained virtually unchanged since the late 1970s, after the unsuccessful *Shofstall* case in 1973, the number of school districts dropped by approximately one-third over the ensuing five years (See Figure 8.) Nonetheless, Arizona has consistently had fewer districts than the national average. (See Figure 9.) Overall, litigation and legislative reform seemed to have little impact on outcome variables with the possible exception of school district consolidation. If anything, the passage of ballot initiative in the early 1990s requiring a supermajority of the legislature to approve tax increases may have contributed to a substantial decline in average per pupil expenditure and professional salaries.

Montana²⁹

While many states have experimented by frequently changing state aid philosophies and aid formulas in response to new needs or disgruntled constituencies, the structure of Montana's state aid formula has remained basically unchanged for the last fifty years. Enacted in 1949, the basic foundation program still serves as the distribution vehicle for school funds. As originally enacted, the formula called for state participation of 80% for general fund purposes, with the balance to come from district and county sources. While the notion of relative calm surrounding the school aid formula would likely be the topic of some argument among those closely associated with the daily operation of schools in Montana, the longevity of the basic aid structure has been unusual by most accounts of politics and economics.

Like many states, however, Montana's resolve to fully fund the intended state aid ratio fell short in actual practice. By 1986, the state's share had

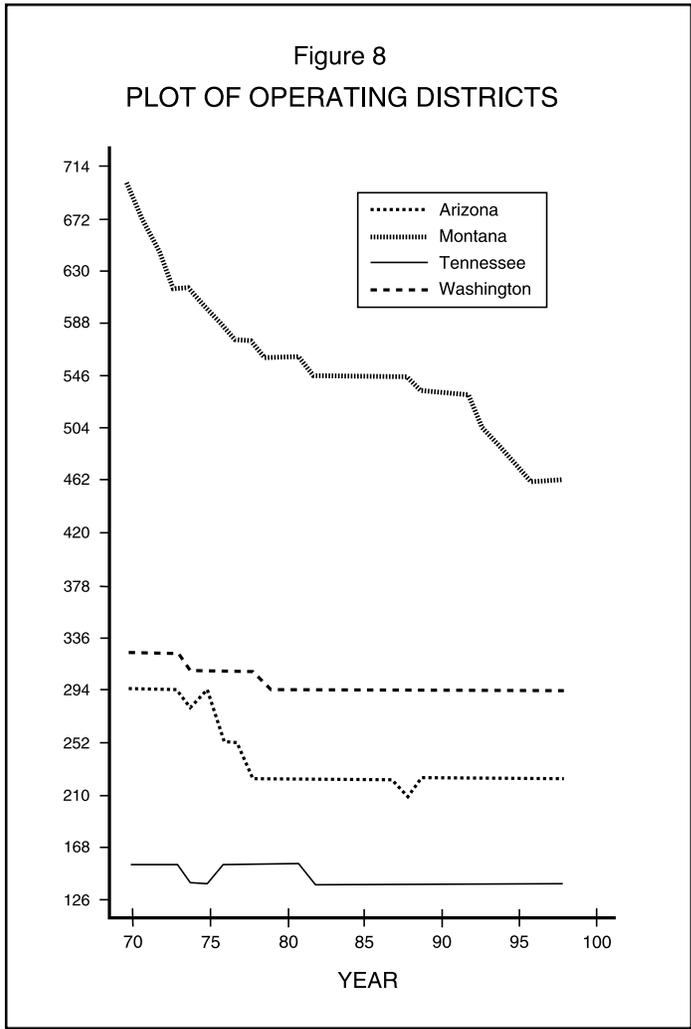
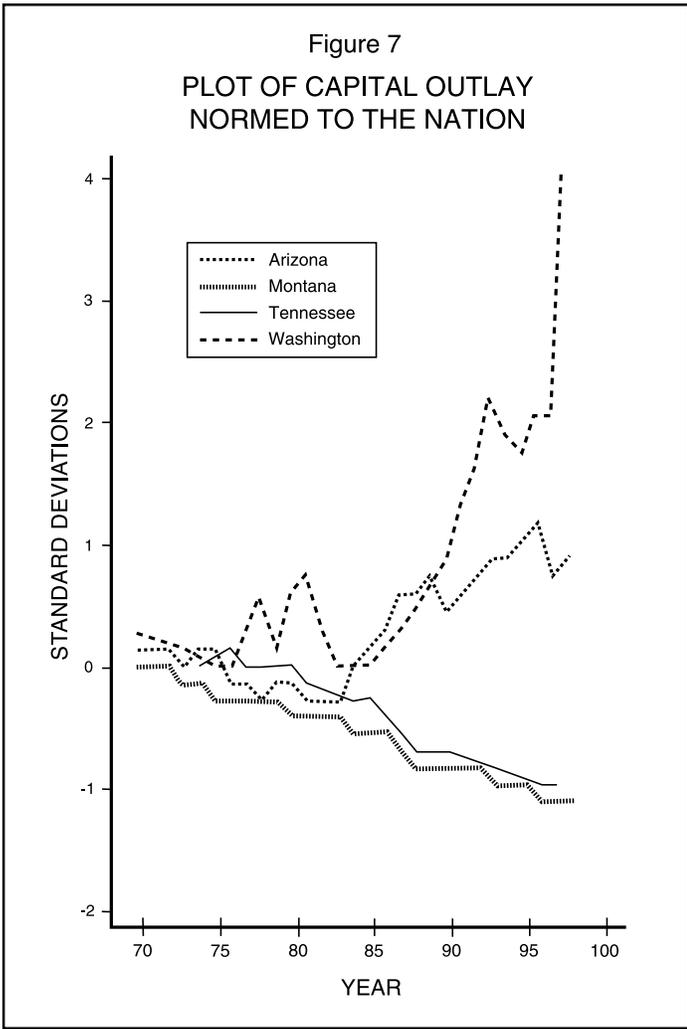


slipped to only 55%, and 64 of the state's approximately 500 school districts filed a lawsuit. In 1989, the Montana Supreme Court in *Helena*³⁰ ruled for plaintiffs, holding in a wide sweep that the mechanisms used to fund general operations, retirement, transportation, and debt service funds were unconstitutional. Regarded by many equity advocates as one of the more strongly stated rulings, *Helena* caught the attention of the state legislature, which attempted to completely revise the formula to make it acceptable to the court. The concept of a foundation was retained, but the new system devised by the legislature contained a guaranteed tax base component. The essential operation of the formula was centered in a 40 mill property tax rate levied statewide in addition to the 55 mills that were currently levied in each county for equalization fund purposes, with the added feature that all 95 mills were deposited directly to the school equalization fund. The new formula also provided that any amount of a district's budget beyond a permissively allowable option would be funded from local district tax sources and subject to voter approval. Accelerated equalization was also built into the formula, so that school districts below a calculated base budget per pupil tied to enrollment size would be able to increase budgets faster than districts which already spent more on a per pupil basis. Districts above the maximum were frozen at the level of the previous year, so that the goal was to force a minimum expenditure level and to narrow the disparity in range of expenditures per pupil. Total general fund state aid in 1990-91 shortly after the ruling was handed down by the court was \$370 million.

As in other states, plaintiffs in Montana and equity advocates around the nation were pleased by the state supreme court's actions. By 1999,

the Montana legislature had reacted to *Helena* by effectively enacting a statewide equalization tax for school purposes and had created a mechanism to narrow funding disparities. In the decade since the ruling, general fund state aid rose to \$428.7 million unadjusted for inflation or enrollment changes. But not everyone was pleased, however, as an unsuccessful challenge was later mounted by rural plaintiffs alleging fiscal disadvantage.³¹

The question, of course, is how a supreme court victory for plaintiffs in a state where the legislature moved fairly quickly to meet the court's demands measures up against other states in the nation, as well as how it has performed in the context of its own fiscal effort trendline. Since the timeline for this present study covers the years 1970-1997, analysis should reveal trends for both pre- and post-litigation performance in Montana. As background, student enrollment in Montana has remained flat, which might indicate lower demands for new resources over time. (See Figure 1.) Like Arizona, Montana's average per pupil expenditure and professional salaries have increased significantly, in nominal dollars, over this time period. (See Figures 2 and 3.) On the other hand, a national comparison reveals very different trends for expenditures and salaries. (See Figures 4 and 5.) Average per pupil expenditures have hovered around the national mean for over two decades although after *Helena*, there appeared to be a bump pushing expenditures from approximately one-quarter of a standard deviation below the mean to one-quarter above, but this increase was not been sustained. The net trend for per pupil expenditures for the twenty-seven year period was downward. Montana moved from a position at approximately half a standard deviation above the national



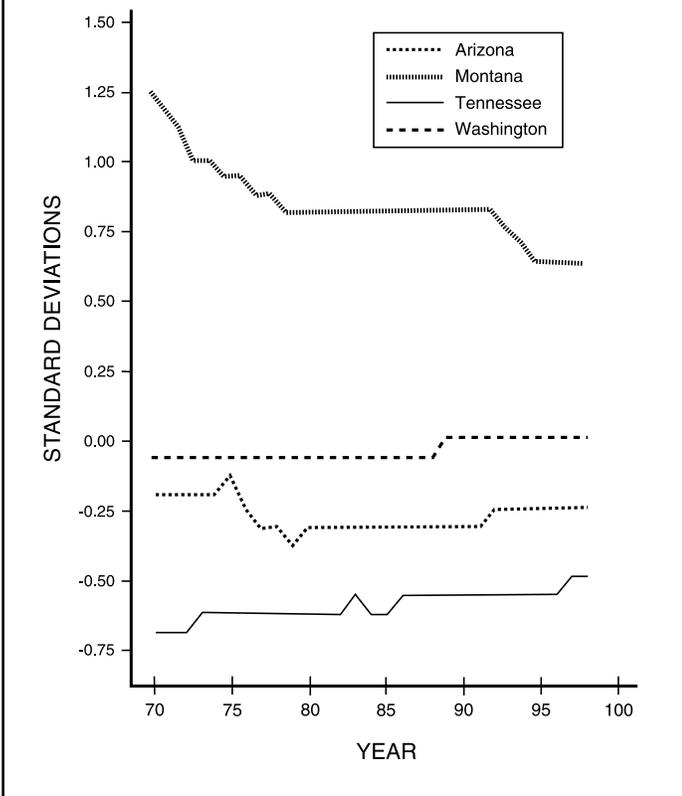
mean in 1970 to one-quarter standard deviation below the mean in 1997. Average professional salaries tumbled over this time period from one-half standard deviation above the mean in 1970 to approximately 1.75 standard deviations below the mean in 1997. Capital outlay expenditures in the state have remained flat, but when compared to the nation, Montana has lost ground here also. (See Figures 6 and 7.) Montana went from being at the national average in the early 1970s to one standard deviation below the mean in 1997. Of the four states studied, Montana experienced the most dramatic decreases in the number of school districts. (See Figure 8.) While the overall trend is downward, the reduction in the number of school districts took a sharp downward turn after the *Helena* decision in 1989. Still Montana has substantially more school districts than the national average, even after years of consolidation. (See Figure 9.) It is important to note that this analysis does not take into account the most recent legislative response of 1999, but based upon data up through 1997, it appears that in the wake of successful litigation, Montana experienced a brief upward spike in per pupil expenditures but then returned to a long held pattern of hovering around the national mean. At the same time, average professional salaries while showing steady intrastate increases plummeted in relationship to the national mean. In addition, although internally Montana has held capital outlay expenditures constant, it has lost ground with regard to national mean. Finally, litigation seemed to accelerate a long-term trend in school district consolidation that began a number of years prior to the supreme court ruling.

Tennessee³²

Like many other states, school finance in Tennessee has had a history of change in reaction to needs and politics. Lack of reform has not been due to lack of political effort, as the legislature tried on various occasions to engage formula reform, with significant funding changes occurring in 1909, 1925, 1955, and 1972. An even greater effort to provide reform followed in 1977 with enactment of the Tennessee Foundation Program (TFP), which sought to provide a high level of state funds to all school districts in the context of equalized distribution. Yet despite equalization features in the TFP that caused the state to provide 92.5% of funding to school districts, the TFP was struck down in 1993 by the Tennessee Supreme Court in *McWherter*.³³ The ruling held that although the state provided a high percentage of funds, the state aid formula underfunded schools in that only \$60 million of the \$2.5 billion spent by schools was equalized at the time of trial. The state supreme court found a correlation between funding and school quality, so that constitutional requirements for a uniform system of public schools were not met.

Perhaps in anticipation of an adverse ruling and in likely response to the need for reform, the Tennessee legislature reacted to school funding woes by enacting the Basic Education Program (BEP) in 1992. The new law contained massive educational changes. Among those changes were a requirement that the state provide 75% of classroom expenditures, a requirement that full funding of the BEP must be met within six years, a requirement that the formula must adjust for differences in local tax capacity, and a requirement that districts must implement performance-based standards resulting in increased student achievement. The funding

Figure 9
PLOT OF OPERATING DISTRICTS
NORMED TO THE NATION



requirement called for nearly \$1 billion in new revenues over five years. Green suggests that increased fiscal effort on the part of the state has been realized, as he points to data showing that the state aid ratio had increased to 51% by 1998, up from 45% in 1992, the year prior to the court's decision.³⁴ Total general fund state aid in 1992-93 when the ruling was handed down by the court was \$1.57 billion, an amount which would require an additional \$513 million by 1997 if the court's order to fully fund the formula were to be observed.

As one of the most publicized plaintiff successes in recent years, the lawsuit in Tennessee seemed to suggest to some scholars that legislatures can be responsive to courts either in advance or after the fact of litigation. The question, of course, is how a supreme court victory for plaintiffs in a state where the legislature moved in advance to meet the demands for equity and where reformers have trumpeted the success of litigation measures up against other states in the nation, as well as how it has performed in the context of its own fiscal effort trendline. Since the timeline for this present study covers the years 1970-1997, analysis should reveal trends for both pre- and post-litigation performance in Tennessee by assessing performance under three separate school aid schemes.

As a beginning point for analysis, student enrollment trends in Tennessee offer a different scenario from both Arizona and Montana. Arizona has had the fiscal burden of steady to steep increases in enrollments over many years while Montana has had the advantage of stable student enrollments over the same period. After a short-lived increase in enrollments in the early 1970s, Tennessee experienced declines in enrollment, bottoming out in the late 1980s. (See Figure 1.) From that point, enrollments have increased steadily, but not sharply. The last decade of enrollment increases may indicate new pressures on funding sources.

Still average per pupil expenditures and professional salaries, in nominal dollars, have climbed within the state. (See Figures 2 and 3.) In particular, after the 1992 legislative reform and 1993 court decision, per pupil expenditure rose sharply, but when Tennessee is compared to the rest of the nation, it does not fare as well on these measures. (See Figures 4 and 5.) Per pupil expenditure dropped from the early 1970s to the mid 1980s, beginning at a point approximately four-tenths standard deviation above the national mean and ending at one and one-quarter standard deviations below the mean. It plateaued there for several years. Prior to the 1992 legislative reform, per pupil expenditure took another sharp downward turn. The 1992 legislative reform, followed closely by the 1993 *McWherter* decision, reversed this trend and resulted in a sustained growth in per pupil expenditure through 1997. Still, Tennessee continues to lag behind with a per pupil expenditure that is approximately one standard deviation below the national mean, and it is substantially worse off than it was in the early 1970s when per pupil expenditure was above the national mean. Trendlines for average professional salaries also raise concerns. While the 1992 legislative reform appears to have reversed a negative trend, neither legislation nor litigation had more than a brief positive impact on salaries. Average professional salaries fell from almost one-half standard deviation above the mean in 1970 to nearly one standard deviation below the mean in the mid 1980s. Some ground was recovered during the late 1980s and early 1990s, but salaries never approached much less exceed the national mean again. Prior to and immediately after legislative reform and the *McWherter* decision, average professional salaries fell. It appears they have regained some ground in the last two years of the analysis, but they remain more than one-half standard deviation below the national mean. Like Montana, Tennessee's level of capital outlay expenditure has remained fairly constant over time, in spite of early enrollment declines and more recent enrollment increases. However, like Montana, it lost ground nationally. Although Tennessee ranked slightly above average to average in capital outlay expenditure until the early 1980s, the state continued to lose ground on this measure ending up at approximately one standard deviation below the mean in 1997. (See Figures 6 and 7.) With regard to school district consolidation, legislative reform and litigation appear to have had no visible effect as the number of school districts remained fairly constant. (See Figure 8.)

Washington³⁵

Without doubt, the state of Washington was a pioneer among the early fiscal equity suits and in terms of aggressive legislative response to a state supreme court decision. Numbering among the most highly centralized education systems in the nation, Washington's experience with litigation offers an intense opportunity to observe the possible effect of equity lawsuits on school funding.

In some ways, many states could look enviously at Washington's history of providing aid to schools. As early as 1961, Washington school districts received nearly 60% state aid, almost 20% more than the average district across the nation at that time. Concomitantly, however, the state was not immune to economics or changes in attitudes toward state support for schools, as by 1970 the balance of funding had shifted dramatically so that state support had only grown by 10% while at the same time local shares had increased more than 500% in constant dollars. Concern regarding growing reliance by districts on local property wealth to fund the true cost of education led to the court case of *Northshore*³⁶ in 1974 which was styled after the successful *Serrano* case in California. Although *Northshore* failed, it was quickly followed in 1978 by *Seattle*³⁷ which was upheld for plaintiffs on appeal to the Washington Supreme Court. The court held the funding system unconstitutional, mandating that the state must make 'ample provision' for the basic educational program through regular and dependable tax sources instead of permitting the heavy reliance on the annual local special tax levies that

had come to characterize Washington school finance and which accounted for the unaided 500% increase in local school districts' budgets. Simply put, education's costs had risen sharply at the local level, and the state's increase of 10% over a period of years had left the state derelict in its duty to make ample provision for education

Responding to the trial court in advance of appeal to the state supreme court, the Washington state legislature moved quickly to adopt a new funding plan. Special levy failures boosted the impetus for reform, along with an unexpected state revenue windfall. A new formula was enacted in 1977 based on staff units, limits on special levy authority, and staff compensation factors designed to narrow ranges of expenditures and to correct the growing imbalance in state aid ratio. Enacting the Basic Education Act (BEA) of 1977 foreshadowed the adequacy movement by defining a basic education in terms of goals, programs, and distribution of funds, including specific skills expected of students. Subsequent amendments to the law sought to address both new improvements and the impact of budget reductions that would occur due to the leveling down effect of the BEA, a phenomenon that would result in the loss of \$115 million per year affecting 84% of the state's students. Various additional adjustments were made to deal with problems arising out of the new law, but the basic features remained intact so that state aid increased from its recent low point of 47% prior to trial in 1975 to its current level of approximately 80% in 1999.

Not all scholars have been encouraged by the structural modifications or the results of Washington's school aid plan. Theobald and Hanna argued that equity is rather abstract unless it has substantive benefits, and their view is that the BEA did not live up to its promise. They argue that the BEA provided little in the way of 'ample' provision and instead only redistributed funds more equitably. Echoing the question of this present research, Theobald and Hanna concluded that the Washington system did not improve per pupil revenues in relation to the rest of the nation, that teacher salaries were cut in some instances due to differences in cost of living that were not redressed in the centralization of personnel costs across the state, that resources available to low income students actually declined, and that reform best benefited nonminority students.³⁸

As one of the plaintiff successes heralded for its intense reform efforts, the lawsuit in Washington may suggest that litigation can have undesirable consequences in that equity may be more than what is actually sought. On the other hand, it may be a case of reform that had a real and valuable effect. The question is how a supreme court victory for plaintiffs in a state where the legislature moved aggressively to meet the court's demand for equity measures up against other states in the nation, as well as how it has performed in the context of its own fiscal effort trendline. Since the timeline for this present study covers the years 1970-1997, analysis should reveal trends for both pre- and post-litigation performance in Washington.

In terms of student enrollment, Washington experienced modest declines from the early 1970s to mid 1980s, but from that point forward, the state has seen consistent growth. (See Figure 1.) This sustained period of enrollment growth, approximately fifteen years in length, can prove challenging as the state must annually find additional revenues to fund education. Like the other states in this study, Washington's average per pupil expenditures and professional salaries have consistently risen, in nominal dollars, over the years. (See Figures 2 and 3.) In fact, of the four states, Washington's per pupil expenditure and average professional salaries ranked highest in 1997, but national comparisons yield a more complicated picture. (See Figures 4 and 5.) State legislative reform in 1977 briefly halted a downward trend in per pupil expenditure relative to the rest of the nation, pushing this measure slightly above the national mean. However, per pupil expenditure soon fell below the national mean and remained there until the early 1990s. Before 1997, per pupil expenditures

fell once again below the national mean, but then rose once more to a point slightly above the mean. Overall, Washington has seen a downward trend in per pupil expenditure that neither legislative reform nor judicial mandate was capable of reversing for more than a brief period. Professional salaries present a scenario that distinguishes Washington from the other states in this study. Only Washington kept their average professional salary above the national mean from 1970-1997. That is not to say however, that professional salaries did not suffer. In 1970, the average professional salary was almost one standard deviation above the national mean. From there the trendline resembled a roller coaster ride, with professional salaries ending at a point approximately one-quarter standard deviation above the mean. In a break from the other states studied, Washington's professional salaries fared relatively better than per pupil expenditure. Washington proved to be an outlier with regard to both selected states and the rest of the nation with regard to capital outlay expenditures. (See Figures 6 and 7.) Beginning in the 1980s, its capital outlay expenditures skyrocketed in comparison with the Arizona, Montana, and Tennessee as well as the rest of the nation. In 1997, the state's capital outlay expenditures were four standard deviations above the national mean. During this same time period, Washington experienced substantial student enrollment growth that would account for part of the increase. Finally, Washington has experienced some small decreases in the number of its school districts up through 1980, and from that point the number has remained fairly constant. It does not appear that legislative reform or litigation resulted in school district consolidation.

Overall Analysis of Trends

Results of this data analysis confirmed the overall tone of the literature regarding litigation effects. The first level of analysis, considering only internal performance profiles, held that all four states made significant improvement in school funding and professional salaries over nearly three decades 1970-1997. This was not surprising, since trend lines should increase over time naturally as a consequence of inflation and other factors, although such analysis is still useful in making certain that decline has not been present. The major purposes of such analysis are simply to see if expected upward increases in fact occurred and that no downward trend is observable, and to assert that states might exert significantly greater effort in comparison to previous effort that might be missed if comparing only against external benchmarks: *i.e.*, external benchmarks are a moving target that may be beyond reach if a comparison group has managed to surge ahead for various reasons, including differences in economic capacity.

In contrast, the second level of analysis returned more cautious results. In some cases, internal trends from the first analysis were upheld, while in other cases trends were moderated or reversed. Since the second level analysis is more interesting and more predictive in the larger national context in terms of assessing whether or not litigation had a positive impact in states where plaintiffs won at the state supreme court level, those results are the focus of the summary appearing next. In essence, the second level analysis held the four selected reform states up against fiscal performance in the rest of the nation, asserting that the relative position of the selected states compared to the nation over time provides an estimate of whether filing a lawsuit is a worthwhile goal.

The following observations summarize both first and second level analyses by comparing and contrasting the results:

1. In the first level analysis, reform states were evenly divided on enrollment trends. Arizona and Washington increased enrollments sharply, while Montana and Tennessee remained relatively unchanged. In the second level analysis, Arizona's and Washington's growth was greater than the national average, while Montana and Tennessee also experienced slight gains. The implication is that if

enrollments grow, expenditures should keep pace, but if expenditures grow at a rate faster than the nation and faster than enrollments, then real gain is perceived. The data show that only Washington increased attendance and expenditures at least in parallel or greater.

2. In the first level analysis, all four states recorded sizable growth in per pupil expenditure. The second level analysis weakened this observation when comparing to the national rate of increase. All four states declined relative to the nation from 1970 until the mid-1990s. The implication is that internal trends can indicate significant effort when comparing against each state's own history, but the national target moved so strongly that no state was able to make noticeable improvement against the national norm.

3. In the first level analysis, all four states appeared to increase all certified staff salaries. In the second level analysis, all four states lost ground over time against the national mean, although Washington was the only state to maintain average certified staff salaries above the national mean from 1970 through 1997. The implication is that states were able to make dramatic internal salary improvements but did not make much progress against a nation that improved salaries in a climate of reform.

4. In the first level analysis, selected states were split evenly on spending for capital programs, as Arizona and Washington dramatically increased capital expenditures and Montana and Tennessee remained flat. In the second level analysis, Arizona and Washington sustained their position exceeding the national norm, but Montana and Tennessee lost ground. The implications are mixed, in that Washington's surge in funding finds a supreme court case nearby, but Arizona's burst of spending began before capital programs were a legal issue.

5. In the first level analysis, selected states were evenly divided on reducing the number of operating school districts. Montana, as the most sparsely populated state, experienced the greatest reduction. In the second level analysis, three states increased the number of districts compared to the national norm, while Montana reduced districts more rapidly than the rest of the nation. The implication is that numbers of districts can have a significant impact on resources through the policy decisions underlying how legislatures choose to organize schools in a state. Fewer districts may be more economical, and consolidation should have the expected effect of freeing resources for redistribution. Ideally, such resources should translate into higher expenditures per pupil instead of tax reductions. While the data did not indicate where the money went in Montana, this seems not to have been the case since it will be seen later that expenditure growth in that state fell behind the nation and was not the result of commensurate enrollment losses.

Conclusion

The literature review in this study indicated that knowledge regarding litigation effects is very limited. The literature continues to hope and believe that litigation has had a positive impact on school funding, but it is unable to present definitive research establishing a causal link between a court ruling and school funding outcomes. In fact, the literature hints that the impact of winning or losing a lawsuit may be less important than the political windfall (or negative fallout) that can be engendered by filing suit. In fairness, the literature does not present any hard data confirming the greater value of a threatened lawsuit, but it does repeatedly suggest that perhaps the greatest value to school funding litigation is the heightened awareness and sensitivity that follows in the public and legislative arenas.

The literature is also clear that litigation is high stakes gambling, and that the only certainty is the enormous amount of time and perhaps money that must be invested in bringing a case to the highest judicial level. A win may produce great or hardly noticeable gains, or it may engender fierce legislative resistance or subtle subversion among wealthy taxpayers. Similarly, a loss is no assurance of either retribution or a failed cause, as a legislature may abruptly decide to embrace school finance reform despite having successfully defended an existing state aid formula. Perhaps some of the uncertainty in the literature is due to the influence and interaction of so many variables that it becomes difficult for any research design to effectively sort out the different effects of so many variables. But above all it can be said that the literature on school funding litigation effects is very young in relative terms, at least in comparison to other fields of study such as penal reform which has more vigorously attacked issues of judicial effect.³⁹

The data analysis carried out in this study indicated that it is difficult to point to specific instances and claim that events are the result of litigation. The first level of analysis examined the four reform states independent of changes in school funding in the nation on the assumption that progress toward equity need not be judged in relation to how other states fared. Beneath this assumption lay yet another assertion, *i.e.*, that a state's own internal progress in relation to its history should be respected. This viewpoint argued that a state may make significant gains even though it may surge ahead or lag behind other states on a national scale. The second level of analysis benchmarked progress against national norms, arguing that selected states were losing the battle if they could not improve their positions relative to the rest of the nation, *i.e.*, litigation had no justifying benefit. The first level analysis indicated that all four selected states made significant funding gains, but there was only modest indication at best in the data to suggest that increases paralleled court activity. The second level of analysis found even less evidence of court impact. While these states likely made genuine gains in the context of their own settings, the national target moved so strongly that all four states dropped on expenditures per average daily attendance. In other words, the data argued that neither legislative will nor the force of litigation were sufficient.

The simple truth is that despite supreme court victories, litigation did not cause any of the four selected states to gain significantly against the rest of the nation. Importantly, these observations flow from a very long period of time, yielding the observation that time itself may eradicate some of the effects of litigation. The argument is at once economic and social, such as the one advanced earlier in which it is questionable whether courts shape society or if the opposite is true. While pessimistic, the data suggest that time and changes in events may smooth out the effects of litigation so that, at least in this instance, the national norm is both a moving target and a difficult one to overtake.

Yet in all fairness, the positive should be noted. All four states moved ahead at varying rates of progress. In most instances, the state's share increased and reductions in local effort were observed. The sheer volume of excitement surrounding these lawsuits has undoubtedly focused attention on the needs of schools, and legislatures across the nation have closely scrutinized school aid schemes either as a result of real understanding or a desire to voluntarily reform rather than be ordered to do so. In sum, litigation has had positive effects, but its contribution may be incompletely reflected in the data.

Based on the entirety of literature on school finance litigation effects, the judicious advice to prospective litigants is to go slowly while objectively seeing the risks and costs. Some level of reason, persuasion, and force has the best opportunity for success. Yet the experience in states suggests that the mixture changes in response to politics and economics and that there is no prescription for success. The news is not welcome

among reformers who want to believe that a new legal theory will be found which will trigger automatic rulings for plaintiffs. But a democracy calls for disagreement, and democracy itself will always struggle between liberty and equality. It is in this context that school finance policy is made, and it is the context in which school funding lawsuits are decided.

Endnotes

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Acknowledgements

Several persons contributed to the analysis and/or reviews of the study. The authors thank John Eichmann and Rita Sauv in the Arizona Department of Education, and Judy Richardson of Peacock, Hislop, Staley and Given, Inc.; Madalyn Quinlan in the Montana Office of Public Instruction; Elvis Green at the Tennessee Department of Education; Gail Henderson and Lori Varela in Washington's Office of the Superintendent of Public Instruction; R. Craig Wood and M. David Miller, University of Florida; and Steven Benton, Kansas State University, for assistance in data analysis.

*Funding for this study was provided by The National Education Association (NEA). The views expressed here do not necessarily reflect the views of the NEA.

“...Simply put, we cannot have better schools until we have better teachers.”

Compensation Reform as Teaching Improvement Policy

Neil D. Theobald

Background

Educating children is a labor-intensive enterprise. As such, teacher compensation is central to addressing educational improvement. First, teacher salaries represent the largest expenditure category for K-12 schools, typically making up over half of school district budgets.¹ Second, a growing body of literature suggests that teacher quality (*e.g.*, subject matter knowledge, cognitive ability, selectivity of college attended) can have a significant effect on student learning.² For example, Hanushek, Kain, and Rivkin find that variations in teacher quality explain at least seven percent of student test score differences.³ Thus, educational policy makers have come to recognize that efforts to improve elementary and secondary education will critically depend upon our success in developing teacher compensation structures that attract, recruit, and retain capable people in the teaching profession. Simply put, we cannot have better schools until we have better teachers.⁴

The Role of Educational Reform

Lessons from previous reform experiences suggest that policy makers in the twenty-first century face a formidable task in devising strategies that will improve the quality of our nation's teaching force. The last two decades of reform was set in motion by commission reports such as *A Nation at Risk*,⁵ which sought to use state regulatory power and additional financial resources in a direct attack on schooling problems - including teacher quality.⁶ A key assumption underlying this first wave of reform was that teachers should continue to organize their classrooms as they had always done, only do so harder and faster, and with stricter state scrutiny.⁷ Evidence quickly surfaced, though, that added bureaucracy and more centralized control did not improve teacher quality or lead to improved student achievement and may have been counterproductive in addressing this problem.⁸ A second reform approach ensued, seeking to reduce bureaucracy and decentralize decision making. Teaching was even more centrally the focus of this “wave”.

Reforms began to focus on the structure of the teaching occupation and the overall structural features of schools. Thus, teachers' salaries in many states and districts were raised; teachers were often provided with some additional decision making authority; and, to a lesser extent, opportunities were created that would allow teachers to advance professionally without leaving the classroom.⁹

The limited achievements resulting from these efforts to institute reforms such as school-based management¹⁰ and teacher professionalism¹¹ spurred the current third wave set of reform that seeks to improve the quality of teaching. These reforms emphasize better teacher preparation, greater accountability, and incentive systems attached to performance levels.¹² An emphasis in this current reform effort is changing

teacher compensation structures.¹³ The cornerstone of this reform is that “compensation systems should begin to pay individual teachers for knowledges and skills”¹⁴ rather than solely on the basis of teaching experience and teacher degree level.

The Role of Teacher Labor Markets

General trends in teacher career paths over the last several decades also suggest that policy makers in the twenty-first century face major challenges in constructing and implementing policies to enrich the nation's teaching force. The career paths of teachers are characterized by the high percentage of individuals that leave the classroom after only a few years in the profession. More than two-thirds of the full-time teachers who started their careers in the Michigan public schools between 1972 and 1975 were no longer teaching in the state during the 1984-85 school year.¹⁵ These results mirror attrition patterns reported in different geographical regions and in different time periods.¹⁶

High rates of teacher turnover thwart efforts to improve the nation's schools in at least three ways. First, high turnover rates neutralize ongoing efforts to improve schools through the enhancement and reform of teacher preparation programs.¹⁷ The increased investment in the human capital of new teachers could be wasted if decision makers do not concurrently implement policies to improve the likelihood that these better prepared individuals remain in the profession. As John Goodlad observed, “Talk of securing and maintaining a stable corps of understanding teachers is empty rhetoric unless serious efforts are made to study and remedy the conditions likely to drive out those already recruited.”¹⁸

Second, effective schools are distinguished by staff stability, continuity, and cohesion.¹⁹ In addition, the ability of less effective schools to institutionalize a successful reform effort crucially depends on the continued presence of large numbers of teachers who are knowledgeable about, and committed to, the change.²⁰ Veteran teachers play a vital role in providing continuing assistance to new teachers and administrators. Several studies point to high turnover in a school's teaching staff as one of the most powerful factors in stifling school improvement efforts.²¹

Finally, the art of teaching children is a developmental process involving a complex set of skills, many of which can only be well honed on the job. While better pre-service teacher education can begin the process of improving teacher quality, research clearly shows that inexperienced teachers continue to sharpen their talents and become more effective teachers during the first few years in the classroom.²² The continual need for school districts to hire new, inexperienced teachers to replace teachers who leave after a very short teaching spell “can only hinder these districts' efforts to improve the education they provide.”²³

The Role of Teacher Compensation

While previous research finds no consistent relationship between teacher compensation and student outcomes,²⁴ it does provide compelling evidence that teacher compensation has a marked impact on teacher career choices. Surveys of college freshmen show that the percentage reporting a preference for pursuing a career in teaching increases during periods of rising teacher salaries and falls during periods when salaries are losing ground.²⁵ After these students finish their studies, teacher salaries have a marked effect on the number of college graduates who enter teaching.²⁶ Once they are in the profession, teachers leave the profession when local teacher salaries fall relative to salaries available in other local employment.²⁷ Additionally, individuals with better opportunities in the labor market- teachers with high standardized test scores²⁸ and those graduating from more selective colleges²⁹ - are the most likely to leave.

On the basis of such work, the current wave of education reform has emphasized the role that teacher salaries play in deterring a larger number of quality teachers from entering and remaining in the profession. In

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1999, the average starting salary in teaching was \$26,639 compared to \$37,194 for other professions requiring similar levels of education.³⁰ Over the last five years, beginning salaries for non-teachers increased at nearly twice the rate as did beginning teacher salaries [28.1% versus 14.7%]. “Those who consider a career in teaching must weigh intrinsic rewards against lower salaries and often difficult working conditions.”³¹

Thus, for school improvement efforts to be successful in the twenty-first century, they must place a renewed emphasis on developing teacher compensation structures that recruit and retain qualified individuals in teaching. The structure that these efforts can take is quite varied. For example, “third wave” reformers are encouraging states to institute pay-for-performance plans that link financial rewards to student achievement.³² This is a marked change from earlier compensation strategies that focused on narrowing salary differences across school districts. Both of these strategies, in turn, differ from the historical pattern of allowing each local school board to set teacher salaries at whatever level, and in whatever way, was agreeable to the district’s taxpayers and to its employees.

These compensation structures clearly differ in how they intend to shape the norms under which teachers operate. An important, but less clear point, is that these structures not only seek to affect the norms and values held by teachers, but they also reflect norms and values held in the larger society. Thus, a potentially useful way to organize discussion of these structures is to categorize them on the basis of the dominant social value they embody. By focussing on the purposes these reforms seek, policymakers should be able to more clearly identify the key assumptions underlying each approach.

Distinguishing Among Approaches

This paper follows the lead of Garms, Guthrie, and Pierce,³³ Boyd,³⁴ and Monk³⁵ in treating equity, efficiency, and liberty “as the basic and fundamental goals that societies pursue when resources are allocated for education.”³⁶ While it is much too simplistic to argue that a compensation system seeks to further only one of these aims, Mitchell and Encarnation find “a strong historical tendency for states to pursue only one goal at a time, neglecting or suppressing the others.”³⁷ One way to distinguish between different teacher compensation structures, therefore, is to see them as implicit endorsements of one of these three competing values.

Liberty-Enhancing Structures

Traditionally, the states’ focus in teacher compensation has been to promote local autonomy. By leaving these decisions to local school boards, states sought to provide freedom for school districts to adapt to the diverse conditions they face in the communities in which they are located. More recently, proposals have focused on sending additional teacher compensation resources to school districts through school funding formulas with the distribution of these funds among schools within a district determined by the extent to which individual schools meet locally-established goals.³⁸ This focus on local goals and processes seeks to promote liberty in three ways. First, because local people clearly know the community and its children the best, it encourages them to act as the primary decision makers with regard to their children’s education. Second, it empowers local teachers to act as autonomous professionals who can bring their knowledge of the children in their classrooms to bear in deciding how to engage these young learners. Finally, it allows schools to reflect local values about what is important for children to learn in school rather than the outcomes that state-mandated test makers think are important. For example, a local school district may decide to use state funds to support a compensation system that rewards schools for their success in meeting school goals that are not directly measured by student achievement [e.g., controlling drug use].

Critique of Liberty-Enhancing Structures

Critics point out that while liberty-enhancing structures provide freedom to choose, they include the freedom to choose incorrectly. From the critics’ perspective, the externalities generated by potentially poor local decisions about what goals should be pursued in public education outweigh Americans’ long-held preference for local control of schools. Specifically, critics decry the non-uniform standards that are created by local autonomy. Uniform standards, coupled with compensation structures that focus teacher attention on those standards, are seen the surest way to achieve higher levels of student performance and therefore the economic and social benefits that are thought to come in the wake of improved student performance.

Response

Defenders of these liberty-enhancing structures counter that the prescription for social and economic growth outlined by this critique is highly implausible. “Under conditions of uncertainty, it is unwise for a nation that wishes to promote the expansion of knowledge to restrict itself to a single, favored version of where progressive improvements of knowledge might originate and how they might develop.”³⁹ Uniform standards require choices to be made about hotly contested matters [e.g., the “reading wars” between whole language and phonics supporters]. Locally-determined, non-uniform standards are seen to avoid this problem. In addition, proponents of liberty-enhancing structures argue that a variety of approaches to teaching allows for experimentation across districts, spurs the development of new teaching methods, and ultimately increases the capacity of teachers to generate and expand their knowledge.

Equity-Enhancing Structures

Equity-enhancing compensation structures initially emanated from school finance litigation in the 1970s. Court decisions calling for fiscal neutrality across school districts has led 23 states to eliminate, or strictly limit, the power of local school boards to determine teacher salaries. By equalizing the ability of school districts to pay teacher salaries, and setting minimum teacher salaries and implementing some form of statewide salary schedules, these states seek to provide more equal opportunities for school districts to attract and retain quality teachers. The goal is to promote fairness by minimizing or eliminating disparities in teacher salaries arising from differences in wealth or geography.

Critique of Equity-Enhancing Structures

Critics of this approach point to the experiences of states that have moved towards salary equity and argue that a trade-off generally exists between equity and salary adequacy. For example, a recent study shows that while the statewide salary allocation schedule implemented by the state of Washington succeeded in creating a more equitable system of pay across school districts, “this equality was created by decreasing the standard of living provided to employees outside the Puget Sound region more than the fall sustained in the Puget Sound region.”⁴⁰ Thus, teachers in Washington now receive a more equal share of a smaller salary pie.

Response

Proponents of equity-enhancing structures, such as that used in the state of Washington, point out that school attendance is compulsory. By requiring children to spend more than a tenth of their expected life span in school, it is argued, a state incurs a moral and legal obligation to support schools and the teachers who work in them, in ways that are congruent with its ideals. While a state’s responsibility for many aspects of children’s lives is at best indirect and limited, its responsibility for ensuring a “a general and uniform system of public schools”⁴¹ is both direct and clear. For these individuals, the trade-offs cited by critics are

reflections of social prejudice. "In retrospect, it probably should have been recognized that the structural, political and fiscal forces that gave rise to inequitable distributions were not going to be easy to reverse, even with reform."⁴²

Efficiency-Enhancing Structures

Efficiency-enhancing initiatives are based on the belief that what teachers most need is stronger skills and knowledge and that the best way to encourage teachers to acquire them is to simultaneously (i) increase demands on the K-12 education system, (ii) reduce discretion of decision-making parties within the system, and (iii) hold teachers more responsible for performance.

In summary, our plan is a rigorous, "professional-pay-for-professional-performance" program. It links major pay increases to improvements in a teacher's professional practice and provides salary bonuses for all teachers in schools where high expectations for learning and achievement are met. It requires accountability across the entire system. The state is held accountable to provide the resources and standards. Schools, districts and communities are held accountable to provide leadership, set new priorities and find time to accommodate change. Teachers are held accountable for improving practice and achieving results in their classrooms.⁴³

Critique of Efficiency-Enhancing Structures

Critics of this approach charge that under this system, "any creative thinking about the purposes of education is to take place at the central levels of government, relegating localities to the task of compliance with those purposes."⁴⁴ If John Dewey is correct that the ends and means of any action are inextricably linked, then pre-set performance goals will impose restrictions on teachers' abilities to think about the means by which those goals can be accomplished.⁴⁵ According to this line of thinking, state and national adoption of detailed and precise educational standards is likely to create teacher demands for equally precise prescriptions of the instructional procedures whereby those standards can be met. Such a one-size-fits-all approach to the complex craft of teaching children is unlikely to foster teachers' creative instructional energies. Instead, use of such a framework to assess teacher quality is likely to undervalue seemingly important teacher characteristics, such as the ability of teachers to convey knowledge and inspire enthusiasm for learning, in favor of more readily identifiable skills and knowledge.

Response

Supporters turn around this charge by contending that performance-based pay structures will actually attract more talented and creative professionals into teaching. The incentives provided by this pay structure

Table 1. Societal Values Pursued Through Teacher Compensation

	<i>Societal Value</i>		
	<i>Liberty</i>	<i>Equity</i>	<i>Efficiency</i>
Goal	(a) Encourage local people to act as the primary decision makers with regard to their children's education (b) Empower teachers to act as autonomous professionals (c) Allow schools to reflect local values about what is important for children to learn in school	(a) Provide more equal opportunities for school districts to attract and retain quality teachers (b) Promote fairness by minimizing or eliminating disparities in teacher salaries arising from differences in wealth or geography	(a) Link major pay increases to improvements in a teacher's skills and knowledge (b) Provide bonuses for teachers in schools where expectations for learning and achievement are met (c) Hold all parties accountable for their role in achieving results
Critique	Externalities generated by potentially poor local decisions about what goals should be pursued in public education outweigh Americans' long-held preference for local control of schools	A trade-off generally exists between equity and salary adequacy. Thus, teachers in states that have moved towards salary equity now receive a more equal share of a smaller salary pie	Adoption of detailed educational standards will create teacher demands for equally precise prescriptions of the instructional procedures whereby those standards can be met rather than fostering teachers' creative instructional energies
Response	Variety of approach allows for experimentation across schools, spurs the development of different approaches, and ultimately increases the capacity of teachers to generate and expand their knowledge	Because school attendance is compulsory, states have a moral and legal obligation to ensure a uniform system of public schools	Performance-based pay will attract potential standouts into the profession, provide incentives for teachers to constantly improve their knowledge, and align salaries with the goal of raising student achievement

will encourage teachers to constantly improve their knowledge of context-sensitive ways of achieving the centrally prescribed purposes of education.⁴⁶ They point to the description of desired knowledge and skills contained in *The Framework for Teaching*,⁴⁷ as providing the processes and tools to assess the practice of individual teachers. In addition, the efficiency-oriented approach “is appealing because it would align salaries more closely with the goal of raising student achievement.”⁴⁸ Because salaries are such a large component of school expenditures, efficiency is enhanced when states allocate compensation in ways that will yield the greatest return to students.

Conclusion

This paper reviewed the roles of (i) the first three waves of educational reform, (ii) teacher labor market behavior, and (iii) teacher compensation in setting “the occupational context of teaching”⁴⁹ that is crucial in attracting and retaining teachers in the profession. Each of these factors suggest that policy makers in the twenty-first century face a formidable task in devising strategies that will improve the quality of our nation’s teaching force. Despite hard work and good intentions, previous reform strategies have not succeeded in ensuring student access to qualified teachers, especially in urban areas, but also in academic subjects with perceived shortages of qualified teachers. Education majors continue to be drawn from the lower end of the ability distribution and those who end up teaching are, on average, less likely to have strong cognitive abilities.⁵⁰ Finally, teacher salaries continue to be seen as a major deterrent to attracting a larger number of quality teachers, with average starting salaries for teachers lagging far behind starting salaries in other occupations.

To facilitate a more systematic analysis of distinguishing between different teacher compensation structures, the last section of the paper differentiates these approaches as implicit endorsements of one of three competing societal values. Table I provides a taxonomy of the different goals that teacher compensation seeks to further, the primary criticisms of each approach, and the response of supporters to this critique.

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“...Urban districts are...characterized by high concentrations of young and inexperienced teachers. This...translates to more expensive professional development programming.”

Spending on Instructional Staff Support Among Big City School Districts: Why Are Urban Districts Spending at Such High Levels?

Kieran M. Killeen
David H. Monk
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Introduction

In a recent study conducted under the auspices of the Center for the Study of Teaching and Policy¹ (CTP), we found that U.S. school districts, on average, direct 2.8% of their annual budgets toward what the Census Bureau defines as instructional staff support (Killeen, Monk, & Plecki 2000). This figure represents annual expenditures of more than \$8 billion or approximately \$200 per pupil. Because these estimates are based on the universe of U.S. school districts, it is possible to make comparisons among districts of varying size, location, and level of poverty, and we found significant, expenditure differences between urban, suburban and rural school districts. After controlling for geographic differences in cost, urban school districts both spend more in per pupil terms and devote a greater share of their budget to instructional staff support than do less urban school districts (See Table 1). Urban districts' spending on this item is above the national average, while suburban and rural districts tend to spend at levels closer to the national average. To be specific, during the 1994-95 school year urban school districts on average spent \$231 per pupil compared with rural school districts which spent at \$188 per pupil. In per pupil terms, urban school district's spending is 20% higher than school districts at the national average. In terms of budget share, urban districts report spending on instructional staff support as a share of total expenditures at levels that are 27% higher than districts at the national average.

In this article we extend our analysis of expenditures on professional development and more closely focus on the case of large urban districts in the United States. We first review the existing literature on professional development financing and set the context for our analysis. Then,

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following a brief description of our datasets and research methods we report in Part I how these professional development expenditures vary by school district urbanicity, and provide descriptive information for the nation's 25 big city school districts. We provide new evidence regarding the magnitude of the differentials. We then turn to a longitudinal analysis and report how expenditures changed in the early 1990's. In Part II we discuss our findings in detail and explore alternative explanations for why these differentials in spending exist. This discussion also illuminates significant hurdles yet to be crossed as research on professional development financing continues into the 21st century. In doing so, we outline how school finance research needs to evolve to better account for spending on professional development.

Research on Professional Development Financing

Prior to the CTP research, inquiries into spending on professional development within school districts were largely case study driven (see Moore and Hyde 1981; Little, 1989; Orlich and Evans 1990; Elmore and Burney 1997). These case study findings, though rich on organizational and contextual descriptions of school district management, provided limited opportunity for broad generalization by school district characteristics like enrollment size, poverty level or urbanicity.

The belief that school districts spend at low levels on professional development is remarkably well established despite the limited and largely anecdotal nature on the research base (see Houston and Freiberg 1979; Kearns 1988; Darling-Hammond 1994). Sparks and Hirsh stated unequivocally in the May 24, 2000 issue of *Education Week* that “despite the power of professional development to improve teaching, the typical school district allocates less than 1% of the budget for such activities”(42). Case study research on this topic has documented budget share ratios of between 1.8% and 11.8% (see Orlich and Evans 1990; Miller, Lord and Dorney 1994), and does not indicate that the majority of school districts spend less than 1%. The conclusion that school districts expend too little on professional development is premature given what little is known about financing ongoing teacher professional development. As Plecki (1999) summarizes “differences in cost estimation and in the metrics used for defining professional development investments underscore the need for more comprehensive and sophisticated notions of ‘professional development’ and ‘investment’ in these functions, and linked to these notions are more appropriate measurement, data collection, and analysis.”

The existing literature on professional development financing supports the intuitive assumption that investments in ongoing teacher training and support are directly correlated with gains in student achievement. For example, in a recent interrogation of NELS:88 data, Rice (2000) documents how the participation of math and science teachers in professional development activities impacts student achievement. In a correlation analysis, Rice found that school support for professional development such as release time from teaching, travel or per diem expenses, stipends and professional growth credits contributed to teacher participation in professional development activities. And, among math teachers, school system workshops were strong predictors of student test scores. But in terms of broad and national level research, the data do not exist which enable researchers to tie the costs of ongoing teacher training and support to student achievement, making rigorous education productivity analysis difficult.

Emerging Research at the National Level

Two new efforts at the national level are attempting to broaden this research base. Efforts from the Center for the Study of Teaching and Policy at the University of Washington, and emerging work from The Finance Project in Washington, D.C. are summarized below.

The Center for the Study of Teaching and Policy, an Office of Educational Research and Improvement funded Center, is in the process

Table 1. Instructional Staff Support Expenditures² Among Urban, Suburban and Rural School Districts, 1994-1995

Urbanicity ¹	Enrollment	Total Instructional Staff Support Expenditures (ISS in 000's)	Total General Expenditures (TGE in 000's)	School District Averages ³	
				Instructional Staff Support Expenditures as a Percentage of General Expenditures, School District Averages	Instructional Staff Support Expenditures Per Pupil
Nationally	37,515,224	8,033,816	241,785,693	2.76	192
Urban	10,716,974	2,442,759	70,378,913	3.51	231
Suburban	17,040,343	3,570,088	109,987,763	2.80	195
Rural	9,757,907	2,020,969	61,419,017	2.68	188

Data Sources: *US Census Survey of Local Government Finances: School District Expenditures (F-33), 1994-1995*; *NCES Common Core of Data, 1994-1995*.
Notes: (1) The metro status area is the NCEC classification of the agency's service area relative to a Metropolitan Statistical Area, where: Urban= School district that primarily serves a central city of an MSA; Suburban= Serves an MSA but not primarily its central city; Rural= Does not serve an MSA.
(2) Fiscal data are adjusted using Chambers' 1998 *Geographic Cost Index*.
(3) This statistic represents a simple average of all school districts at the national level, then along the three point urbanicity scale.

of conducting an ambitious study on this topic that will involve intensive case studies in four states (California, New York, North Carolina, and Washington) to learn more about the kinds of investments that are being made in teacher professional development. The study is structured to begin with an examination of national data to see what can be learned from these sources about the allocation of resources for professional development purposes. Attention will turn next to data collection efforts that exist within each of the four states that will be studied. The study will then move directly to the individual school district level and will include an intensive analysis of a single large district within each of the four states. The goal for this portion of the study is to gain insights into teacher professional development efforts that are not available from routinely collected data at both the state and national levels.

The nested and sequential nature of the data collection and analysis makes good sense given the sometimes elusive nature of the available fiscal data on professional development activities. There are numerous conceptual as well as operational difficulties that surround efforts to generate estimates of investments in professional development. For example, programs are not always operated out of local school districts, and yet the existing accounting systems tend to be oriented around the school district as the unit of analysis. Some states provide summer institutes for teachers and the costs for these institutes may be accounted for within a state agency's budget. The agency in question may vary depending on the state and depending on the type of service being provided. The CTP effort, then, is to capture these investments by working backwards from the delivery point to make sure that the costs are included.

Similarly *The Finance Project*², will soon begin a multi-year, Ford Foundation supported project to study innovative mechanisms for financing professional development in education. Arguing that current systems for financing professional development are fragmented, and that professional development programs fail to properly utilize resources, *The Finance Project* hopes to inform standards based reform efforts with effective professional development policies. Goals of their effort include mapping how resource streams affect professional development programming, quality, as well as how available resources affect costs. Research will be guided by an inter-disciplinary team, and result in the development and dissemination of new policies on professional development financing.

Data and Methods

The findings and statistics reported in this study are based upon the entire population of US school districts. The data are drawn from two sources: (1) The Census Bureau's *Survey of School District Finances (F-33)*, and (2) the *Common Core of Data*, which is compiled by the National Center for Education Statistics. We focus on fiscal years 1992 and 1995.

Specifically, we have focused on a F-33 data element called: "Instructional Staff Support," as an estimate of school district spending on professional development. This variable is defined by the Census Bureau to include: Supervision of instruction service improvements, curriculum development, instructional staff training, and media, library, audiovisual, television, and computer-assisted instruction services³.

To discriminate standard operating school districts from other educational organizations defined by the Census Bureau, we followed the database creation steps defined by O'Leary and Moskowitz (1995). Even with the basic database development steps, our research still required handling of those records with missing data for instructional staff support. During the F-33 universe years, approximately one third of all states report some level of missing values for the instructional staff support. Our research identified those school districts with missing records for "instructional staff support" at levels above 15%. Rather than impute values for the missing records, a total of seven states in 1991-1992 and five states in 1994-1995 were removed from the study. In 1991-1992, those states were Alaska, Arizona, Maine, Montana, Nebraska, Nevada, and North Dakota; In 1994-1995 those states were California, Montana, Nebraska, Nevada, and North Dakota. Although the Census Bureau provides the F-33 as a universe dataset, school districts in Kentucky, Massachusetts, Tennessee and New Jersey in 1992 included imputed values for our target variable. Due to implausible results discovered for districts in Massachusetts, Tennessee and New Jersey, these states were removed from the 1992 dataset. This culling only affects the longitudinal analysis section of this report.

The comparison of school districts across rural and urban continuums, as well as region, requires standardization of educational costs. For school districts, cost differences can come from variation in the salaries that must be paid to hire and retain teachers as well as differences in the form of the educational services being delivered. Efforts to control for cost inputs also allows for an approximate means to adjust expenditures by

geography (Chambers xi, 1998). We used Chambers' *Geographic Cost of Education Index* (GCEI) to adjust for regional differences in instructional staff development expenditures that come from differences in the cost of key inputs into the educational process. Specifically, we utilized Chamber's 1990-91 GCEI to adjust FY 1992 F-33 data, and the 1993-94 GCEI to adjust the FY 95 F-33 data.

We are primarily concerned here with comparisons of instructional staff support expenditures across places and across time. Comparison of resources by place requires standardization by population size. In keeping with reporting standards in the school finance literature, we report instructional staff support expenditures in per pupil terms as well as in terms of the share of the total general fund expenditures. These two statistics are then categorized by one of two urbanicity scales developed by the National Center for Education Statistics in 1995. The same urbanicity scale is used for both years of fiscal data.

Part I. Findings: Spending on Instructional Staff Support Among Big City School Districts

Comparing School District Expenditures in During the 1994-1995 School Year

As we noted earlier and as Table 1 demonstrates, school districts in urban areas devote 3.5% of their budget on average to instructional staff support activities, a level that exceeds the national average of 2.8%. Per pupil spending on this item is also highest for urban districts at \$231, and greater than districts at the national average of \$192.

Given that urban school districts appear to spend greater resources on professional development, we sought to refine our measure of urbanicity or "urban-ness" and reexamine if those same expenditure patterns hold

across districts that vary in their type of urbanicity. By widening our urbanicity scale a bit further, in Table 2, we are better able to compare the relationship between urbanicity or population density and instructional staff support expenditures. We observe that school districts serving large central cities, mid sized central cities, and large towns devote the greatest proportion of their budget to instructional staff support. School districts on the fringes of urban areas, the suburbs, as well as rural school districts devote the least. This same pattern holds when the target variable is expressed in per pupil terms. The most surprising observation is the decline, expressed in per pupil or budget share terms, as one travels from the urban core out—until one reaches school districts in the large towns when the statistics climb again.

Table 3 focuses in on the 25 largest school districts serving large central cities. We call these big city districts. We have highlighted the top 25 big city districts and ranked them by enrollment. These 25 big city districts represent almost 10% of all US students and more than 9% of all expenditures on instructional staff support⁴.

Together these districts tend to exceed national averages in terms of staff support budget share and expenditures per pupil. Excluding New York City for the moment, the budget share ratios range from 2% in Philadelphia to more than 6.6% in Orlando. School districts serving cities like Orlando, Tampa, Louisville and Washington, D.C. tend to lead other city districts in staff support expenditures per pupil. Expressed in per pupil terms, staff support spending is lowest in districts serving large cities like Mobile, Salt Lake City, and Philadelphia.

However, there is quite a noteworthy exception to this nationwide pattern, and the source of this departure are the data coming from New York City. As the largest school district in the nation, New York City

Table 2. Instructional Staff Support Expenditures² by School District Urbanicity, 1994-1995

Urbanicity	Enrollment	Total Instructional Staff Support Expenditures (ISS in 000's)	Total General Expenditures (TGE in 000's)	School District Averages ³	
				Instructional Staff Support Expenditures as a Percentage of General Expenditures, School District Averages	Instructional Staff Support Expenditures Per Pupil
Nationally	37,515,224	8,033,816	241,785,693	2.76	192
Large Central City	6,400,757	1,289,739	41,543,143	3.43	222
Mid-Size Central City	6,821,494	1,651,373	42,945,351	3.30	215
Urban Fringe of Large City	9,174,881	2,020,461	61,785,121	2.92	210
Urban Fringe of Mid-Size City	3,421,769	694,244	20,855,026	3.03	192
Large Town	784,255	168,645	4,575,077	3.42	208
Small Town	5,172,465	1,092,706	32,106,224	3.04	195
Rural	5,739,590	1,116,647	37,975,751	2.46	182

Data Sources: US Census Survey of Local Government Finances: School District Expenditures (F-33), 1994-1995; NCES Common Core of Data, 1994-1995.

Notes: (1) The urbanicity scale used here is a seven point NCES classification, where: A. Large City: A central city of a Consolidated Metropolitan Statistical Area (CMSA) or MSA, with the city having a population greater than or equal to 250,000; B. Mid-Size City: A central city of a CMSA or MSA, with the city having a population less than 250,000; C. Urban Fringe of Large City: Any incorporated place, Census-designatd place, or non-place territory within a CMSA or MSA of a Large City and defined as urban by the Census Bureau; D. Urban Fringe of Mid-Size City: Any incorporated place, census designated place, or non-place territory within a CMSA or MSA of a Mid-Size City and defined as urban by the Census Bureau; E. Large Town: An incorporated place or Census designated place with population greater than or equal to 25,000 and located outside a CMSA or MSA; F. Small Town: An incorporated place or Census designated place with population less than 25,000 and greater than or equal to 2,500 and located outside a CMSA or MSA; G: Rural: Any incorporated place, Census designated place, or non-place territory designated as rural by the Census Bureau.

(2) Fiscal data are adjusted using Chambers' 1998 *Geographic Cost Index*.

(3) This statistic represents a simple average of all school districts at the national level, then along the three point urbanicity scale.

Table 3. Spreading Instructional Staff Support¹ Among Big City Districts, 1994-1995

Top Twenty-Five Big City School Districts ^{2,3}	City Serving	Enrollment	Total Instructional Staff Support Expenditures (ISS in 000's)	Total General Expenditures (TGE in 000's)	Instructional Staff Support Expenditures as a Percentage of General Expenditures, School District Averages ⁴	Instructional Staff Support Expenditures Per Pupil ⁴
Nationally		37,515,224	8,033,816	241,785,693	2.76	192
New York City	New York	1,022,534	32,158	8,092,824	0.40	31
City of Chicago SD	Chicago	407,241	80,336	2,382,982	3.37	197
Dade County SD	Miami	321,615	82,494	2,346,713	3.52	257
Philadelphia Schools	Philadelphia	208,710	26,834	1,313,788	2.04	129
Houston Ind. SD	Houston	202,149	42,128	1,087,083	3.88	208
Detroit Public Schools	Detroit	170,855	26,219	1,228,045	2.14	153
Dallas Ind. School District 9	Dallas	145,019	37,863	826,270	4.58	261
Hillsborough Co. Schools	Tampa	138,575	51,776	976,218	5.30	3.74
Duval County SD	Jacksonville	121,362	27,428	680,548	4.03	226
Orange Co. School Board	Orlando	118,666	47,442	722,269	6.57	400
Baltimore City Schools	Baltimore	113,428	24,259	660,507	3.67	214
Memphis City Schools	Memphis	108,643	26,142	533,763	4.90	241
Milwaukee City Schools	Milwaukee	102,909	30,313	728,031	4.16	295
Pinellas County SD	St. Petersburg	102,170	30,904	662,760	4.66	302
Jefferson County Schools	Louisville	93,407	28,608	552,373	5.18	306
Albuquerque SD	Albuquerque	89,001	20,362	445,747	4.57	229
Orleans Parish Schools	New Orleans	86,028	13,922	413,646	3.37	162
Charlotte-Mecklenburg Sch.	Charlotte	86,023	15,922	560,774	2.84	185
DC Public Schools	Washington	80,450	33,132	659,450	5.02	412
Granite SD	Salt Lake City	78,590	10,716	288,276	3.72	136
Wake County Schools	Raleigh	76,922	15,463	472,605	3.27	201
Virginia Beach City	Virginia Beach	75,926	22,435	411,174	5.46	295
Mobile County SD	Mobile	64,645	7,882	292,356	2.70	122
Brevard County SD	Palm Bay	64,595	17,359	399,007	4.35	269
East Baton Rouge Parish	Baton Rouge	61,460	10,844	319,266	3.40	376

Data Source: *US Census Survey of Local Government Finances: School District Expenditures (F-33), 1994-1995.*

Notes: (1) The expenditure data were adjusted using Chambers' 1998 Geographic Cost Index.

(2) The following states, and therefore the large urban districts within them, were removed from the analysis due to a high proportion of missing values in 1994-1995: California, Montana, Nebraska, Nevada, and North Dakota.

(3) The 25 Big City Districts are those LEA's ranked by student enrollment and characterized by the Census Bureau as being a district that primarily serves a central city of an MSA.

(4) The weighted average, reported here, is calculated as the summation of expenditures per district divided by the total enrollment.

reports spending very little on this item. According to Table 3, in 1994-95 NYC reported spending a little over \$32 million on instructional staff support. This amount equated to about \$30 per pupil in instructional staff support, and amounted to less than 1/2 of 1% of total general expenditures.

Comparing School District Expenditures between 1992 and 1995

In Tables 4 and 5 we turn from our cross-sectional analysis and examine changes in expenditures from 1992 to 1995.

Among U.S. school districts in the early 1990's, we observe a 25% increase in instructional staff support spending per pupil and an 8% increase in the share of staff support expenditures in the total budget. As Table 4 depicts, these growth rates are generally highest in urban areas, whereas rural areas are among the slowest to change. In terms of growth in expenditures per pupil, school districts serving mid sized central cities as well as their suburbs, grew faster than school districts serving the large central cities and their suburbs. By comparison though, the budget share ratios are generally half of the per pupil growth rates. School districts serving large central cities and mid sized central cities generally grew the share of instructional staff support in the total budget at a rate that was twice that of the nation⁵, and three times that of rural areas. This is probably an indication of professional development revenues not keeping pace with general budget growth.

Like Table 3, Table 5 focuses attention on changes in staff support expenditures for the 25 big city districts. Districts serving East Baton Rouge, Salt Lake City, Milwaukee, Chicago and NYC grew the fastest in terms of this variable. One should note that although NYC's growth statistics appear to be large, the district was moving from quite a low level of spending during the earlier period. To be specific New York City increased its per pupil spending on instructional staff support from \$21.54 to \$31.45 between 1991-1992 and 1994-1995. The share statistics increased from .32 to .40 over the same period. Second, a wide range of districts grew their expenditures per pupil at paces faster than other districts serving "large central cities", but only Milwaukee outpaced the budget share ratio in a concurrent fashion. Last, there are a fair number of districts that demonstrate growth in per pupil expenditures but exhibit negative growth values in the budget share statistic. This is the case in districts serving Dallas and Tampa, among others.

In summary then, we have found that urban school districts, primarily those serving large and mid sized central cities as well as those serving large towns, expend more resources on instructional staff support than do suburban or rural school districts. For example, in 1994-95 districts serving large central cities spent \$222 per pupil on staff support, an amount that was 6% higher than districts at the fringes of the cities and 22% greater than rural districts. And, between the 1991-92 and 1994-95 school years, these figures moved farther apart. Districts serving more

Table 4. Longitudinal Analysis of Instructional Staff Support Expenditures² By Urbanicity¹, 1991-1992 and 1994-1995

	Growth ³ in Instructional Staff Support Expenditures as a Percentage of General Expenditures	Growth ³ in Instructional Staff Support Expenditures per Pupil
Nationally	8	25
Large Central City	17	30
Mid-Size Central City	14	33
Urban Fringe of Large City	11	27
Urban Fringe of Mid-Size City	14	32
Large Town	9	22
Small Town	4	23
Rural	6	22

Data Sources: *US Census Survey of Local Government Finances: School District Expenditures (F-33), 1991-1992, & 1994-1995; NCES Common Core of Data, 1991-1992 & 1994-1995.*

Notes: (1) The urbanicity scale used here is a seven point NCES classification, where: A. Large City: A central city of a Consolidated Metropolitan Statistical Area (CMSA) or MSA, with the city having a population greater than or equal to 250,000; B. Mid-Size City: A central city of a CMSA or MSA, with the city having a population less than 250,000; C. Urban Fringe of Large City: Any incorporated place, Census-designatd place, or non-place territory within a CMSA or MSA of a Large City and defined as urban by the Census Bureau; D. Urban Fringe of Mid-Size City: Any incorporated place, census designated place, or non-place territory within a CMSA or MSA of a Mid-Size City and defined as urban by the Census Bureau; E. Large Town: An incorporated place or Census designated place with population greater than or equal to 25,000 and located outside a CMSA or MSA; F. Small Town: An incorporated place or Census designated place with population less than 25,000 and greater than or equal to 2,500 and located outside a CMSA or MSA; G. Rural: Any incorporatedplace, Census designated place, or non-place territory designated as rural by the Census Bureau.

(2) Fiscal data are adjusted using Chambers' 1998 *Geographic Cost Index*.

(3) Growth is measured as the rate of change between the simple average statistics from 1995 and 1992.

urbanized areas tended to grow faster in terms of the amount spent on staff support as well as the proportion of the district's budget expended on staff support.

Part II. Why are Urban Districts Spending at Such High Levels?

While these recent findings indicate an apparent urban advantage in supporting teacher professional development, they are also indicative of significant difficulties in the measurement of teacher professional development financing. By controlling for differences in resource costs to school districts, as well as by reporting expenditures in per pupil terms, we avoid attributing instructional staff support expenditure differences to geographic cost differences or enrollment size.

The pattern of urban school district spending described in this article may be related to greater demand by these school districts for professional development services. Circumstances like high teacher turnover, a young teaching force, challenging student populations or unusual resource streams for professional development programming could foster greater need or demand for services within the school district organization. This demand could exceed what is being experienced by suburban and rural school districts, and therefore drive up spending. We discuss two examples of factors that create high demand for professional development in urban school districts.

High Levels of Student Need

Urban school districts, with large populations of special needs, poverty stricken, and minority school children face difficult challenges. The federal government recognizes these conditions and appropriates tax dollars to mitigate these challenges for school districts. Although the majority of school-based federal dollars allocate at least a portion to professional development (EFRC 1998), the Eisenhower Professional Development Program is the most comprehensive program to do so. Because 50% of all Eisenhower funds must be allocated by states

according to existing Title I appropriations, urban districts can be expected to receive a disproportionate share of professional development funds. Moreover, if state school finance systems also allocate funds for professional development based on an entitlement criteria or a poverty ratio, one would expect urban districts to again be favored. In this argument then, students with high-needs, concentrated in urban school districts, generates the disproportionate allocation of special revenues for professional development activities to urban districts.

We explore this argument further by focusing on the distribution of Eisenhower Funds⁶. In 1994-1995, we found that urban school districts receive on a per pupil basis more Eisenhower funds than suburban or rural districts. Urban districts receive 89% more Eisenhower funds per pupil than suburban districts and 44% more than rural districts. Assuming that all Eisenhower Funds are expended via our instructional staff support variable, Eisenhower funds comprise 2.2% of all professional development expenditures among urban districts whereas the shares equal 1.3% and 1.7% among suburban and rural school districts. Eisenhower funds, therefore, appear to assist urban districts in tipping their scales in terms of greater resources available for professional development spending.

It would be interesting to see if these earmarked revenues coming from the federal government for professional development serve to leverage additional spending in this area from state and local sources. However, due to limitations in the national data sets researchers are unable at this time to disaggregate total spending on professional development according to source. This condition restricts the ability to formally measure, such as through an econometric model, the effects of multiple revenue streams on an expenditure item such as professional development.

Table 5. Longitudinal Analysis of Instructional Staff Support Expenditures¹ City-By-City^{2,3} Comparisons, 1991-1992 and 1994-1995

Affiliated City Staff Support,	School District	Growth in Instructional Staff Support as a Share of Total General Expenditures	Growth in Instructional Per Pupil
	Nationally	8	25
New York	New York City	24.2	46
Chicago	City of Chicago SD	12.8	32
Miami	Dade County SD	6.2	29
Philadelphia	Philadelphia Schools	-11.6	-16
Houston	Houston Ind. SD	5.3	20
Detroit	Detroit Public Schools	0.2	22
Dallas	Dallas Ind. School District 9	-11.4	18
Tampa	Hillsborough Co. Schools	-4.6	15
Jacksonville	Duval County SD	-7.6	-3
Orlando	Orange Co. School Board	10.0	13
Baltimore	Baltimore City Schools	6.1	16
Memphis	Memphis City Schools	na	na
Milwaukee	Milwaukee City Schools	51.4	65
St. Petersburg	Pinellas County SD	-1.2	16
Louisville	Jefferson County Schools	-24.5	-9
Albuquerque	Albuquerque SD	-0.3	17
New Orleans	Orleans Parish Schools	-18.1	-24
Charlotte	Charlotte-Mecklenburg Sch.	-28.7	-6
Washington	DC Public Schools	29.2	21
Salt lake City	Granite SD	14.0	36
Raleigh	Wake County Schools	16.9	10
Virginia Beach	Virginia Beach City	10.5	31
Mobile	Mobile County SD	-5.1	22
Palm Bay	Brevard County SD	-11.9	5
Baton Rouge	East Baton Rouge Parish	24.4	36

Data Source: US Census Survey of Local Government Finances: School District Expenditures (F-33), 1991-1992 & 1994-1995.

Notes: (1) The expenditure data were adjusted using Chambers 1998 Geographic Cost Index.

(2) The following states were removed from the analysis due to a high proportion of missing values in 1994-1995: California, Montana, Nebraska, Nevada, and North Dakota. Massachusetts, New Jersey and Tennessee were removed from the longitudinal analysis due to incomplete Census Bureau estimates for the 1991-1992 school year.

(3) The 25 Big City Districts are those LEA's ranked by student enrollment and characterized by the Census Bureau as being a district that primarily serves a central city of an MSA.

Staff Turnover Demands More Training, More Expensive Training

Beginning in the 1987-1988 school year, principals reported via the NCES Schools and Staffing Survey that it is most difficult in urban settings, over suburban and rural, to attract and hire teachers (Lippman et al, 1996). Urban school teachers themselves report having little control over their curriculum and display job absenteeism at rates higher than suburban and rural districts; Furthermore, urban districts have high concentrations of teachers with less than three years of experience (*ibid*). These findings suggest hiring and retaining teachers, let alone experienced teachers in urban areas creates difficult challenges in urban districts. Translating these challenges to increased professional development costs may be explained, in part, as a demographic issue.

Two concepts related to teacher composition and retention help to elaborate this argument. Rice (2000) in her review of professional development programming based on SASS data, noted that inexperienced teachers participate more frequently in professional development activities than do teachers with more than three years of experience. Urban schools and districts, with high concentrations of inexperienced teachers would therefore likely expend more on professional development. A second and related reason for higher expenditures may be a function of high migration rates among young teachers, in and out of urban districts. It is well known among demographers that the primary factor influencing migration is age. Young people in their 20's, particularly well educated persons, tend to migrate at rates that exceed other age

groups. High rates of teacher turnovers would force a district to continually retrain new teachers or perhaps invest more in existing teachers in order to stem out migration. This point is difficult, however, to quantify. Simply correlating growth rates in the size of the teacher and administrator labor force with professional development expenditures, clouds this issue of migration. Future research will want to discern and measure the importance of (a) new hires due to staff attrition, from (b) new hires due to enrollment growth. We argue that new hires due to staff attrition will impact urban districts more heavily than suburban and rural districts and therefore might serve to influence professional development costs.

Conclusion

In this article we have sought to contribute to the existing knowledge of teacher professional development financing. Our findings are drawn from the Census Bureau's Survey of School District Finances, specifically a variable titled instructional staff support. We utilize this self-reported school district variable as an estimate of professional development expenditures across the U.S. We highlight an intriguing pattern of expenditures among urban districts, particularly districts serving large and medium sized central cities. In these districts, expenditures on instructional staff support are higher than those in suburban and rural districts. These differentials exist when expenditures are expressed in per pupil terms as well as in terms of shares of total general expenditures, and persist even after controlling for variations in resource costs. We also find some evidence that these differentials grew during the early 1990's. We point to two

possible explanations for higher spending among urban school districts. First, we argue that urban districts, characterized by high concentrations of poverty, are favored with federal grants that exceed levels in suburban and rural school districts. These revenues supply a steady and supplemental source of professional development revenues that afford urban districts the opportunity to spend at higher levels. Second, we argue that urban districts are also characterized by high concentrations of young and inexperienced teachers. This composition translates to more expensive professional development programming. These two arguments also highlight the dearth of available data on professional development financing. This condition limits the ability of school finance researchers to effectively define and trace the revenues, costs, and benefits of professional development activities and hence inform 21st century policies.

In conclusion, the national debate about teacher quality and its improvement prompts interest in knowing more about the current investments in professional development. While some data like the instructional staff support item from the U.S. Census Bureau are available, there is a clear need for more refined measures that provide deeper insights into current practices. We believe the analyses we report in this article take a useful step in the correct direction, but we are acutely aware of the need for better data that more precisely measure flows of resources into the professional development of teachers and other staff members in the nation's schools. The detailed case studies currently being conducted by the Center for the Study of Teaching and Policy at the University of Washington will build on the results we report here and should add greater clarity to the debate over the proper level of support for the further professional development of teachers.

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Endnotes

1. The Center for the Study of Teaching and Policy (CTP), housed at the University of Washington, is a consortium of five universities which has been created to investigate the relation between excellent teaching and policymaking at national, state, and local levels. The mission of CTP is to investigate the relation between excellent teaching and policymaking. CTP was founded in 1997 and is funded for five years by the National Institute for Educational Governance, Finance, Policymaking, and Management of the Office of Educational Research and Improvement (OERI) in the U.S. Department of Education. For more information, visit the CTP web site at <<http://depts.washington.edu/ctpmail/target.html>>.

2. Information about *The Finance Project* initiative on professional development financing may be found at their website at <<http://www.financeproject.org>>.

3. According to definitions in the NCES *Financial Accounting for Local and State School Systems* (Fowler 1990), instructional staff support is composed of two main categories: Improvement of Instruction Services and Educational Media Services. The former clearly encapsulates an intuitive conception of expenditures for teacher support services or staff development. Items for this section include:

- a. Activities concerned with directing, managing, and supervising the improvement of instructional services.
- b. Activities that assist instructors in designing curriculum, using special curriculum materials, and learning of techniques to stimulate and motivate students.
- c. Activities that involve improving the occupational health or professional training of instructional staff, including expenditures for workshops, demonstrations, school visits courses for college credit, sabbatical leave, and travel leaves.

The second major component, Educational Media Services, includes expenditures for activities related to managing and directing educational media, school library services, and audiovisual services. The intent of this component is to capture costs associated with use and preparation of those devices, content materials, methods or experiences used for teaching and learning purposes. The emphasis here is not on training of instructional staff to use the library services or other audiovisual materials, per se, but rather on the general personnel and materials costs involved with preparing audiovisual and other media for use by staff and students. Textbooks are not intended to be charged to this component.

4. Given that a number of states were removed from our dataset, it is likely that these estimates are overstated somewhat.

5. The growth rates reported here for the nation represent the rate of change between 1992 and 1995 for simple averages of all U.S. school districts. If the simple average for each state is calculated first, then growth is measured year to year across the state averages, the "national average growth" is a bit lower. In terms of the budget share the figure is .9%, and in per pupil terms the statistic is 14% (Killeen, Monk, Plecki 2000).

6. The findings reported here were generated utilizing the same 1994-1995 database used to generate Tables 1-5. However, tables were not created to display the findings presented in the concluding remarks.

“...Our inability to link money and/or resources to student outcomes seems to be, at least in part, a result of not having...detailed fiscal data.”

The Collection and Use of Student Level Data: Implications for School Finance Research*

Lawrence O. Picus
Ed Robillard

The principal focus of school finance in the past has been on elimination of fiscal disparities among school districts. Whether the goal was to eliminate differences in per-pupil spending, or to establish greater taxpayer equity, most school finance research has focused on ways to measure equity and on treatments for differences in the fiscal capacity of school districts. While there is still much to be done on this front, school finance today must also accommodate a number of new issues related to: whether or not spending levels are adequate to meet the needs of our children; how educational resources are allocated and used; and how funding levels are linked to student outcomes (Odden & Picus, 2000). In this article, we suggest that to fully understand each of these issues, school finance researchers will need to collect resource allocation data at the student level.

In recent years, considerable attention has been devoted to the collection of school level fiscal data. These efforts seem motivated by both the growing trend toward more school site decision-making, and the growing demand for accountability for student performance. In the states with the most experience in school level data collection, one constant has been that gathering of these data is expensive and difficult. Often once collected, the data remain relatively unused. Moreover, to the extent that understanding how resources are linked to student outcomes, it seems probable that school level variables will suffer from the same lack of specificity that has plagued the use of district level expenditure variables in research on this topic. For that reason, we feel it important to consider the collection of student level resource allocation patterns. This effort is not without its difficulties and expense. In fact, it may provide more information that school districts really need for efficient fiscal operations. However, absent more knowledge of what is to be learned from student level data collections, we feel initial efforts in this direction are warranted. This paper provides a description of our initial work in identifying the resources available to individual students at one high school in the Los Angeles Unified School District. It begins with a brief review of the literature on resource allocation in schools. This review focuses specifically on the reasons for collecting student level data and how such data can help improve school finance research. Following this discussion,

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we describe our research methods and offer our initial estimates of student level resource allocation patterns at one high school in Los Angeles. The article concludes by suggesting how such data might be collected in the future.

Review of the Literature

Despite the large sums of money spent annually for K-12 education, we know remarkably little about how those funds are used at the individual student and school level. School finance studies have traditionally focused on school districts as the level of analysis, and most states only collect information from constituent school districts at the district level. The focus of most state finance reporting systems is on fiscal accountability, not understanding how or why resource decisions are made. These systems generally focus on object level reporting. As a result, we know a great deal about how much our schools spend for salaries, benefits, contracts, etc. but relatively little about expenditures by function (instruction, administration, pupil services, maintenance and operations, transportation, etc.), and even less about how much is spent by individual program.

For example, many districts can not tell us how much is spent per pupil for elementary vs. secondary instruction, much less answer a question like what are per pupil costs for mathematics instruction at the high school, or how much is spent on individual students at the elementary level. Yet, until we can identify these costs, it seems unlikely we will be able to ascertain how the use of educational resources is linked to student achievement

Berne and Stiefel (1997) argue that student resource studies can answer three types of questions. They are:

- Resource effectiveness questions
- Equity questions
- Resource intent questions

Resource Effectiveness Questions

A large body of literature, both in economics and school finance, has focused on production function analyses that attempt to relate inputs to outputs. Studies of this type are useful for answering questions on the effectiveness of resource use, and the cost-effectiveness of different programs. To date, production function analyses that attempt to relate the student outcomes to resources have not clearly identified a link between spending and student achievement. Eric Hanushek's work in this field led him to conclude that there does not appear to be a systematic link between student achievement and the level of spending (see for example, Hanushek, 1989; 1994a; 1994b; 1996a; and 1996b). He does not suggest that such a link does not exist, only that at the present time, schools need to spend the resources they have more efficiently if they are to improve student learning with more money (see in particular, Hanushek, 1994b).

In recent years, a number of authors have challenged Hanushek's findings, arguing that more money does relate to higher levels of student achievement. Hedges, *et. al.* have argued extensively that if different statistical methods are used to conduct meta-analyses of production function studies, there is a clear link between spending and student achievement (see Hedges, Laine & Greenwald, 1994a and 1994b; Greenwald, Hedges & Laine, 1996a and 1996b; and Laine, Greenwald & Hedges, 1996). Ferguson found that "hiring teachers with stronger literacy skills, hiring more teachers (when students-per-teacher exceed 18), retaining experienced teachers, and attracting more teachers with advanced training are all measures that produce higher test scores in exchange for more money (Ferguson, 1991: 485)." Other work by Ladd and Ferguson (1996) in Alabama found similar links between spending and student achievement.

Cost-effectiveness studies are less common in the educational literature. In part this is due to the difficulty in measuring educational outcomes consistently across children. Cost-benefit analysis, of which cost effectiveness is a derivative (see Levin, 1983), relies on the ability to value both costs and benefits in dollar terms. The difficulty in education is that to compare student achievement, we need to rely on various test scores and measures of gain. Since tests in different subjects use different scales, as do different tests of the same subjects, it is virtually impossible to compare the cost effectiveness of different programs with district and state level aggregate cost data.

Berne and Stiefel argue that studies like the ones described above "...could be done with much more accuracy if there were student-level resource measures that were defined to be inclusive and to differentiate between kinds of programs and students. The data would be useful if it were gathered at the school level or, if it were a sample of individual student-level data that was representative at the school level. (Berne and Stiefel, 1997: 70).

Equity Questions

School finance has a long history of analyzing funding equity. However, most of that work has looked at spending differences across school districts. Very few studies have considered school level finance equity either within districts, or across districts in an individual state. Hertert, (1996) analyzed school level equity in California, but to do so was forced to collect data from a sample of school districts and key in their data by hand. Nakib (1996) analyzed school level equity in Florida using that state's extensive school level data. Picus (1993a, 1993b) used a national sample of school districts merged from the Schools and Staffing Survey and the 1987 U.S. Bureau of the Census, Census of Governments to analyze school level expenditure patterns by various district characteristics such as size, location and wealth. However, outside of this work, there have been few school level analyses of finance equity. Berne and Stiefel suggest "...a well-defined set of student resource variables would improve equity studies at the school level including studies that use administrative data, particularly if those variables are capable of serving as models for other data sets (Berne and Stiefel, 1997: 70)."

Resource Intent Studies

The third category of questions Berne and Stiefel identify have to do with how resources are used or how they flow to programs or schools. Studies of this sort include the Resource Cost Model developed by Chambers and Parish, and the work Bruce Cooper and the accounting firm of Coopers and Lybrand are doing in analyzing school district expenditures by program and level. This work provides a wealth of information on how educational resources are used. However, data collection methods are expensive, and all suffer from the inherent incompatibilities in the way districts and states report fiscal data. These complexities, combined with the need to make hard decisions about allocation of overhead costs and central office expenditures have led most analysts to shy away from such efforts.

Four School Finance Issues That Would Benefit From Student Level Data

Elsewhere, Picus (forthcoming) and Picus and Peternick (forthcoming) argue that collection of student level fiscal data will improve our knowledge in four school finance research areas. They are:

- Equity
- Adequacy
- Accountability
- Productivity

Equity

Although issues of equity have been the principal focus of school finance since the turn of the century (see for example Odden & Picus, 2000), school finance research will continue to look at issues of equity well into the foreseeable future. One area gaining more attention is within district spending disparities.

Hertert (1996) demonstrated that even in a state with relatively equal per-pupil spending (California), there are substantial differences in per-pupil spending among schools within a district and across schools among districts. She also showed that substantial differences exist in the types of resources available to children, finding a considerable disparity in the pupil/teacher ratio for teachers of high-level math and science courses. Clearly those students in schools with a lower ratio (fewer students per teacher) have greater access to teaching resources for those subjects.

The differences Hertert identifies across schools are an important concern for school finance researchers. Even if we make progress in improving the equity of district level finances, if differences continue to exist among schools, our ability to improve student learning for all may be compromised. Understanding the extent to which differences in spending, and educational resources are unevenly distributed among schools both within districts and across schools among districts within a state is another critical issue for future school finance research.

While school level data would improve our understanding of this considerably, anyone who has been in a school recently can't miss the fact that even within individual classrooms, considerable differences in the resources available for each child exist. For example, some children, as part of a special education inclusion program, may have their own teaching aide for all or part of the day. Other children may be taken from the classroom for a portion of some or all days each week for special instruction. This model is common in Title I programs, and is a critical part of the Reading Recovery program. These actions are clearly intended to improve the "vertical equity" in schools, something school finance research has had limited success in measuring to date. Moreover, this shows clearly that substantial differences in the resources available to individual children probably do exist.

Adequacy

The 1990s saw resurgence in school finance litigation. Since 1989, a total of 21 cases have found their way to the highest court in their respective state. In 12 of those, the court decided in favor of the plaintiffs (see Odden & Picus, 2000 and related web site <http://www.mhhe.com/schoolfinance>). Beginning with the 1989 decision in Kentucky, courts have been more willing to overthrow the existing funding system, define remedies and establish concrete requirements for constitutional remedy. In many instances, these decisions have focused on an alternative concept in school finance - adequacy.

In the past, school finance cases were brought on the more narrow grounds of funding equity for students, or taxpayer equity through remedies such as fiscal neutrality. Adequacy cases argue that it is the responsibility of the state to provide an "adequate" level of resources to insure each child receives a satisfactory education. As envisioned by William Clune (1994), adequacy shifts the focus of school finance reform from inputs to an emphasis on high minimum outcomes. Adequacy models focus on the resources needed to provide students with the education they need to attain high standards. It seems clear that the availability of student level resource data would improve the accuracy of estimates of the costs of providing students with an adequate education.

Accountability

Holding schools accountable for the performance of their students has become one of the staples of education policy in the 1990s. Policy makers talk about giving schools the funds they need and holding them

accountable for student performance. While this rhetoric is popular, it is a long way from a state actually relaxing its control over the basic accounting functions they currently require of school districts, particularly for specific grant programs. This is understandable as any legislator who appropriates billions of dollars for schools only to find that some have “misused” those resources will want to have some redress with local officials. Hence, we have been slow to remove restrictive and outdated fiscal controls on schools.

Some progress has been made in this direction through so-called “market based” approaches to school reform or reorganization. Specifically, programs that support site based management, school choice, vouchers and charter schools offer local school officials the opportunity to have more control over the allocation and use of the revenues they receive. The question facing school finance researchers is, do local educators take advantage of this new flexibility and use their resources differently? If they do, does it make a difference in student outcomes? Both questions are critical components of future school finance research. We also need to know if different organizational structures lead to greater gains in student learning than others and we need a better understanding of the relationship between organizational structure, resource use and student achievement. Armed with this information, it may be possible to hold schools accountable for the performance of their students.

Productivity

We are a long way from understanding the link between money and student outcomes. Despite hundreds of studies and years of debate, the question of how money matters is still hotly debated. What we need is better fiscal data. Today it is possible to get detailed student level demographic and performance data. Often we can only link it to district-wide fiscal data. If we better understood how much was spent at the school, or ideally at the student level, it should be possible to more fully understand the relationship between money and achievement. Additionally, it is also important to understand what resources money buys at the school. For example, it may be more important to know about the characteristics of individual teachers than how much they earn, or even how many students are in their classes.

Estimates of Student Level Resource Allocation in One Urban High School

In the pages that follow, we describe our approach to estimating the expenditures for each student in one urban high school in Los Angeles. We begin with a description of the school itself, follow with a detailed discussion of our methodology and conclude with the results of our analysis. In the conclusions to this article we discuss the strengths and weaknesses of our method and compare it to the use of national NCES data for the same purpose as has been suggested elsewhere (see Picus, forthcoming and Picus & Peternick, forthcoming).

Description of the High School

The school site used for this study is a large, comprehensive, urban, year-round, high school located in the Los Angeles Unified School District. The population of the school fluctuates between 3500 and 4000 students. Students attend school as part of one of three enrollment tracks (designated A, B and C). Students are assigned tracks primarily by zip code or program. The school offers a number of special and magnet programs which operate on one of the three tracks. Thus, students accepted in the Graphic Arts Academy enroll in the B Track. Students not enrolled in any particular program are assigned to a track by zip code. As students leave and new students enter the school, the registration office policy for assigning new students to a track is based on maintaining equal numbers of students in each track.

Eighty percent of the students in the school are Latino, and the remaining 20 percent are African-American. Approximately half of the Latino population is of Mexican descent with the other half from Central American and South American countries. This latter group includes many recent immigrants. The transiency rate is over 20 percent per year. More than 90 percent of the school’s students receive free and reduced price lunch each day. The school operates at its enrollment capacity and over 200 students in the school’s attendance area were bused to other schools at the beginning of the 1999-2000 school year.

The school utilizes block scheduling with classes meeting for two hours every other day Tuesday through Friday. On Monday, all six periods meet for one hour. Athletic teams meet as a physical education class either 5th or 6th period in addition to their after school time.

The school year starts in the beginning of July and ends the last week in June. The only time the school closes completely is during the last week in December. Each track meets for four months then takes two months off.

There are eight academies in the school. The academies offer instruction in specialized areas such as graphic arts. Approximately one-third of the students are enrolled in one of these eight academies. The school is governed using a school based management (SBM) model. The school’s SBM committee selected the principal along with most of the five assistant principals at the site. The school recently received the California Distinguished Schools award and is a finalist to become a New American High School.

Conceptual Framework and Method

To understand how resources are allocated to students, the school’s spending was divided into three categories. The first was those expenditures that could be directly allocated to individual students. Direct student expenditures included the dropout prevention program, social workers, attendance counselor and health clinic costs. These expenditures were assigned directly to individual students. Total direct student costs amounted to \$430,714 or 2.2 percent of the total school budget of \$19,307,808.

The second step was to identify the costs associated with each class offering in the school. To do this, we relied on the school’s master calendar to assign teachers and students to each class. That done, we determined the cost of compensation for each teacher and divided that figure by the number of classes a teacher taught. If an individual had administrative responsibilities for some portion of the day, the cost of that time was allocated to the school’s indirect costs as described below. Departmental costs were also allocated to each teacher and then to each teacher’s individual classes. Thus, if a teacher taught two language arts classes, and three social studies classes, the individual period cost of the social studies department would be allocated to the three social studies classes and the individual period costs of language arts department would be allocated to the two language arts classes. Classes that were part of academies that received additional funding shared equally in that funding. Total direct classroom costs amounted to \$10,595,450 or 54.9 percent of the school’s total budget.

Finally, all other costs in the school were allocated on a per student basis. These costs included administrators, student support services, administrative support, supplies, utilities, custodial, maintenance and operations, food services and transportation. These costs amounted to \$8,281,644 or 42.9 percent of the total budget for 1999-2000.

Direct student costs and per-pupil indirect costs were assigned to each student. Then, the cost of one student in each of the identified classes was estimated. The total costs for each student was the sum of the direct student costs allocated to that individual, that student’s equal share of the indirect or school level costs, plus the costs associated with one

student in each of the classes in which the student was enrolled. The figures reported in this article represent expenditure estimates based on the school's budget for 1999-2000 and are subject to revision at the end of the school year. We chose to use 1999-2000 budget data because data from the student information system for the previous year (for which we had actual expenditure data) was not available.

Data

A student database was created using the school's student information system (SIS). The data were placed in the database on a date in November 1999 when all three tracks were present on campus. Approximately 3800 student records were downloaded to our database. The variables captured included: student name, birthday, unique record number, grade, track, ethnicity code, and the course numbers in which the student was enrolled for each of the six periods of each day. We checked the database for duplicate students and for students not enrolled in any classes. This reduced our sample to 3,489 students.

The data on classes offered and their size was obtained from another district resource. There were approximately 1,200 different classes offered on the three tracks. The information available on this report also included what type of class (*i.e.* algebra IA, world history) and what type of program (magnet, Humanitas, etc.) each class represented. Individual class data were generated on the same day in November 1999.

We assumed, for the purposes of this study, that students would enroll in the same classes during the second semester of the school year. In the long run, we would prefer to estimate costs based on actual enrollments in each semester. However, issues of timing and the need to wait until well into the year 2000 to get all of the data necessary required that initially we make this assumption. We also assumed that the teacher force would remain constant throughout the year and that they would continue to teach the same classes each semester. Since teacher turnover has been less than three percent so far this year, the assumption is not too far from actual practice. While this assumption does not reflect the reality of any school, it seems reasonable for a first approximation of resource allocation and use. In the future, we hope to be able to totals based on students' actual enrollments throughout the year.

To determine class level expenditures, we used the school and district personnel systems to estimate teacher salary and benefits. These were allocated across the classes taught by each teacher on an FTE basis. We also determined the costs of assistant teachers (where they were utilized), departmental costs, academy costs, and special program costs. These were allocated to individual classes as appropriate to determine how much was spent on each individual class offered by the high school. The class cost was then divided by the number of students in the class to reach a per-pupil figure.

The last category of expenditures is the costs associated with running the school generally. These include expenditures for administrators, instructional support staff such as counselors and deans, administrative support staff such as security and school police, teacher substitutes, materials and supplies, utilities, custodial staff and supplies, maintenance, student cafeteria, transportation and costs associated with the district office. The total of these costs were then divided by the number of students to arrive at a constant per pupil figure of \$2,374 per pupil. These costs are summarized in Table 1.

Results

The average budgeted per-pupil expenditure at the high school we studied was \$5,534 for the 1999-2000 school year. Since this amount includes an estimate of district office expenditures, it is below the state-wide average of \$6,269. We expect this is the result of both less experienced teachers (with lower average salaries) and larger class sizes at the high school we studied. Table 2 displays summary statistics for

Table 1. Summary of School Level Costs Allocated on a Per-Pupil Basis

Category	Amount (\$)	Amount Per pupil (\$)	Percent of Total (%)
Administrators	512,182	147	2.65
Student Support	1,670,805	479	8.65
Administrative Support	1,223,257	351	6.34
Substitutes	221,880	64	1.15
Supplies	1,270,585	364	6.58
Utilities	170,369	49	0.88
Custodial	485,407	139	2.51
Maintenance	410,907	118	2.13
Student Cafeteria	1,256,400	360	6.51
Transportation	191,000	55	0.99
District Office	868,852	249	4.50
Total	8,281,644	2,374	42.89 ¹

¹Figure represents percentage of total school expenditures, not expenditures for school level only.

Source: Computed from school records.

Table 2 . Summary Statistics for Per-Pupil Expenditures

Statistic	Amount
Average -per-pupil expenditures (\$)	5,534
Standard Deviation (\$)	1,075
Minimum (\$)	3,615
Maximum (\$)	16,734
Range	13,059
Median	5,265
Restricted Range, 95 th - 5 th (\$)	2907
Gini Coefficient	0.091

Source: Computed from school data.

Table 3. Expenditures Per-Pupil by Grade and Track

Measure	Number of Students	Expenditure Per-Student (\$)
Grade		
9	1,248	5,507
10	1,042	5,332
11	663	5,805
12	539	5,649
Track		
A	1,196	5,357
B	1,101	5,436
C	1,194	5,800
School	3,489	5,534

per-pupil expenditures for each of the 3,489 students in our sample. The table shows that per pupil expenditures ranged from a low of \$3,615 to a high of \$16,734, a range of over \$13,000 per pupil. However, the restricted range representing the difference between the student at the 95th percentile and the student at the 5th percentile is considerably smaller, only \$2,907. The standard deviation in per-pupil expenditures is \$1,075. Finally, the Gini coefficient, which measures the equity of the distribution of resources is a relatively good 0.901. This suggests that even though there are a few students for whom tremendous levels of resources are being devoted, for the most part, students have roughly equal access to educational dollars at this high school.

We investigated some of the potential sources of variation in expenditures per pupil across the school. We found that there were slight differences by track and grade as represented in Table 3. The table shows that average expenditures are lower than average for 9th and 10th graders and higher than average for 11th and 12th graders. Note also the substantial drop off in the number of students in the 11th and 12th grades. This drop-off is most likely the reason for the increased per-pupil costs, there being fewer students to put in some, if not most, of the classes that are aimed at the older students. This would lead to higher average per-pupil expenditures. Analysis of expenditures by track shows relatively little variation, with Track C having expenditures somewhat above the school average and Tracks A and B somewhat below. This may be a function of teacher experience by track.

As described above, the high school has six academies and programs that provide specialized educational programs to students. Four of them have per-pupil expenditures higher than the school average, while the other two are somewhat below the average. The Magnet program spends \$5,276 per pupil and the Humanitas program some \$5,370 per-pupil. The remaining four academies, NAI, Graphic Arts, ISA and Perkins all spend somewhat more than the school-wide average.

Special education is a major expense item at the school. Not surprisingly, many of the highest cost children in the school receive special education services due to some disability. The school spends an average of \$7,958 per pupil enrolled in Special Day Classes (156 students), nearly \$7,000 (6,697) per pupil for students in Resource rooms (159 students), and an average of \$5,612 for the 1,341 LEP students. The school also spends \$5,564 on the 112 gifted students in programs at the school.

The question is, how can these data be used to improve schools? This question is the topic of the following section.

Conclusions

In order to address the school finance research topics posed above, school finance researchers will need access to a wide range of new data. It is clear that answering many of the questions posed requires detailed and accurate data at levels lower than the school district. Understanding how funds are distributed to schools, how those schools use those funds and what resources are available to individual students is critical to developing a better understanding of what we need to do to create high performing schools.

Development of school level data is one possible option. This appears to be an expensive alternative, and one that does not guarantee we will have substantially better answers to many of the questions posed above. Today, nine states have begun initiatives to collect school level fiscal data. Ohio, Texas and Florida have been pioneers in this endeavor, and some interesting research findings are beginning to emerge from the vast array of data available in those three states (Nakib, 1996; and Sherman, Best & Luskin, 1996). While other states will surely follow, at least one, Washington, has decided that at the present time, the expense of collecting school level fiscal data exceeds the value of those data (JLARC, 1999).

School level data are hard to collect. Two recent volumes of the *Journal of Education Finance* (v.22 n.3 and v.23 n.4) make this clear. The first, edited by Odden and Busch (1997) summarizes the efforts of CPRE to analyze school level data bases in a number of states, while the second, edited by Goertz and Stiefel (1998) described the results of a multi-year study of school level data and equity in four school districts, New York, Rochester, Fort Worth and Chicago.

While school level data is clearly important, a more cost effective strategy might be to collect student level resource data. If we are ever to truly understand how money matters, and get a truly accurate sense of the equity of the distribution of the funds we currently make available to children through their schools, we need to have a better picture of the resources available to each student.

It is unlikely that state data systems will ever have the capacity to handle data for the millions of children in our schools. Moreover, the expense of collecting these data probably far exceeds its value in terms of understanding educational productivity. However, with relatively few additional items, student level resource indicators could be collected through the major longitudinal surveys conducted regularly by the National Center for Education Statistics (NCES). Picus and Peternick (forthcoming) prepared a position paper on this issue and developed potential survey items for the Early Childhood Longitudinal Survey.

By adding questions related the services offered to each child, and the costs of those services, it may be possible to collect nationally representative data on student level resource allocations. Combined with more detailed state and school level data availability, school finance research will be able to focus directly on all four issues identified above: equity, adequacy, accountability and productivity.

Recent school finance discussions have focused on the importance of school level data collections. While this remains an attractive approach from a school finance perspective, it seems that our true focus should be on individual students. We already have student level data on student outcomes, demographics and academic characteristics. Our inability to link money and/or resources to student outcomes seems to be, at least in part, a result of not having similarly detailed fiscal data. School level fiscal data will only give us a partial solution to this problem. It is also very expensive to collect and there are considerable risks that comparisons across states and even across districts within a state may be very difficult, if not impossible.

It seems that it would be both more practical and cost effective for the federal government (through NCES) to support the collection of data at the student level. These data could be aggregated up to school, district and even the state level if desired. Picus and Peternick (forthcoming) have shown that it is feasible to collect a considerable amount of student level fiscal and resource data with a few additions to the current drafts of the Early Childhood Longitudinal Survey. If the data from this survey prove valid and useful, then future longitudinal surveys could be designed from the ground up with resource and fiscal data having a place in each instrument.

Collecting data through these surveys would provide a sound, statistically valid, sample of student level fiscal data which could be linked to other data on performance. More importantly, it would be possible to capture the differences in services received by children enrolled in the same classroom. The ability to distinguish services available to individual students is critical to making distinctions about why their performance varies.

Additionally, student level fiscal data allows NCES to collect information about resources directed toward students in any school setting that can be identified, and only requires that the type of schooling be made clear. It would then be theoretically possible to see if there are systematic differences in the funds and resources available to children in alternative

school settings, and see if those differences relate to differences in performance.

Thus, while school level data are attractive for a number of reasons, student level data collections have the potential to be more cost effective and more useful to improving our understanding of student learning. In all cases, the focus of this fiscal data collection should be to help better understand the factors that lead to improved learning on the part of our students.

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Acknowledgements

*The work reported here was funded through a grant from the USC Center for Urban Education (USC/CUE). The authors gratefully acknowledge the support of USC/CUE. The views expressed in this article are those of the authors and do not necessarily represent the views or opinions of USC/CUE.

“...Fiscal provisions of the IDEA have undergone what is probably the greatest changes since the inception of this law in 1976.”

Finance Provisions Under the Individuals With Disabilities Education Act 1997 Amendments

Deborah A. Verstegen

The 1997 Amendments to the Individuals with Disabilities Education Act (P. L. 105-17), signed into law by the President Clinton on June 4, 1997, make comprehensive changes to the IDEA. The legislation amends and extends the infants and toddlers program and special purpose grants in addition to modifying the substantive requirements of the grants to the states and the preschool programs. The purpose of this article is to describe the key elements of the legislation related to the finance provisions with a focus on the grants to states and preschool programs.

P.L. 105-17 retains the basic structure of the IDEA—three formula grants and the discretionary grant programs. However, the fiscal provisions of the IDEA have undergone what is probably the greatest changes since the inception of this law in 1976. Important changes are found in the:

- state and substate allocation formulas¹,
- terms and conditions for state and local eligibility and participation,
- fiscal accountability provisions.

This article is organized around these three areas.

State Formula

Grants to States Program—Part B, Section 611

Until appropriations for the grants to states program exceed \$4.9 billion, state and substate grants will be based on prior law, *i.e.*, the number of children with disabilities that are receiving special education and related services. However, the calculation of eligible children or child count may now occur, at the discretion of the state, either on the last Friday in October or December 1 of the fiscal year for which the funds are appropriated.

New Formula²

When appropriations for the Part B grants to states program reach or exceed \$4.9 billion (\$4,924,672,200) the new formula, based on a state's entire school-aged population and a state's entire school-aged population in poverty, will take effect. Under the new formula, the states will continue to receive a base amount of funding equal to their award in the year before this “trigger” appropriation level was reached. New money, or funds above this base amount, will be distributed with 85% based on the total school-aged population and 15% based on the total population in poverty. Both these population figures will be based on the age range to which each state provides a free and appropriate public education (FAPE). Table I provides a scenario related to the base year, the “trigger” amount, and formula allocations.

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Table I. IDEA, New Formula - Part B, § 611 - State Grant Program-Illustrative Only

Grants to States

Examples - Dollar Amounts are Illustrative Only

- 1998: \$4.1 billion

Distribution

Child Count formula (old)

- 1999: \$5.2 billion

Triggers new formula (Appropriation over \$4.9 billion)*

\$5.2 billion - 1999 appropriation

-4.1 billion - *Base-amount*, the year before the trigger was exceeded (1998)

\$1.1 billion difference (New Money)

Distribution

\$4.1 billion - State Awards - Pre-trigger year allocation based on child count (1998)

\$1.1 billion - New Permanent Formula based on 85% census, 15% poverty (with restrictions)

- 2000: \$5.9 billion (\$1.8 above base)

\$5.9 billion - 2000 appropriation

-4.1 billion - *Base-amount* the year before the trigger was exceeded (1998)

\$1.8 billion difference (New Money over base year)

Distribution

\$4.1 billion - State Awards - Pre-trigger year allocation based on child count (1998)

\$1.8 billion - Under New Formula 85% census, 15% poverty (with restrictions)

Note: *Appropriation must equal or be greater than \$4,924,672,200.

Increased Funding Years: Formula Restrictions

Certain restrictions apply to state allocations under the new formula which take effect after a total appropriation of \$4.9 billion is reached. These include minimum and maximum grant provisions in years in which overall funding for this program increases.

Minimum Provisions³. Under minimum grant provisions, a state's allocation will be the greatest of the prior year's allocation, the allocation under the new formula, or one of the following three provisions:

- The base amount plus 1/3 of 1% of the total appropriation increase over the total base year amount. (For example, if the total base year appropriation was \$4.1 billion and the current appropriation is \$5.2 billion, then each state would receive at least \$3.63 million in new money, which equals 1/3 of 1% of all new funds under this provision (\$5.2 - \$4.1 billion X .0033).

- The percent increase from the prior year less 1.5%. (For example, if the total appropriation increases 10% over the prior year, then 10% minus 1.5% equals a minimum of an 8.5% increase for each state over the prior year.)

- 90% of the percent increase above the prior year. (For example, if there is a 10% increase in the total appropriation over the prior year, then each state would be entitled to receive at least a 9% increase (90% of 10%) over the prior year's allocation.)

Maximum Provisions. The maximum grant restriction overrides the minimum provisions described above. The maximum increased allowed for a state is 1.5% above the percent increase in appropriations over the

prior year. (For example, if appropriations increase over the prior year by 10%, then the maximum increase allowed for a state will be 11.5% (10% + 1.5%)). All of these provisions are summarized in Table 2.

Decreased Funding Years: Formula Restrictions

Limits are also placed on the allowed reduction for years in which appropriations to the grants to states program decrease after a total allocation of \$4.9 billion has been reached. These are:

- If the total allocation is less than the prior year but greater than the base year (before the trigger was reached) then the allocation to the state is the amount it received in the base year plus a prorated amount. This proration is best illustrated through an example. If the total appropriation was \$4.1 billion in the base year, and then \$5.2, \$5.9 and \$5.1 billion in subsequent years; the difference between the current and base year is \$1 billion (\$5.1 billion minus \$4.1 billion). This equals the total available pool of "remaining funds." Each state's share of these "remaining funds" is determined by its percent increase in funding for the two prior years. For example, if the state's increase between the two prior years had been \$7 million this would equal 1% of the national increase of \$0.7 billion (\$5.9 - 5.2 billion) for these two years. This percentage would be used to determine this state's share of "remaining funds." In this case, the state would receive \$10 million (1% of \$1 billion) over its base year allocation.
- If the total allocation is equal to or less than the allocation for the base year, then each state's allocation is the amount received in the base year or that amount ratably reduced.

Examples of calculations for minimum and maximum increases are shown for hypothetical states in Table 3. The top section of the table shows total counts of school-aged children, school-aged children in poverty, appropriations for 1997, and hypothetical appropriations for 1998 and 1999. Child count distributions govern 1997 and 1998 (base year). In 1999 the new permanent formula becomes effective because the appropriation is larger than \$4.9 billion. These data are provided for the U.S. and for three hypothetical states "A", "B" and "C."

Table 2. IDEA, New State Grant Formula: Restrictions for Minimum & Maximum Increases for Funds Above Base Year (In years with Increased Appropriations)

Minimum

1. Take the highest increase of the new formula amount or the following:

- 1/3 of 1% of total dollar increase above the base year
Example:
If appropriation increases from \$4.1 to \$5.2 billion then 1/3 of 1% of \$1.1 billion = \$3.63 million
 - Percent increase from prior year less 1.5%
Example:
If total appropriation increases 10%, then 10% - 1.5% = 8.5% increase
 - 90% of percent increase in the total appropriation above the prior year
Example:
If 10% increase in appropriation, then 90% of 10% = 9% increase
2. At least as much as the prior year

Maximum

- Cannot receive more than 1.5% above the total percent increase in Part B § 611 funds
Example:
10% increase in total appropriation over prior year
+ 1.5%
11.5% increase maximum

Table 3. Examples of State Allocations under the New Formula (Part B, Section 611): Minimum/Maximums for Funds Above Base Amount

<u>Child Count Formula</u>					
	Census Count of Children	Children in Poverty	Initial Allocation 1997	Base Year Allocation 1998	New Permanent Formula 1999
US Total	70,561,458	12,574,163	\$3,107,522,000	4,092,000,000	5,200,000,000
State A	1,089,889	252,854	53,205,156	67,619,644	85,504,328
State B	1,468,153	179,115	85,108,762	110,056,586	137,933,114
State C	8,789,680	1,511,825	306,706,866	404,171,069	518,669,775
<i>Minimum/Maximum Options for Increases in Funds Above the Base Amount (1999)</i>					
	Formula Allotment 85%/15%	Minimum 1/3 of 1%	Minimum % Increase -1.5%	Minimum 90% Increase	Maximum % Increase +1.5%
State A	X85,504,328	71,286,311	84,747,205	83,947,314	86,775,794
State B	132,014,386	113,723,253	X137,933,114	136,631,225	141,234,812
State C	541,437,593	407,837,736	506,544,643	501,763,595	X518,669,775

Note: X = the state award; * = Assumes \$8 million for evaluation/studies.

The second part of the table illustrates possible options for state allocations under the minimum and maximum provisions of Part B. The ruling provision and amount for each state has an “X” placed next to it. As shown, State A receives the base amount set in 1998 (\$67,619,644) plus the difference between this amount and the total state grant, as determined through the new permanent formula of 15% poverty and 85% census. In this case, the formula amount is higher than any of the three minimum allocation options. As it is also lower than the maximum, the state is allocated the formula amount (\$85,504,328). State B is allocated the most (\$137,933,114) under the minimum provision that permits the state to be awarded the percentage increase in annual appropriations minus 1.5%. Again, the maximum provision does not apply so the state is allocated the highest amount under this minimum option. Finally, State “C,” with a large number of school-aged children and children in poverty, generates the largest amount under the new formula, but this is over-riden by the maximum increase permitted. Thus, State “C” is awarded \$518,669,775.

State Education Agency Allocations

The 1997 Amendments also revised IDEA funding for state education agencies. These provisions are effective immediately.

State Set-aside. The amount of the state set-aside under the measure is 25% of the total amount the state received under this program in 1997, cumulatively adjusted each year by the lesser of the growth in inflation⁴ or the percent increase in the state award over the previous fiscal year. These funds may be used for administration and for other direct services and support.

State Administration. For administration, the larger of either 20% or \$500,000 may be used to administer the grants to states program (Section 611), the preschool program (Section 619) and, Part C— if the SEA is the lead state agency in Part C- infants and toddlers program.⁵ These funds may also be used for technical assistance and coordinating activities with other programs that provide assistance to children with disabilities.

State Services and Direct Support. The remainder of the funds retained by the state, and not used for administration, must be used by the state to support direct and support services, and for monitoring and complaint investigation. These activities include:

- Support and direct services—including technical assistance and personnel development and training,
- Monitoring and complaint investigation (for costs exceeding the 1985 amount for such services),
- Establishing and implementing a mediation process,
- Assisting LEAs in meeting personnel shortages,
- Developing a state improvement plan,
- Implementing SEA/LEA activities to meet performance goals,
- Developing and implementing a statewide coordinated service system—not to exceed 1% of the total allotment for the grants to states program (Section 611).

Mandated Substate Grants to Local Education Agencies: The “Sliver”. In addition, each state will be required to use an additional amount for new grants to local educational agencies in every year that its allocation increases by more than the rate of inflation for the prior year, and the amount of required funding is not less than \$100,000. These funds are to be used for making systemic changes to improve results for children with disabilities and other specified activities.

For example, if the total IDEA, Part B grant to a state was \$50 million in 1997, the SEA set-aside would be \$12.5 million (25% of total). Assume that in 1998, inflation increased 3% over the prior year; and the total IDEA, Part B grant was \$55 million. The appropriation increase over the

prior year therefore is 10%. Because the increase in funds is higher than the increase in inflation, the state would be required to provide subgrants to localities of \$875,000 (7% of \$12.5 million) for capacity building and improvement.

The amount required for subgrants to localities would vary from year to year. At their discretion, states could also use funds reserved for state-level activities for these LEA grants. If the increase in the state’s allocation does not exceed the rate of inflation, it would not be required to use any funds for these LEA grants. Therefore, the mandated amount for LEA grants would not necessarily increase from year to year. Examples of “sliver” calculations are explained in Table 4 and shown in Table 5, along with SEA set-aside amounts, including administrative and non-administrative funds.

Table 4. IDEA, New Permanent Formula: State Activities - Subgrants to Localities (The “Sliver”)

Mandated grants to localities for capacity building and improvement.

- Applies only when the SEA set-aside increases more than inflation

Calculation of amount to be distributed

- Calculate percent inflation increased over prior year
 - Calculate percent total appropriation (Part B § 611) increased over prior year
 - Subtract appropriation increase from inflation increase (b-a).
 - Take remainder (c) times total SEA set-aside for the prior year.
- This is the amount to be distributed (the “sliver”).

Example:

10%	inflation increase
-3%	appropriation increase
7%	multiply times prior year SEA set-aside*
(.07 * 12.5 million = \$875,000)	

Distribute \$875,000 to LEAs

*SEA set-aside is state administration and other state level activities not including prior year subgrants to localities (if any).

Sub-State Formula

Grants to States Program—Part B, Section 611

Each state receiving a grant under the grant to states program (section 611) must distribute at least 75% of the funds to local education agencies (LEAs). The allocation formula for distributing these federal funds to the LEAs mirrors the state allocation formula except there are no minimum or maximum provisions. As with the state formula, until appropriations for the grants to states program (Section 611) exceed \$4.9 billion,⁶ substate grants are based on prior law— the number of children with disabilities that are receiving special education and related services.

New Formula⁷

When appropriations for the grants to states program exceed \$4.9 billion, this will “trigger” a new permanent state and substate formula.

Base amount and new money: New money, or funds above the base amount, received in the year before the trigger appropriation level was reached, would be distributed according to the new permanent formula. For additional dollars above the base, 85% would be based on the total school-aged population and 15% based on the total population in poverty—within the age range that states provide a free and appropriate public education.

There are slight differences in the state and LEA population and population in poverty factors that are used to distribute assistance under this program. For substate grants, the total school-age population

Table 5. State Set-Aside - Sample State (\$ in Millions)

	FY 1997	FY 1998	FY 1999	FY 2000
Rate of Inflation	NA	3%	5%	5%
Increase in Funding from Prior Year	NA	10%	20%	10%
Total IDEA Part B Funding	\$50.00	55.00	66.00	72.60
<u>Total SEA Set-aside</u>	\$ 12.5	12.875	13.52	14.87
Total State Level Activities (Sum of State Admin and Other State-Level Activities: [A+B+C+] 25% 1997 Part B Grant, adjusted)				
A. <u>State Administration</u> (20% Set-aside)	\$ 2.5	2.58	2.7	2.84
B. <u>Other State Level Activities</u> (80% Set-aside)	\$ 10	10.3	10.82	11.36
C. <u>State Sub-grants to LEAs</u> For Capacity-Bldg & Improvement (Difference Between Rate of Inflation and Increase in Funds Available times Prior Year SEA Set-aside)	\$ NA	0.88	1.93	0.68

Note: Figures are illustrative not actual; NA = not applicable.

includes only public and private school students, so the totals will be slightly lower than for the state, which includes all school-aged children. For example, the substate population will exclude home schooled children, children in prisons and other institutions, and drop-outs. For the poverty factor, the state education agency will need to determine the measure to be used to distribute aid. For example, it may use the number of children in LEAs receiving free lunches; or the number of children in families with incomes below the poverty level for the LEA.

Other Fiscal Provisions

Grants to States Program, Part B, Sections 612 & 613

This section focuses on other important fiscal provisions contained in the 1997 amendments. These include the “placement neutral” formula requirement for states, the provision of special education services that also benefit nondisabled children, and the fiscal accountability provisions.

Placement Neutral Provision for SEA Finance Formulas. This provision⁸ requires states to demonstrate that if the state special education funding formula distributes assistance to localities based on the type of setting in which a child is served, the state has policies and procedures to assure that these funding provisions do not result in placements that violate the requirement that children with disabilities be served in the least restrictive environment (LRE). If such policies and procedures are not in place, the state must provide the Secretary with an assurance that it will revise the funding mechanism to ensure that it does not result in restrictive placements.

State special education funding systems that provide differential allocations based on where children with disabilities receive their educational services (e.g. in a resource room, a separate classroom, or a special public or private institution) sometimes provide additional funding to LEAs when children are served in more restrictive settings. Funding systems of this type are viewed as potentially in conflict with the LRE provisions of the IDEA.

This new requirement for “placement neutrality” could affect current special education funding systems in a number of the states. About one-quarter of the states have special education funding systems that are

primarily based on placement, and many other states have subsidiary provisions that provide additional funding when students with disabilities are served in separate, regional or state, public or private, special education institutions. Separate special education transportation reimbursement formulas may also be viewed as special education funding based on student placement. These formulas generally add funds for sending students with disabilities away from neighborhood schools that can not be recouped to offset some of the costs that may be incurred for serving these students closer to home. It is unclear how broad the interpretation of this new requirement will be, and whether it will include such provisions as separate special education transportation funding.

Examples of “placement neutral” formula include systems where funds are distributed on criteria other than student placement. Alternative criteria commonly used are categories of disability, the overall count of special education students, or total counts of all students. Other alternative funding criteria are the intensity of services required by individual children with disabilities and fixed percentages of reimbursement for special education expenditures regardless of where the child is served.

Benefits for Nondisabled students. Another change under the 1997 Amendments allows nondisabled students to receive benefit from special education services provided for children with disabilities that are in accordance with their Individual Education Programs (IEPs). The provision encourages localities to meet the intent of the law—that children with disabilities are educated to the maximum extent possible with children without disabilities—without having to fear audit exceptions under the no supplanting or commingling of funds requirements.

For example, if a general education classroom breaks into groups for reading, and the special education teacher meets with three special education students during this time in the general classroom (or other educational setting) then children without disabilities can be included in the group. Likewise, if special materials and equipment are purchased with special education funds under IDEA, and they are placed in a resource center where children with disabilities are educated along with children without disabilities, both groups may use the materials and equipment. However, special education children have the first draw on such materials.

SEA Fiscal Accountability Provisions. As in prior law, these federal funds must not be commingled with state funds and must supplement and not supplant other federal, state and local funds expended for special education and related services. In addition, new provisions for state maintenance of effort have been added to the measure. States are not permitted to reduce the amount of state financial support for special education below the level of the prior year. Likewise, states are not permitted to reduced medical and other assistance available, or to alter eligibility, under Titles V and XIX of the Social Security Act with respect to the provision of a free appropriate public education for children with disabilities.

However, two additional provisions provide some flexibility to states by modifying these prior requirements. First, funding for the state education agency set-aside (including assistance for administration and other uses) may be commingled with state funds and used to supplant other funds from federal, state and local sources expended for special education and related services for children with disabilities.⁹ Second, waivers of the fiscal accountability requirements are permitted if the Secretary concurs with a state claim that it has provided clear and convincing evidence that all children with disabilities have a free and appropriate education available to them.

LEA Fiscal Accountability Provisions. As before, LEAs are required to use Part B funds for the excess costs of providing education and related services to children with disabilities and to supplement not supplant

other federal, state and local funds for this purpose. Localities are also still required to maintain effort (spending) at the level of the prior year. However, four exceptions and a special provision have been added through the 1997 amendments to provide for increased flexibility.

Localities may reduce their expenditures when the reduction is attributable to:

- The voluntary departure, by retirement, just cause, or otherwise, of special education personnel,
- a decrease in the enrollment of children with disabilities,
- the termination of costly expenditures for long-term purchases, such as the acquisition of equipment or the construction of school facilities,
- the termination of the obligation of the agency to provide a program of special education to a particular child with a disability that is an exceptionally costly program (as determined by the SEA) because the child:

- has left the district,
- has reached the age at which the obligation of the district to serve the child has terminated,
- no longer needs a special education program.

In addition, if the appropriation under the state grant program (Section 611) exceeds \$4.1 billion, and the SEA permits, localities may treat up to 20% of the increase in federal funds over the prior year as local funds.

Schoolwide Programs Under ESEA, Title I. Another new local provision is that education agencies may now use Part B funds to carry out schoolwide programs under Elementary and Secondary Education Act (P.L. 89-10 as amended; Title I, section 1114). Schools with at least 50% of their children in poverty are eligible to participate in this program, which allows funds from a variety of state and federal categorical programs to be combined in ways that promote the provision of a unified set of instruction for all children in the school. For the first time, IDEA funds are allowed to be included in this mix of funds. The amount of IDEA funds that can be used for this purpose is governed by the percent of children with disabilities in the participating school compared to the total number of such children in the LEA.

Bridging Services Across Program and Agencies. An LEA may also use up to 5% of the funds it receives under the state grant program (Section 611) in combination with other funds, to develop and implement a coordinated service system designed to improve results for children and families, including children with disabilities.

Fiscal Provisions

Preschool Grants Program

Grants to States Program, Part B, Section 619

In general, the preschool state and substate allocation formulas mirror the grants to state program formulas, except the new preschool funding formula goes into effect immediately.

Allocations to States

After reserving funds for studies and evaluations, states will receive a base amount equal to their awards in 1997 which were based on the number of children with disabilities aged three through five (and at the state's discretion, two-year-old children who will turn three during the school year) receiving special education and related services.

When appropriations under this section increase above the 1997 level, new money, will be distributed to states with 85% based on their relative school-aged population aged three through five, and 15% based on their relative population in poverty aged three through five—within the age range that states provide a free and appropriate public education. The minimum and maximum provisions pertaining to the preschool formula are the same as those under the Part B grants to states formula.

State Set-aside

The 1997 Amendments revised allocations to the state education agency under the preschool grant program effective immediately. The amount of this state set-aside is 25% of the total amount received under the preschool grant program (Section 619) in 1997, cumulatively adjusted each year by the lesser of the growth in inflation or the percent increase in the state award over the previous fiscal year.

State Administration. Of the adjusted state set-aside, the state may retain up to 20% to administer the preschool grant program and Part C, the infant and toddler program, if the SEA is the lead agency. These funds may also be used for technical assistance and coordinating activities under Part B with other programs that provide assistance to children with disabilities.

Other State-Level Activities. Funds that are not retained by the state for administration shall be used by the state for direct and support services, including the following:

- Direct services for children eligible for services under the preschool grants program,
- Support services including establishing/implementing a mediation process that may benefit children aged three through five in addition to younger and older children,
- Developing a state improvement plan,
- SEA/LEA activities to implement and meet performance goals established by the state under the preschool program,
- Supplementing funds to develop/implement a statewide coordinated service system—not to exceed 1% of the total allotment for the grants to states program (Section 619).

Sub-State Formula

The substate allocation formula under the 1997 Amendments to the IDEA, Part B, Section 619, mirrors the state allocation formula, except there are no minimum or maximum provisions. Each state receiving a grant under the preschool grant program (Section 619) must distribute any funds it does not reserve for administration to local education agencies.

Local education agencies will receive a base amount of funding equal to their awards in 1997 under the child count formula assuming the state took the full set aside of 25%. New money, or funds above the 1997 or base amount, would be distributed with 85% based on the relative numbers of children of ages three to five enrolled in public and private schools and 15% based on relative numbers of children living in poverty. This poverty count is based the number of children ages three to five, or the subset of this age range for whom the state provides a free and public education to eligible children.

Side by Side Comparison

Table 6 provides a side-by-side comparison of major finance provisions included in P.L. 105-17.

Questions and Answers

1. *Question:* When will the new permanent formula, under the grants to states program, effecting state and substate grants, become effective?

Answer: Not until appropriations for Part B, Section 611 exceed \$4.9 billion. It appears likely that this will occur sometime between the years 1999 and 2005.

2. *Question:* In the grants to states new permanent formula, which is overriding: minimum grants or maximum grants?

Answer: The maximum grant provisions are overriding and apply even if minimum grant provisions generate more state assistance.

Table 6. IDEA Comparison Chart- Fiscal Provisions

Issue	Prior Law & Regulations	Current Law (P.L. 105-17)
Funding formula, generally	Prior law establishes a child count formula.	The new law keeps current law until federal appropriations reach approximately \$4.9 billion, at which time the new formula applies to funds appropriated over previous year's appropriations. Certain floors and caps would also apply to increases and decreases. Child count would continue through the year in which the new formula starts and then be discontinued after that date.
State-local funding split	Current law requires that no more than 25% of a state's grant be used at the state level, with the remainder being passed through to local educational agencies. Administrative funds limited to 5% of total funds.	The new law sets the state funding maximum as 25% of the 1997 level, and then limits the growth of that fixed sum to the rate of inflation or the increase in appropriations, whichever is smaller. Administrative funds are limited to 5% of 1997 with aforementioned restrictions. Subgrants to localities are required when increase in appropriations are higher than inflation.
In-state distribution of funds	Prior law requires that state funds be distributed by child count and prohibits distributing less than \$7,500 to any LEA.	The new law specifies that the intra-state formula will be the same as the federal formula, and eliminates the \$7,500 rule, except there are no minimums and maximums.
State Supplantation of state, local, and federal funds	Prior law and regulations prohibit supplantation of state, local, and other federal funds (except where the state provides clear and convincing evidence that all children with disabilities have FAPE available to them, in which case the Secretary may waive this requirement in whole or in part).	Prior law as to supplement not supplant and establishes a state maintenance of effort provision, based on state expenditures (not federal or local). Waiver is the same as current law, except that, the Secretary must establish by regulation within one year objective criteria for permitting reductions after determining compliance with the statute and consideration of the results of compliance reviews.
Use of funds	Prior law requires that federal funds not be commingled with state funds, and be used to supplement- and not supplant- other federal, state, and local funds.	New exemptions from maintenance of effort for LEAs are increased from the past, single regulatory exemption, to four statutory exemptions (when there is a decrease in enrollment, which is the current regulatory exception; an end to an agency's obligation to pay for an exceptionally costly program for a child; unusually long-term large expenditures (e.g. construction or equipment); or departure by retirement or otherwise of special education personnel). When LEA funds increase and were allocated from federal appropriations that exceed \$4.1 billion, an LEA may use up to 20% of the increase in federal funds to reduce its effort from the previous year by that amount.
State formula placement neutral	No similar provision in prior law.	State formula must not encourage separate placements of children with disabilities or assurances are required that it will be revised.
Flexibility in use of funds	No similar provision in prior law.	LEAs may use funds for schoolwide programs under ESEA, Title I, except funds must be based on percent of children with disabilities participating in such programs. Also, services and aids may also benefit one or more nondisabled children if IEPs are being met for children with disabilities.
Charter schools	No similar provision in prior law.	The new law contains three provisions relating to charter schools: 1) LEA charter schools may opt not to be merged into larger LEAs (unless state law specifically prevents this); 2) Non-LEA charter schools must receive an appropriate share of IDEA funds; and 3) charter schools are eligible for state discretionary program grant funds.
Services to prisoners in adult prisons	No prison specific provisions in prior law.	The new law clarifies that a state may delegate to prison authorities the responsibility for overseeing special education for individuals in adult prisons who have been tried and convicted as adults. With the delegation, any action by the Secretary on noncompliance with law (i.e. reduction in funds) must be proportional to the number of students in prison. Standards relating to IDEA services, placement, and paperwork may be relaxed to acknowledge the security and penological requirements of the prison environment.

3. *Question:* Do child counts continue once the new permanent formula is implemented?

Answer: No. Child counts cease once the new permanent formula is implemented. Funding will be based on total school-aged population and total school-aged population in poverty.

4. *Question:* What happens to funds distributed by states to localities under the mandated capacity building and improvement grant section (the sliver) in the subsequent year?

Answer: These funds flow directly to the LEAs according to the substate formula.

5. *Question:* Are the factors that distribute funds to states under the new permanent formula the same as those that distribute funds to localities?

Answer: No, they differ slightly. The funds to states are distributed on the most recent population and poverty data for the nation. The substate grants permit a state to select a factor for poverty, such as free lunch count. Also, the population factor within states is based on public and private school-aged pupils, rather than the total school-age population, so there is a residual number of students that are not counted within the substate formula—such as pupils being home-schooled, in state institutions, drop-outs, etc.

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Endnotes

1. Funds to states are those funds remaining after deducting assistance to: (1) Outlying areas and freely associated states, (2) evaluations and studies, and (3) the Bureau of Indian Affairs. For information on grants to outlying areas and freely associated states see P.L. 105-17 (B)(611)(b). For information on funds for the Bureau of Indian Affairs see P.L. 105-17 (B)(611)(c). In general the Secretary may reserve up to 1% of the total Part B, Section 611 appropriation for outlying areas and freely associated states. After deducting that amount and reserving funds for evaluations and studies, the Secretary shall reserve 1.226 percent to provide assistance to the Bureau of Indian Affairs. The remainder is distributed to the states as discussed herein. The discussion is limited to states and public schools.
2. Part B(611)(e).
3. Part B (611)(e)(3)(B-C)(I-ii)(I-III).
4. The state set-aside is adjusted for inflation using: U.S. Department of Labor, Bureau of Labor Statistics. *Consumer Price Index for All Urban Counties*.
5. Outlying areas can use up to five percent or \$35,000, whichever is greater.
6. The appropriations under the grants to states program (Part B, Section 611) must exceed \$4,924,672,200.
7. Part B (611)(e).
8. Part B (612)(a)(5).
9. Part B (611)(f)(1)(C).

"...In many states, charter school laws seem to be more intent on harming school districts than promoting fair competition."

The Financial Impact of Charter Schools on School Districts

Edward Muir
F. Howard Nelson
Rachel Drown

Charter schools are new or converted schools "chartered" by agents of the state, which offer families options in addition to those choices available through their school district. Charter school legislation generally grants greater fiscal and educational autonomy from school district and state regulations. The adjustment to charter schools has not always been an easy one for school districts. This article focuses on the financial impact of charter schools on school districts. After providing background for the issue, the subsequent section enumerates the many aspects of financial impact. Several suggestions are then made for minimizing the harmful financial impact on school districts.

I. Background

Much research and commentary focuses on the fights between charter schools and school districts rather than how the system of rules and regulations governing charter schools has affected school districts. In some of the first research on the relationship between charter schools and districts, Rofes (1998, pg. 7) described how teachers and administrators perceived the charter school movement as a "slap in the face." Rofes measured the financial impact of charter schools on districts in terms of "felt loss," rather than actual financial impact. Most recently, Bruno Manno and his colleagues (2000) also gave human characteristics to the relationship and postulated four phases of the education establishment's response to charter schools, starting with outright opposition, moving through competition and ending with acceptance. The charter school challenge is viewed as spiritual rather than structural, perhaps because some reformers are hoping to use charter schools to create cultural changes in school districts.¹

This article takes a different approach—one suggested by the recent research on Michigan charter schools that has focused on how "the rules matter" (Arsen, Plank and Sykes, 1999). The important research questions focus on "if" and "how" school districts are adapting to the new marketplace and whether district schools and charter schools can find common ground so they can learn from each other—once a critical part of the charter school idea. Our approach focuses on how charter school systems, which vary from state to state, shape and constrain the environment in which school districts operate. A national perspective is important. Drawing on our work as investigators for the National Charter

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School Finance Study funded by the U.S. Department of Education,² this article also uses our experience learning from local unions of the American Federation of Teachers.

The direct financial impact of students leaving for charter schools and the concomitant loss of efficiency are the most obvious problems faced by school districts, but a host of other issues exacerbate this loss of efficiency. For example, the rules governing student transfers and timing of payments can create financial and pedagogical problems for school districts. Because charter schools can limit enrollment and draw students from waiting lists to keep financial stability, the burdens of shifting enrollments fall disproportionately on school districts. Other rules regarding how charter schools fit into the educational "ecosystem" similarly affect school districts. Some states, for example, allow more than one institution to authorize charter schools, a chaotic system full of unintended consequences. The funding systems created for charter schools often systematically differ from those created for school districts, with charter school funding often characterized as "streamlined" or "simplified." Perverse incentives may result that deter charter schools from educating high-cost students. Finally, districts often carry significant hidden costs related to charter schools that do not show up as charter school revenues or expenditures.

Some widely held beliefs about the financial effect of charter schools on school districts also need to be reconsidered. One mistaken belief is that if the state pays for charter schools directly, school districts are held harmless. Another problematic belief is that school districts pay for private and home school students moving on to charter schools. While short-term costs for school districts could result if the state is not quick to count these students in enrollment, long-term costs are usually spread across all school districts.

II. The Financial Impact of Charter Schools on School Districts *The Impact of Displaced Funds*

Charter school advocates insist that all of the money flowing from school districts to charter schools results in offsetting savings for school districts. School district officials often argue that no savings result. Overhead costs do not change and the loss of students is so dispersed that financial losses cannot be recouped by reducing the number of teachers and classrooms. The actual impact depends on specific characteristics of the school district, mainly district size and growth.

Districts with enrollment growth are less likely to feel the financial impact of charter schools according to Rofes (1998). The reasons are obvious. Growing school districts are adding classrooms and hiring teachers. Fixed costs become a smaller and smaller share of the growing budgets. In many situations, charter schools ease the pain of school district growth. It is probably no coincidence that many of the early charter school states were fast growing states such as California, Colorado, Florida and Texas. While fast growth aids the painless absorption of the charter school financial impact, it also sharply diminishes the effect of charter school competition.

Stable or declining enrollment school districts are more likely to suffer a financial impact. Ironically, financial problems caused by charter schools can threaten the education reform efforts they are intended to stimulate. Districts with declining enrollments already struggle with rising fixed costs per student. Districts respond in the usual ways: they adapt to any financial crisis by raising class sizes, cutting teacher pay and eliminating programs.

The situation in Cincinnati illustrates one district's response to charter schools. Even before the opening of five charter schools in 1999-2000, enrollment had been declining. The district had twice been unable to pass tax levies. According to Rofes' findings, this makes Cincinnati a prime candidate to feel a negative financial impact from charter schools.

At the start of the 1999-2000 school year, charter school enrollment was approximately four percent of district enrollment, and 98 teachers were laid off due to charter schools. The district's financial problems had already caused a debate over whether it could afford to keep its award winning professional development programs in place. The influx of charter schools exacerbated the problem, and the opening of more charter schools in 2001 should worsen the situation.

Economies of Scale

Rofes (1998) found that small districts were more likely to experience a "felt effect" than larger ones. In Minnesota, the Center for Applied Research and Educational Improvement (CAREI, 1996) also found that large districts felt a minimal impact as a result of charter schools. Ironically, the bureaucratic big city school systems that some view as most in need of reform may be the least affected by charter school competition.

Big cities may be more adaptable to the financial challenges imposed by charter schools for many reasons. Home ownership tends to be low and poverty levels greater, so cities are used to dealing with transient students. Bureaucratic budgeting formulas routinely shift staff among schools. Cities are also experienced in dealing with desegregation programs involving busing, magnet schools and a variety of other choice plans. Size offers large school districts the opportunity to manipulate attendance zones in order to improve efficiency in staffing and building utilization.

At the heart of this discussion is the issue of variable and fixed costs. Although there is a debate over the extent to which costs in public education are fixed, it is generally agreed that larger districts and larger schools (at least up to 1,500 students) are more efficient than smaller units (Riew, 1966; 1986; Cohn, 1968).³ Efficiency comes from the centralization of administrative functions and, within schools, from the increased use of common spaces such as gyms, cafeterias and playgrounds. As the number of students using these centralized functions decreases, their relative cost increases. Less funding is available for other programs.

Charter schools themselves suffer the most severe economy of scale problems. Evidence from Colorado (Berk, Augenblick and Myers, 1998) and Michigan (Prince, 1999; Wolfram, 1999) indicates that it costs more per pupil to administer a small charter school than it does a school district. Globally, charter schools added 1,700 new administrative units to the nation's 14,500 existing school districts in 1999-2000. The net result is a dispersion of funds from instruction to administration in school districts as well as charter schools.

While suffering from their smallness, charter schools are somewhat better insulated from the effects of small scale than school districts because they play by different rules. They are allowed to set their own maximum enrollment and draw students from waiting lists. Charter schools can adapt enrollment to their facility. Charter schools have some choice over their own location. While large, urban school districts may be more adaptable to charter school competition than smaller ones, population density in urban areas allows charter schools numerous opportunities to overcome some of the problems of small scale. Schools can grow larger because transportation is less of a problem. School-size facilities are easier to find. Niche markets are more easily developed.

The growing presence of management companies underscores the importance of scale. Companies seek to become more efficient by centralizing administrative processes in the corporate office. With more than 100,000 students during 2000-01, Edison Schools, Inc., has created a large virtual school district in an attempt to grow into profitability.⁴ Edison Schools, Inc., believes it will become profitable if it can operate 200 schools. Once economy of scale is viewed in this light, each gain in charter school efficiency comes at the expense of school districts,

especially small districts. Ironically, by creating national chains of charter schools, management companies are reacting to the same cost pressures that led to school district consolidation in the first place.

Impact of Student Turnover

The rules governing student transfers result in a greater pedagogical and financial impact on school districts than on charter schools. Students frequently move from school district to charter school and back again. Students returning from charter schools probably do not return to the same buildings and same grades as students exiting to charter schools. In many states, charter schools open in mid-year. A few charter schools have closed in mid-year. As a result, charter schools cause havoc with rational planning and budgeting. Charter schools do not face the same problems as school districts because they operate from a single school building, do not have to accept students if no space exists, and draw students from waiting lists to replace students who leave in order to maintain financial stability.

Cincinnati's experience illustrates the problems caused by the ebb and flow of students to charter schools. In the first five months of the 1999-2000 school year, 284 students left Cincinnati Public Schools for charter schools, mostly at the beginning of the year. During the same period, 423 students returned to district schools from charter schools, which left the total charter enrollment in February, 2000 at 1,826 students. Thus, 700 students left from or returned to the school district-40 percent of the total enrollment in charter schools.⁵ Students returning to the school district may be more costly to educate.⁶ After laying off teachers due to the initial financial impact of increasing charter school enrollment, the district had to hire back teachers in mid-year if it could; some teachers had found employment elsewhere. Loss of experienced teachers is yet another problem faced by school districts attempting to adapt to the ebb and flow of charter school enrollment.

The regulations governing the timing of payments to charter schools can affect this issue. About half of charter school states advance some money to charter schools before the school year begins.⁷ Advance payment is logical given the start-up problems of charter schools and other cash flow difficulties including difficulty in borrowing monies. The problem arises when students begin returning to district schools from charter schools. While charter schools may be required to return funds to the district, the funding adjustments may not occur until the end of the year or in the next fiscal year. It is hard to return funds if the money has been spent. States and districts have made payments to charter schools that never opened or opened with far fewer children than the school was funded for. Arizona and Texas in particular have had difficulty recovering lost funds.

Private School and Home School Student Transfers to Charter Schools

An often-voiced worry of school districts is the belief that districts pay charter schools for students who had never been enrolled in a district school- *i.e.*, those students transferring from private and home schools. This is an issue in states where charter school students are included in the school district pupil count such as Massachusetts or Ohio, and in states like California, Colorado and Florida where school districts authorize charter schools. In fact, private and home school transfer students, once they are counted on the district's rolls, typically generate new state aid for school districts equivalent to the entire foundation level, not just the average state aid per pupil.⁸ The new money flows to charter schools, leaving host school districts financially unaffected. Presuming a fixed amount of K-12 state aid for all school districts in the state, all districts lose some state aid in order to finance the movement of students from private schools to charter schools.⁹

The rub for school districts is when the state does not promptly count former private and home-schooled students. State aid is sometimes based on enrollment from the previous year, or an average of current and previous year enrollment. Thus, for one year, there would be no new state aid or insufficient aid for students coming from private schools. For this reason, Massachusetts pays the entire tuition of charter school students coming from private schools for one year.

The Financial Impact of Charter Schools on the Educational Ecosystem

Borrowing concepts from biological science such as “ecosystem,” political scientists have written about the ecology and life cycle of interest groups (Gray and Lowery, 1996a; 1996b). As animal populations increase in a biological ecosystem, the various species specialize into “niche” environments in order to survive. Political scientists found that interest groups exhibited similar specialization, as their ecosystem became more crowded. States and school districts also belong to a delicate social ecosystem. Charter schools become part of the many complex decisions made by school districts regarding educational reform, privatization, desegregation, white flight, magnet schools, transportation, school boundary setting, at-risk students and special education programs. Under the early charter school concept, it was hoped that as the number of charter schools increased in the educational ecosystem, that they too would specialize, developing niche markets in which to thrive. Groups of teachers and parents would develop innovative schools and the best ideas would be incorporated into the broader school system.

While some charter schools have filled niches and provided innovative models for public schools, some evidence suggests a trend in the opposite direction. Instead of enriching the school environment and filling niches, charter schools increasingly compete for the same students as other public schools. They adapt widely used education programs, teach students in classrooms with comparable pupil-to-teacher ratios and operate schools as large as regular public schools.¹⁰ Charter school advocates characterize such programs as Success for All, Direct Instruction, Core Knowledge, and “back-to-basics” as reforms. Since these programs are commonly found in public schools, this shows that American charter schools are adopting a middle of the road strategy. Evidence from a nationwide open enrollment program in New Zealand that has been compared to “complete characterization” indicates that schools may believe their best strategic response to competition is to become generalists, casting their marketing net as wide as possible (Ladd and Fiske, 2000).

Markets can become oversaturated in the move to the middle, placing pressures on charter schools, school districts and private schools. Private schools are concentrated in urban areas for the same reasons as charter schools. Education management companies have an advantage in competing directly with other charter schools (Arsen, 2000). Research from Texas indicates that charter schools gravitate towards more densely populated areas with higher levels of pre-existing educational competition (Grosskopf, Hayes and Taylor, 2000)

Poor management of the numbers and distribution of charter schools by states is one of the main ways that oversaturation and disruption of the education ecosystem can occur. Many states allow several chartering authorities—such as school districts, universities, municipalities, independent charter boards and the state board of education—to issue charters and few procedures exist to rationalize the sum of these choices.¹¹ Multiple chartering agencies were created as vehicles to insure proliferation of charter schools rather than stewardship of the ecosystem. The threat of multiple chartering agencies to the ecosystem is illustrated by the situations in Inkster, Michigan and Cincinnati, Ohio:

- *Inkster, Michigan.* Enrolling 1,500 students, this all minority suburban school district had been struggling with declining enrollment and financial difficulties for years. Small size and shrinking enrollment made the district especially vulnerable to an unfavorable financial impact. Authorized by several different universities, eight charter schools (only three within district boundaries) accelerated the enrollment decline. Hoping to have some influence on the charter school expansion, the district became one of only three districts in the state to authorize a charter school. Nevertheless, the school district still had the responsibility for costly programs for special education and low-income students. The resulting financial instability led to faculty layoffs, unbalanced budgets and a serious threat by the state to take over the district for financial reasons. These actions only increased the outflow of students to charter schools, which operated under a different set of rules that allowed them to become the stable institutions in the ecosystem. The district finally contracted with Edison Schools, Inc.—which operates several charter schools in Michigan—in order to receive an infusion of capital and buy time from the state shutdown authorities. The demise of Inkster was based largely on financial factors, not student performance.

- *Cincinnati, Ohio.* By 1999-2000, five charter schools opened in Cincinnati, an innovative but financially troubled school district with declining enrollment. In an effort to embrace the charter movement and incorporate it into the school choice options already available in the city, the district granted three charters of its own for 2000-01. Independent of the district’s action, the state (which has yet to reject a charter school application) granted at least four additional charters, bringing the total to twelve.¹²

In both school districts, there was no plan to manage charter school and school district coexistence. Both districts attempted to embrace the charter school movement, while both states were primarily interested in proliferating charter schools, so the district efforts only added to their financial woes.

Overly Simplistic Funding Formulas

A few states (e.g., Georgia, Hawaii, Kansas and Wisconsin) leave charter school funding decisions to the school districts that charter them. Generally, based on the district’s standard budget and facilities allocation formulas, districts then provide funding for the specific needs of charter schools including higher costs associated with particular programs, grade levels or student populations.

Many states, however, provide per pupil funding based on a simple average of school district expenditures or revenues. This system works equitably only when charter enrollment approximates host school district student populations. Problems arise when charter schools receive the same funding as school districts but do not provide similar programs or educate similar children:

- School district spending for preschool programs, private school services, residential placements, community outreach, adult education, bilingual education, vocational education and other activities are included in charter school funding in some states whether or not charter school provide these types of programs.

- About half of the states fund elementary students in charter schools at the same level as high school students, even though high school students cost more to serve. This policy encourages the development of elementary charter schools.

- Several states base funding for special education on average school district special education spending or revenue, rather than the specific needs of students enrolled in the charter school. This system discourages charter schools from serving high-cost special education students; charter schools serving only low-cost special education students reap a wind-fall.¹³ Table 1, using data for charter school systems that were operating in

1997-98, presents a breakdown of how special education for charter schools is funded.

- A majority of states provide additional funding to charter schools for at-risk students either directly or through school district negotiations. In at least seven states, however, funding for at-risk students is based on school district averages rather than the specific at-risk population in the

Table 1. Special Education Funding

<i>Based on Disabilities of Students Enrolled in Charter Schools</i>	<i>Based on Negotiations with School District</i>	<i>Matches School District's Special Education Spending or Revenue</i>
Arizona, ¹ Delaware, District of Columbia, Florida, Georgia, ² Hawaii, ² Kansas, ² Michigan, New Jersey, New Mexico, ² Minnesota, ⁵ South Carolina, Texas, Wisconsin ¹	California, Colorado, Connecticut, ³ Illinois ³	Alaska, ⁴ Arizona, ¹ Louisiana, Massachusetts, Milwaukee, Pennsylvania, ⁴ North Carolina, ⁴ Rhode Island

Source: Nelson, Muir and Drown (2000).

¹ All school districts and charter schools in Arizona receive a weight of 0.158, worth about \$375, for every pupil enrolled, whether or not they have a disability. No other funding is available for low-cost disabilities such as speech and learning disabilities, but students with middle- and high-cost disabilities generate substantial funding through a weighting system.

² On same basis as any school in the district as opposed to receiving direct funding from the state formula.

³ District of residence pays actual cost if charter school provides service.

⁴ Special education students generate funding, but not based on a specific disability.

⁵ Based on actual cost.

charter school. This system discourages charter schools from serving at-risk students.¹⁴

A few states adjust charter school per-pupil revenues using a weighting system that provides more funding for high-cost students (e.g., District of Columbia, Florida, Texas). See Table 1. By matching funding to student needs, charter schools with low-cost students do not receive as much of the funding that school districts were using to serve high-cost students. Given that state special education funds do not typically match the added cost of providing special education, however, such systems ameliorate rather than eliminate the problem.

Of the 23 states and two cities with charter schools in 1997-98: (1) twelve states provided the same funding for elementary schools as high schools, even though high school students are more costly to educate; (2) eleven states provided significant funding advantages to charter schools with low special education populations; and, (3) nine states provided funding advantages to charter schools with few low-income or at-risk children.

Hidden Financial Advantages for Charter Schools

The view that charter schools suffer funding disadvantages compared to public schools dominates the charter school literature (Bierlein and Fulton, 1996; Finn, Manno and Bierlein, 1996; Premack, 1999): Charter schools

sometimes receive less than 100% of operating revenue.¹⁵ Charter schools usually do not receive funding to finance facilities and debt that is equivalent to school district funding.¹⁶ Charter schools may pay administrative fees to school districts or chartering authorities without receiving offsetting services. In some states, charter schools focused predominantly on special needs and at-risk students may be substantially underfunded.

Several offsetting factors, some of which have been touched on in previous sections, may give charter schools a financial advantage over public schools in some states.

- Charter schools may receive “in-kind” services directly from school districts (e.g., oversight, transportation, special education services, personnel services or facilities).
- School districts may fund preschool programs, private school services, community outreach, adult education, vocational education and other activities that are justifiably withheld from charter schools.
- Charter schools can configure their grade level structure, waiting lists and enrollment to generate optimal class size, staffing, facility usage and funding.
- In some states, as discussed in the previous section, charter schools with few special needs students get funding equivalent to school district special education funding.
- Many states exempt charter schools from paying into state retirement systems.¹⁷
- A majority of states exempt some or all charter school teachers from state teacher certifications, which allows charter schools to hire less expensive teachers.
- Charter schools are usually treated as school districts for the purposes of Title I funding and therefore avoid having to meet additional criteria used to distribute scarce funds within school districts.¹⁸
- Large national management companies may be able to benefit from scale economies unavailable to small school districts in which company schools may be located.
- Charter schools choose their own location and maximizing funding may be part of the choice. Population density in urban areas allows charter schools numerous opportunities to overcome some of the problems of small scale.

The logic of having school districts provide services to charter schools rests in economy of scale. Districts already have significant capacity, and it would be inefficient for charter schools to create their own capacity. District services are more efficient, however, because of centralization. School districts cannot provide services to small, disperse independent charter schools on the same cost basis as they do for their other students. Yet, districts in a number of states are mandated to provide services at no cost to charter schools. The cost of these services typically show up in district budgets even in states where negotiations between charter school and district do not play a significant role in funding.

Student transportation proves to be one of the more problematic finance issues for charter schools. Transportation often proves a barrier to the exercise of choice, especially for poor students. The transportation costs of charter schools obviously are higher than transportation for a system of neighborhood schools, even if school districts provide transportation for charter school students on regular bus routes. Legislatures should be concerned about imposing high-cost charter school transportation on school districts without also providing extra funding. This has been a particularly difficult issue in Pennsylvania where districts are obliged to transport students up to ten miles beyond their borders. When the Philadelphia district refused to pay for transportation outside of the district to schools it had not chartered, it was sued and lost. Charter schools are free to set their own hours of operation and may operate on a different schedule than district schools. In Massachusetts, for example,

school districts have to provide crossing guards for charter schools on days when district schools are not open.

In Connecticut, charter school students identified as needing special education services are entitled to a planning and placement team meeting held by the school district in which the student resides. The school district may directly provide services or pay the charter school for special education services. Illinois school districts pay charter schools 75% to 125% of average costs. Much of the funding differential is based on whether a charter school provides special education services on its own or relies on the school district. Similarly, Colorado school districts negotiate with charter schools over a funding level that ranges from 80% to 120% of district spending. Charter schools often get less than 100% funding if they attract fewer special education students or if the school district provides special education services at no cost. Colorado districts have often entered into what has been called an "insurance" arrangement with their charter schools, whereby the charter pays the district average special education cost and the district guarantees to provide special education services.

III. Fine Tuning the Financial Transition to Charter Schools

Those most concerned about charter schools' effect on districts sometimes argue that state governments should pay the full costs of charter schools while holding school districts harmless. Each charter school student would then always cost twice as much as other students. As argued above, direct state payments to charter schools usually do not hold school districts harmless. States usually recapture an amount equivalent to the charter school payment from school districts through subtraction from state aid payments to school districts, or when district enrollment declines due to charter schools. Some states, however, do pay twice for at least some charter school students. For example:

- A system of state aid minimums protects most Connecticut schools from losing state aid for any reason, so the state is unable to recapture charter school funding from most school districts.
- In 1998-99, a separate appropriation from Congress supported a majority of District of Columbia charter school funding.
- In some states like Texas, very wealthy districts that receive no state aid do not surrender local revenue when students move to charter schools and the state ends up paying the full charter school cost. This means that the state is paying for these students for the first time.

Paying twice for charter school students is unusual. States subsidizing the cost for wealthier districts who are over the foundation amount makes little sense. This section focuses on other forms of transition assistance.

Declining Enrollment Adjustments. Charter schools aside, many state aid formulas recognize that costs do not fall in proportion to enrollment decline, so enrollment declines are averaged down. Some states average school district enrollment from the prior and current year (e.g., Michigan). One advantage of a declining enrollment adjustment is that the shrinking districts most affected by charter schools get the most assistance.

Transition Assistance. Declining enrollment adjustments work automatically in states where charter school students no longer count as students in a school district. School districts in Massachusetts, however, include charter school students in the district pupil count and pay charter schools "tuition" - an amount approximately equal to the district's per-pupil expenditure. New Jersey, Pennsylvania, Ohio and several other states also keep track of charter school students as residents of a school district. Three of these states-Massachusetts, Pennsylvania and Rhode Island-help ease the financial loss of enrollment shifts to charter schools from school districts by partially "reimbursing" school districts for tuition increases. "Tuition increase" is the aggregate increase in tuition generated by all

students attending charter schools. The reimbursement in Massachusetts is 100% during the first year in which the increase occurs, 60% in the second year and 40% in the third year. This transition aid amounted to more than \$2,000 per enrolled charter school pupil in 1998-99.

Rhode Island provides a different model of transition assistance. Charter schools pay back to the sending district 5% of charter school funding to acknowledge-according to legislative intent-that when a student moves to a charter school, the sending district is not able to reduce costs by 100%. This crude adjustment, however, is probably insufficient during the initial transition and then unnecessary after a few years. Furthermore, the 5% payment could also be considered a correction for problems with the Rhode Island funding formula.

Aid for Former Home Schooled and Private School Students. In states where charter school students are counted as school district residents for state aid purposes, the district either pays charter schools directly or the payment appears as a deduction against state aid. For a charter school student who had previously enrolled in private schools or been educated at home, the school district payment appears especially irksome because the school district seems to be paying for students it never educated. These "new" students, however, eventually generate new state aid for the district in an amount approximately equal to the charter school payment.

Funding problems for students who transferred into a charter school from home, private or parochial schooling may still exist. For one year, districts could potentially be required to pay for students that were never enrolled or funded as district students. Other states average enrollment over a multi-year period. To address this first year problem, the state reimburses the district 100% of the tuition for charter school students that previously received non-public education.

Managing the Charter School Ecosystem. Several states limit the number of charter schools. Typically, states increase the limits over a period of time. Charter school advocates view efforts to limit charters as merely political opposition but limits serve numerous purposes. One outcome is that school districts have a longer time not only to adapt to enrollment shifts and deal with the consequent financial problems, but also develop a competitive response to charter schools. Since limits force more competition among charter school applicants, the weakest charter school applicants are unable to start schools.

A single statewide chartering authority, if it is well run, may help to better manage the charter school ecosystem. In a state like Massachusetts, only the state charter school office charters schools and legislation limits the number of charter schools. The charter school office has chartered a wide variety of schools that together serve students at all grade levels in poor and wealthy school districts in almost all parts of the state. Most charter school proponents, however, want to make it easy to get a charter rather than compete and they have been successful in expanding the number of charter granting authorities in several states.

One reason that Massachusetts has geographically dispersed charter schools is that school district payments to charter schools is limited to 6% of school district expenditures. In 1999-2000, only four school districts hit the expenditure ceiling. In contrast, the multiple chartering authority in Michigan has led to a disproportionate number of low-cost elementary schools and a disproportionate charter school presence in or near Michigan's mid-size cities like Flint, Lansing and Grand Rapids (Arsen, Plank and Sykes, 1999).

Allowing only school districts to authorize charter schools helps manage the charter school ecosystem. Charter schools then become part of the many complex decisions made by school districts regarding desegregation, magnet schools, transportation, at-risk students and special education programs. Sometimes for good reasons, charter school advocates view school district authorizing as unnecessarily restrictive.

Nevertheless, charter schools in some state like Colorado, Florida and Illinois, tend to be very autonomous even though schools districts are the primary authorizers.

Minimizing the Impact of Student Turnover. Part of the school district angst over charter schools is uncertainty over the number of students moving to charter schools, the number of students returning to school districts from charter schools, when students leave or return, and how the money flows with students. Charter schools deal with student turnover more easily than school districts because they are able to combine enrollment limits and waiting list to keep enrollment and financing constant. The following suggestions help alleviate financial problems associated with turnover.

- *Stop mid-year openings.* Many states like Michigan and Texas allow charter schools to open in mid-year. Not only does this policy result in sudden enrollment and financial shifts for school districts, but mid-year openings tend to characterize weak charter schools that either had difficulty opening or opened without sufficient planning.
- *Multiple attendance measurements.* Some states measure attendance in school districts only once or twice a year. Applying the same procedure to charter schools has led to many complaints from school districts about how charter school students start returning to the district immediately after they have been counted in the charter school. Some states, however, make continuous financial adjustments based on frequent enrollment counts. Florida, for example, measures attendance, adjusts funding for school districts and charter schools, and even changes its foundation level funding four times a year.
- *Improve funding certainty.* School districts seek to staff and fund schools before they open in the fall. Adapting to changes caused by charter schools is much more difficult after school opens. Some charter school laws are more effective than others in improving financial certainty. District of Columbia charter schools, for example, receive 75% of funding at the beginning of the year based on initial enrollment. The other 25% is paid in the spring based on subsequent enrollment counts. Funding can decrease in the spring, but not increase. Under a plan like this one, school districts would be protected from mid-year financial loss.

IV. Conclusion

Many school leaders have insufficient understanding of the school finance system to determine the impact charter schools have on their budgets (Rofes, 1998). This article seeks to fill the knowledge gap by describing several ways charter schools have a financial impact on school districts. Since charter school laws and funding systems vary from a state to state, a national perspective is important.

Stable or declining enrollment school districts generally suffer a greater direct financial impact. Districts with declining enrollments already struggle with rising fixed costs per student and respond as they do to any financial crisis—raising class sizes, laying off the least senior teachers and eliminating programs. Small districts face a greater financial challenge from charter schools. Big cities are more adaptable to charter school growth because they regularly deal with transient students and are experienced with their own school choice programs. On the other hand, the population density of big districts attracts charter schools seeking to deal with facilities and transportation issues. Unlike school districts, charter schools are able to fix their enrollment at optimal levels and draw students from waiting lists to fill vacancies. Charter schools can also adapt enrollment to their facility.

In addition to direct financial impact, charter schools impose other financial problems. Student transfers in and out of charter schools impose financial problems. Infrequent measuring of charter school attendance and delayed financial adjustments complicate the situation. Some states allow more than one chartering authority, a chaotic system full of

unintended consequences for the educational “ecosystem.” The “streamlined” or “simplified” funding systems created for charter schools often encourage charter schools to educate low-cost students. Finally, districts often carry significant hidden costs related to charter schools that do not show up as charter school revenues or expenditures.

This article made several suggestions for minimizing the harmful financial impact on school districts including: (1) transition aid through declining enrollment adjustments or direct financial assistance; (2) immediate financial adjustments for private and home schooled students transferring into charter schools; (3) coordination of chartering agencies; (4) limiting the number of charter schools and then expanding the limit gradually; (5) limiting school district financial loss to a fixed percentage of budget; (6) stopping mid-year openings for charter schools; (7) counting charter school enrollment several times a year and making immediate financial adjustments; and, (8) improving the funding and increasing expectations that charter school educate high-cost students.

In many states, charter school laws seem to be more intent on harming school districts than promoting fair competition. Ironically, the financial problems caused by charter schools can threaten the education reform efforts they are intended to stimulate. Furthermore, the bureaucratic big city school systems that some view as in most need of reform, especially if enrollment is growing, may be the least affected by charter school competition.

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Endnotes

1. Underlying this proposition is a concept of school districts as static and in need of change. While this may sometimes be the case, Hess (1999) subscribes to the theory that districts typically try to change too quickly and that a competitive response to charter schools may cause as much harm as good.

2. See <<http://www.aft.org/charterfinance>> for more information.

3. This concept of efficiency is based solely on cost without regard to effectiveness in improving student achievement. Smaller units may be more cost effective once outputs are considered (Stiefel, Berne, Iatorola and Fruchter, 2000). One hoped-for benefit of charter schools, but an unproven one, is the improvement of academic achievement through the creation of smaller schools.

4. At a June, 2000 appearance at the Washington Press Club, Edison Schools Inc. founder Chris Whittle noted that Edison is now the 60th largest school district in the nation.

5. Since these figures do not include students coming from or returning to private schools, turnover is even higher.

6. Seven Hills, Edison's charter school in Worcester, Mass., illustrates the problems of high-cost student returning to a school district from charter

schools. During the first half of the 1996-97 school year, 21 special education children from the school returned to public schools, two-thirds of them in moderately handicapped categories (prototype 503.3 to 503.41). Edison admitted low-cost regular education students off the waiting list. Since special education costs are averaged into charter school funding, the school district was unable to recoup funding for the high costs of the special education children returning to the district.

7. Some states advance considerable funding to charter schools. Connecticut provides 25% of funding in July and another 25% in September. In Illinois, school districts forward funds to charter schools in four equal quarterly payments beginning no later than July 1. By Oct. 1, charter schools have received half of their base funding. Delaware mandates the payment of 75% of the anticipated state per-pupil funding at the beginning of each fiscal year. The District of Columbia advances 75% of funding in October, with the remainder paid the next spring.

8. This generalization excludes wealthy school districts unable to qualify for state foundation aid.

9. Exceptions to this generalization include the District of Columbia and Hawaii, where there is only one school district.

10. In some large urban districts such as New York City, where there are dozens of smaller schools created as part of the New Visions program, it is also possible that many of the niches are already filled (Lief, 2000).

11. Minnesota recently passed legislation allowing nonprofit organizations to charter schools, which means that the creation of public schools is becoming divorced even more from governmental bodies.

12. Cincinnati's response is analogous to a Depression-era farmer's response to over production. The farmer produced more, thereby exacerbating market the problem of overproduction. The government's response to the farm crisis was to engage in policies limiting production.

13. In Massachusetts in 1997-98, for example, charter schools received an average tuition of \$6,551 per pupil for all students. The average cost for regular education in districts sending students to charter schools was \$5,650 per pupil. Special education costs are a major component of the \$1,100 difference. Basic district special education costs averaged \$15,391 per full time equivalent special education student. Charter schools and districts served similar percentages of students at the lower end of the cost spectrum, the students who spend almost all of their time in a regular classroom anyway (Wood, 1999). However, charter schools are unlikely to enroll students with moderate special needs (requiring half a day or more in a self-contained setting). In Massachusetts and a few other states, the funding for high-cost special education students is incorporated into charter school revenue. A similar dynamic occurs for bilingual education.

14. The Gateway Charter School application in Coventry, Rhode Island provides one example of the difficulties of funding at-risk schools. The applicants hoped to serve at risk students, but in Rhode Island, all charter schools get the same amount of funding based on school district averages. Without the needed extra funds, the charter school became unfeasible. In effect, the Rhode Island funding system penalizes charter schools seeking to specialize in serving high-cost students.

15. Alaska, Colorado and Illinois allow funding of varying percentages to account for the unique circumstances of charter schools. Connecticut and Minnesota fund charter schools equally regardless of the school district in which they are located, so some charter schools get less than local school districts, and some get more. In Michigan, charter schools are funded comparably up to about \$6,000 a year, the maximum funding for charter schools. In New Jersey, charter schools receive 90% of base funding, but the base includes transportation and private school support.

16. In 1998-99, 14 of 23 states provided no significant funding for charter school facilities. Arizona provides more charter school facilities funding per pupil than the state provided for an average school district. The

District of Columbia provides comparable facilities funding. Florida, Massachusetts and Minnesota also provide significant, though not necessarily comparable, funding for faculties.

17. In 1997-98, charter schools were required to participate in the state teacher retirement system in 12 states, and participation exceeded 75% in several others. Participation was very low in Arizona, the District of Columbia, Florida, Michigan and North Carolina.

18. Federal funding is insufficient to provide Title I programs for all eligible children in most school districts. Districts develop plans to ration funding. Typically, funding goes to schools with the highest concentration of poor children. Under most plans, elementary schools are more likely to receive funds than high schools.

"...Michigan's charter schools spend substantially less on instruction and more on administration than the state's traditional public schools."

Charter School Spending: Autonomous and Accountable?

David Arsen

A lot of momentum is presently building behind the idea that educational outcomes can be improved by delegating more power and authority from districts directly to schools. Many observers are concerned that the growth of school district administrative bureaucracy has diverted resources from instructional activities and inhibited principals and teachers' capacity to creatively respond to children's needs. Diverse policies—from school-based management to vouchers—are defended on the grounds that management and budgeting decisions ought to be made closer to students. Whether or not any given policy will bring about anticipated improvements in productivity, innovation, or accountability, however, depends entirely on the specifics of program design.

Charter schools offer an important case of decentralized resource allocation. Charter schools enjoy considerable autonomy to implement programs that appeal to students, parents and teachers. Indeed, they are obliged to do so. How does resource allocation change when schools make their own budgeting decisions in a context where survival is premised on the ability to attract students? Despite the heated claims of advocates and critics, we know little about resource allocation in charter schools.¹ Advocates predict that charter schools, once freed from the administrative overhead of traditional public schools, will focus their resources more intensively on classroom instruction. Critics meanwhile suggest that administrative expenditures in charter schools will actually increase due to the loss of scale economies, or the incompetence or dishonesty of charter school operators. How charter schools compare to traditional public schools in their spending on administration versus instruction is but one of many interesting dimensions of resource allocation.

This paper examines resource allocation in Michigan charter schools, officially known as public school academies. Since the passage of enabling legislation in 1994, Michigan's charter school population has grown rapidly. I will compare expenditure profiles of charter schools and traditional public schools. Michigan's charter schools are very heterogeneous. So I will also examine expenditure patterns among groups of charter schools disaggregated by various characteristics, including their years in operation and conversion status. Most Michigan charter schools contract with private, for-profit companies for management services. Advocates predict that contracting will redirect resources from administrative bureaucracy toward the central mission of classroom instruction (Hill, et al., 1999). An analysis of charter school resource allocation, therefore, presents an interesting test of the contracting model.

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Resource Allocation in Traditional Public Schools

Previous research on resource allocation in traditional public schools provides a helpful benchmark for examining charter school spending patterns. Studies have found remarkable consistency in the spending profiles of public schools. (See Brewer, 1996; Cooper, et al., 1994; Nakib, 1995; Picus and Fazal, 1995; and Speakman, et al., 1995.) Roughly 60% of current operating expenditures is devoted to instruction, with a range in individual districts consistently falling between 55% and 63%. Instruction's share of school spending is much more uniform across districts than revenue per pupil, which of course varies dramatically.

If school districts spend 60% of their resources on instruction, where does the remaining 40% go? Is this the deadweight of administrative bureaucracy? Not entirely. Nationally, just about 6% of total expenditures is devoted to school-site administration and an additional 3% to central administration. Picus and Fazal (1995, p. 17) concluded on the basis of their research in New York and Florida that: "The noninstructional dollars represent not an administrative 'blob', as some have claimed, but spending for important functions such as maintenance and operations, student transportation, site administration, and instructional support in the form of staff to help teachers and students." Moreover, in contrast to the conventional wisdom, available evidence suggests that the administration share of expenditures in large central city school districts is lower than in other districts in the same states (Picus, 1991; and Monk and Roellke, 1994).

Most public school expenditures, between 80% 90%, are spent at the school level. This figure is also remarkably consistent across districts, regardless of location, spending level, or demographic composition of the student population (Picus and Fazal, 1995; and Speakman, et al., 1995). Nevertheless, individual schools may have very little discretion over how those funds are spent.

In one important respect, existing evidence reinforces the position of those who advocate more autonomous school-level management. The uniformity of resource allocation patterns among public schools is consistent with the conception of budgeting as lacking discretionary flexibility.

Michigan's Charter School Movement

Michigan's charter schools represent an interesting setting to examine the impacts of autonomous school-level budgeting.² First, among the states with charter school legislation, Michigan's legislation ranks among the most permissive, granting a high degree of autonomy to charter schools (e.g., Wohlstetter, et al., 1995; and Mintrom and Vergari, 1997). Second, the state has many charter schools, ranking behind only Arizona and California on this count. Third, charter schools in Michigan need not be authorized by local school districts, and the vast majority of the state's charter schools are completely autonomous from any traditional public school district. Fourth, unlike a number of other states, Michigan provides its charter schools with full funding levels roughly equivalent in most cases to the per pupil revenue of the local district in which they are located. Fifth, Michigan's charter school legislation permits schools to contract with for-profit management companies to provide administrative and instructional services, and private firms currently manage most of the state's charter schools.

Michigan charter schools have independent legal status. Chartering agents appoint school boards of directors that are free to make business and educational decisions. Existing public and private schools can convert to charter status. Charter schools are not responsible for transporting their students to and from school. They are required to participate in the federal free and reduced lunch program, and to provide appropriate education for students with disabilities or special education needs.

Michigan's charter schools are exempt from the collective bargaining agreements of the surrounding district (unless the chartering agent is the local school board), and also from the state's teacher-tenure regulations. Teacher certification requirements for charter schools are identical to those of local school districts. Charter schools must contribute to the Michigan Public School Employees' Retirement System (MPERS) on behalf of their employees, but they do not have to contribute for personnel working in their building who are employed by an outside company. Charter schools are free to contract with private companies to provide any portion of their educational and support services. Chartering agents are permitted to annually charge schools they charter up to 3% of their state foundation aid in return for their oversight services.

Michigan's school finance system, adopted by voters in 1994, has important implications for charter schools. The finance reforms shifted Michigan from a district power equalization system to a foundation allowance program (Addonizio, et al. 1995). The new system also shifted primary funding responsibility from local districts to the state, and strictly limited districts' ability to raise additional general fund revenue. State funds are distributed to districts and charter schools by a formula that is essentially driven by the number of pupils enrolled. The practical consequence of the new system is that effective ownership of educational revenues has shifted from districts to individual students, because students moving from one district to another or to a charter school take their entire state grant with them. In this respect, Michigan's funding system closely approximates conditions envisioned by proponents of market-like educational service delivery systems.

Michigan's charter schools receive a per pupil foundation allowance from the state equal to the foundation grant received by the surrounding district, up to a few hundred dollars more than the state 'basic' foundation grant. Charter schools also have access to categorical state and federal funds in the same manner as local districts. Approximately 20% of charter schools received more total revenue per pupil (foundation plus categorical grants) than their surrounding district in 1996-97 (Horn and Miron, 1999).

Table 1 offers a summary profile of Michigan's charter schools. In the 1999-2000 school year, there were 173 charter schools in operation, with an enrollment of approximately 50,000 students, representing about 3% of the state's K-12 enrollment.

School Year	Number of Schools	Number of Students	Percentage of Public K-12 Students
1995-96	43	5,500	0.3
1996-97	79	12,500	0.7
1997-98	108	20,000	1.2
1998-99	138	30,000	1.9
1999-2000	173	50,000	3.0

Source: Michigan Department of Education.

Data Sources and Methodology

The empirical work presented here is based on data from the Michigan Department of Education's Form B report, which presents audited financial information submitted by all local school districts and charter schools. I examine general fund expenditures across detailed functional categories for alternative groupings of traditional and charter schools. In every instance, group means presented here are pupil weighted. In effect, the expenditures for a given function among a group of schools were summed and divided by the group's total enrollment, so large schools or districts count more than small ones in calculated means.

Resource Allocation in Charter and Traditional Public Schools

Table 2 displays spending across major functional categories in Michigan's traditional and charter schools. In 1997-98, mean current operating expenditures in Michigan's traditional school districts were \$6817, or about \$530 more than in charter schools. There were, however, significant differences between charters and districts in how this money was spent.

Charter schools spent significantly less on instruction and more on business and administration than traditional public schools. On average, public school districts spent about \$1,150 more per pupil on instruction than charter schools. Public districts also spent \$460 more on instructional support than charter schools.³ Charter schools, meanwhile, spent over \$1000 more per pupil on business and administration than public districts. Charters spent about \$200 more per pupil on operations and maintenance, while districts spent about \$200 more on student transportation. The higher expenditures by charters on operations and maintenance are expected. Since they do not have bonding capacity to finance capital expenditures, most charter schools are forced to rent their buildings. This expenditure falls under the operations and maintenance category.

Overall, spending profile differences are readily summarized. Districts spent about \$1600 more per pupil than charters on instruction and instructional support combined, and \$1000 less on business and administration. The difference between these sums roughly matches the \$500-\$600 by which total per pupil spending in districts exceeded that in charter schools, since expenditure differences on other sub-functions are relatively small and offsetting.

	<i>Traditional Public Schools</i>		<i>Charter Schools</i>	
	Mean \$ per Pupil	% of Total	Mean \$ per Pupil	% of Total
<u>Instruction</u>	4239	.62	3081	.49
Basic Instruction	3215	.47	2874	.46
Special Ed	517	.08	68	.01
Compensatory Ed	281	.04	42	.01
Vocational Ed	94	.01	59	.01
Adult Ed & Other	130	.02	39	.01
<u>Instructional Support</u>	632	.09	172	.03
Staff Support	271	.04	103	.02
Pupil Support	361	.05	69	.01
<u>Business & Administration</u>	722	.11	1749	.28
School Admin	437	.06	622	.10
General Admin	135	.02	580	.09
Business Office	150	.02	547	.09
Operations and Maintenance	788	.12	1010	.16
Transportation	316	.05	112	.02
Other	122	.02	164	.03
Total	6817	100	6288	100

Source: Computed by author from Michigan Department of Education data.

Table 2 also displays the shares of current general fund expenditures devoted to each functional category. Spending shares in the state's traditional public schools are quite typical of school districts nationwide. Overall, Michigan's school districts devoted 62% of current expenditures to instruction. Charter schools meanwhile devoted only 49% to instruction. Business and administration accounted for 11% of expenditures in traditional public schools, but a startling 28% for charter schools.

Consider spending across sub-functions within the "Instruction" category. Most of the higher spending in districts was devoted to "Added Needs" not basic K-12 instruction. Overall, districts spent only about \$350 more per pupil on "basic instruction" than charter schools. Both groups devoted about the same share of current spending to basic instruction. Charters devoted 46%, districts 47%. Public school districts, however, spent much more on special education, compensatory education, vocational education, and adult education. These categories together represent about 15% of spending in districts, compared to only 4% in charters.

On average, Michigan charter schools spent nearly two and one-half times more per pupil on business and administration, than did traditional public schools. Charter school spending was higher in each of the three administrative sub-functions disaggregated in Table 2. The greatest disparity occurs not for school-level administration, where charters exceed districts by about 40%, but rather in the two central administration sub-functions, "general administration" and "business office". In both areas, per pupil spending by traditional public schools was only about a quarter of charter school spending.

On average, Michigan charter schools spend a good deal less on instruction and more on administration than traditional public schools, both in terms of absolute dollars per pupil and expenditure shares. Charter schools, however, are very heterogeneous. There is much more extensive variation in spending profiles among charter schools than among traditional public schools. This is to be expected, and could be taken as a desirable sign of charter school experimentation. The coefficient of variation for the instruction share among the traditional public schools was only 0.06, while the coefficient for the business and administration share was 0.20. Both of these figures represent a high degree of uniformity across school districts. The corresponding coefficients of variation for charter schools were both substantially higher, 0.23 for the instruction share and 0.93 for the business and administration share. I turn now to examine a series of factors that may affect charter school resource allocation and account for this variation.

Resource Allocation by Charter School Characteristic

Charter School Vintage

The establishment of new schools entails significant challenges and financial commitments. Spending patterns may change over time, as charter schools overcome initial start-up hurdles. In particular, charter schools' high level of administrative spending could reflect exceptional, non-recurring, start-up expenses that taper off once schools get established. This hypothesis is tested in Table 3, which displays resource allocation in 1997-98 for groups of charter schools disaggregated by years in operation. For example, in 1997-98 schools initiated by 1995-96 were in at least their third year of operation. The data provide no evidence of a vintage effect. At least within their first three years, charter school resource allocation across major functional categories is not significantly different from spending in first-year schools.

Type of Chartering Agent

A key feature of any state's charter school policy is the designation of organizations with the authority to grant charters. By design, chartering agents serve a critical role in assuring the fiscal and academic accountability of charter schools. In some states, for example California, only local school districts are authorized to issue charters. Some observers fear that this policy choice seriously compromises the desired impact of charter school legislation, since local districts may be reluctant to establish schools that create true competition for themselves. Charter school advocates generally prefer to give other organizations statewide chartering authority. Those who prefer to restrict chartering authority to local districts, on the other hand, maintain that districts unlike other organizations have the capacity and proximity to effectively carry out the required oversight duties.

Michigan gives chartering authority to the boards of its state universities, community colleges, and intermediate school districts, as well as local districts. Only state universities may charter schools anywhere in the state, while the other organizations are restricted to chartering schools within their jurisdiction. State universities have chartered nearly 90% of the state's charter schools, and a single university, Central Michigan University, has chartered nearly half of the schools.⁴ In some instances, concerns have arisen about whether universities were upholding their chartering agent oversight duties (Michigan Auditor General, 1997).

One policy-relevant question, therefore, is whether differences in the organizational capacity or incentives of different types of chartering agents translate into systematic differences in school resource allocation patterns. Table 4 offers some evidence on this question. The shares of

Table 3. Michigan Charter School Resource Allocation by School Vintage, 1997-98

	<i>Mean \$ per Pupil</i>			<i>Share of Current Expenditures</i>		
	Charter Schools Initiated			Charter Schools Initiated		
	by 1995-96	1996-97	1997-98	by 1995-96	1996-97	1997-98
Number of Schools	41	35	29	41	35	29
Total	5981	6607	6297			
Instruction	2878	3266	3081	.48	.50	.49
Instructional Support	257	110	172	.03	.02	.03
Business & Administration	1567	1724	1749	.27	.26	.28
Operations & Maintenance	1025	1195	1010	.17	.17	.16
Transportation	81	125	112	.02	.02	.02

Source: Computed by author from Michigan Department of Education data.

spending devoted to instruction and administration were not significantly different in schools chartered by local districts and universities. The main difference between these groups occurred elsewhere. Schools chartered by local districts devoted more resources to instructional support (11% versus 2% in university charters), and less for operations and maintenance (11% versus 17% in university charters). Schools chartered by intermediate school districts devoted a much larger share of their resources to instructional activities and a smaller share to administration and operations and maintenance than did schools chartered by state universities or local districts.

These results concerning chartering organizations should not be pushed too far. The population of schools chartered by local and intermediate districts are both small. Observed differences in spending patterns are also likely to reflect systematic differences in the types of programs undertaken in schools chartered by different types of chartering organizations. One interesting outcome is that schools chartered by local districts devote a higher share of their expenditures to administration than do the authorizing districts themselves.

Contracted Management Services

One of the most important and interesting charter school developments is the rapid expansion of contracting with private, for-profit education management organizations (EMOs). Nowhere has this development progressed further than in Michigan. In 1995-96, only a handful of Michigan charter schools contracted for management services. In 1996-97, about a quarter of the state's charter schools were managed by EMOs. The EMO market share rose to roughly half of the state's charter schools in 1997-98, and to about 70% by 1998-99. In the 1999-2000 school year, over three-quarters of the state's charter schools contracted with EMOs for management services.

The EMOs currently in operation in Michigan represent a very heterogeneous group of firms. They vary in terms of their size, their scope and their management sophistication. Key personnel in these firms come to the field with varying levels of experience in education. EMOs can adopt a variety of organizational forms and market strategies. Some operate a single school. In Michigan, some single-school management companies were set up by the charter school organizers themselves to manage their own schools. The nominally independent companies then contract with their own schools. Increasingly, however, EMOs are managing multiple schools in several states. These so-called "chain" operations sometimes possess significant financial resources and can offer a total package of services (curriculum, assessment, and administration), rather than just

bookkeeping or the provision of school lunches. Some EMOs attempt to implement a uniform, whole-school design in each of their schools. Other EMOs offer a menu and price list for a range of specific services. In principle, EMOs could be non-profit organizations. In Michigan, however, for-profit EMOs are overwhelmingly the norm.

A few years ago, charter schools generally turned to EMOs once they were already in operation. Now charter school organizers typically partner with a private company from the initial planning stage before securing a charter. Indeed, the initiative for establishing new charter schools now often comes from EMOs, which then seek personnel to administer the school.

Chain management companies offer charter schools a number of potential benefits, including assistance in securing start-up funds, complying with state reporting requirements, and implementing an established curricular design. Horn and Miron (1999) surveyed many charter school principals to discover their schools' motivations for contracting with outside firms. They report that the most common reason was to enable schools to opt out of the state school employee retirement system. Public schools contribute about 15% of payroll to the MPSERS. If, however, the same school personnel are employees of an EMO, the firm may contribute a much lower percentage to a 401K plan.

How does contracting with an EMO affect charter school resource allocation? EMOs emphasize their ability to bring efficiency to administrative operations as one of their primary advantages. In principle, EMOs can deliver scale economies in the provision of administrative services that would be extremely costly on a per pupil basis for individual charter schools. This implies lower administrative spending in charter schools with EMO contracts than those without. An alternative hypothesis, however, is that administrative spending will increase as a result of the management fee paid to the EMO. In Michigan, the management fee that chain-EMOs charge charter schools is in the neighborhood of 10% of their state foundation grant. In order to cover this added administrative expense, the EMO must find a way to reduce costs elsewhere. There are three possibilities: (1) scale economies, (2) reduce teacher or support staff compensation, or (3) reduce or eliminate the provision of certain services.

Table 5 offers some evidence on this question. Self-managed charter schools spent somewhat more on instruction than EMO schools. Most of this additional spending, however, was devoted to "Added Needs" rather than basic K-12 instruction. On average, EMO-managed schools spent only \$116 per pupil on added needs instruction (special, vocational, and compensatory education). By comparison, the average added needs

Table 4. Michigan Charter School Resource Allocation by Chartering Organization, 1997-98

	<i>Mean \$ per Pupil</i>			<i>Share of Current Expenditures</i>		
	Schools Chartered by Universities	Local Districts	ISDs	Schools Chartered by Universities	Local Districts	ISDs
Number of Schools	89	6	8	89	6	8
Total	6131	6454	5576			
Instruction	3060	3106	3403	.50	.48	.61
Instructional Support	142	700	365	.02	.11	.06
Business & Administration	1765	1854	1248	.29	.29	.22
Operations & Maintenance	1050	739	456	.17	.11	.08
Transportation	114	54	103	.02	.00	.02

Source: Computed by author from Michigan Department of Education data.

Table 5. Michigan Charter School Resource Allocation By Management Status, 1997-98

	<i>Mean \$ per Pupil</i>		<i>Share of Current Expenditures</i>	
	Self-Managed Schools	Mgmt. Services Contracted	Self-Schools	Mgmt. Services Contracted
Number of Schools	53	52	53	52
Total	6536	5891		
Instruction	3344	2932	.51	.50
Basic				
Instruction	2976	2815	.45	.48
Added Needs	368	116	.06	.02
Instructional Support	271	116	.04	.02
Business & Administration	1692	1782	.26	.30
Operations & Maintenance	1137	938	.17	.16
Transportation	92	123	.01	.02

Source: Computed by author from Michigan Department of Education data.

spending among all traditional public school districts was \$943. Self-managed charter schools also spent significantly more on instructional support than EMO-managed schools. The main area in which EMO-managed school spending surpassed self-managed schools was business and administration.

Management companies are becoming a major feature of the charter school landscape in Michigan. The dynamics of competition in the EMO industry will have important consequences for charter schools. The industry is growing rapidly and market structure is changing. The density of EMO activity in some areas in Michigan is now forcing head-to-head competition among firms. Resource allocation patterns could change significantly in the future as this industry matures. Thus far, however, whatever scale economies EMOs can deliver, they have not been sufficient to reduce per pupil administrative expenditures in charter schools. EMO-managed charter schools spend more on administration than self-managed charters. EMOs appear to cover these administrative expenses by curtailing added needs instruction and instructional support.

Concluding Observations

In Michigan, where charter schools operate with a high degree of autonomy in a relatively 'permissive' policy setting, charter schools allocate their resources quite differently from traditional public schools. Michigan's charter schools spend substantially less on instruction and more on administration than the state's traditional public schools. Further research is needed to fully account for these spending differences, and also to ascertain whether observed differences in resource allocation are related in any way to educational outcomes. Resource allocation differences, however, do not appear to be related to exceptional start-up costs of charter schools, since the patterns persist in subsequent years after schools become established. Nor do they appear to be attributable to the cost of leasing buildings, since this expense falls under operations and maintenance, not administration. Finally, although EMO-management is associated with higher administrative spending, this can only account for a fraction of the difference between traditional public schools and

charters, because self-managed charters spend far more on administration than traditional districts.

Endnotes

1. One exception is Prince (1999). Prince's paper and an earlier version of this paper were independently prepared for the 1999 American Education Finance Association meeting. The findings of the two papers are complementary. The present paper updates the original empirical work to include expenditure data from the 1997-98 school year.
2. A fuller description of Michigan's charter schools and their impacts on traditional public schools can be found in Arsen, Plank, and Sykes (1999).
3. Form B follows the convention of reporting expenditures on "school administration" (e.g., building principals and clerical staff) under the "Instructional Support" function. Given my interest here in administrative expenditures, I have pulled out "School Administration" expenditures from "Instructional Support" and reported them along with other administrative expenditures under the "Business and Administration" function. The remaining components of "Instructional Support" are "Staff Support" (e.g., library, audio-visual, computer labs and instructional staff supervision) and "Pupil Support" (e.g., guidance, health, social work).
4. In Michigan, the trustees of the three major research universities—Michigan State University, the University of Michigan, and Wayne State University—are selected in statewide general elections. The trustees of the state's 15 other public universities are appointed by the governor. The governor of Michigan has been a strong advocate of charter schools. Thus far only universities at which the governor appoints trustees have chartered schools.

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“...Few policymakers have considered the inherent value conflicts between school and district entrepreneurship and state education finance equity goals.”

Educational Entrepreneurship: A New Challenge to Fiscal Equity?

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Educational Entrepreneurship: A New Challenge to Fiscal Equity?¹

The search for equity in public elementary and secondary education funding in the United States continues into the twenty-first century. Because education is constitutionally a state responsibility, the struggle occurs largely at the state level where advocates have utilized legislative and judicial routes to pursue greater school finance equity. Over the past thirty years, few states have escaped school finance litigation, and some have even had their systems overturned more than once.² In recent years, a number of states have voluntarily undertaken re-examination and reform of their funding formulas (Crampton, 1999). Yet, in spite of years of litigation and legislative reform, there are still wide disparities in funding among states and across school districts.

While state courts and legislatures continue to debate the equity of traditional funding sources, a new challenge may be emerging as schools and districts look to alternative sources of revenues from entrepreneurial activities. Media accounts suggest that there is an increase in entrepreneurial revenue raising by schools and districts through activities such as parent fundraising, commercial advertising, corporate sponsorships, and recruitment of tuition-paying students (Lindsey, 1994, 1995; Hernandez, 1995; Sandham, 1997; Ritter, 1998; Trotter, 2000). To date, there are, at best, a handful of studies on entrepreneurial revenues and their impact on interdistrict and intradistrict fiscal equity.³ As a consequence, few policymakers have considered the inherent value conflicts between school and district entrepreneurship and state education finance equity goals.

This study examined entrepreneurial activities in three Colorado school districts with differing demographic and socioeconomic profiles in order to gain a sense of the range and magnitude of such activities and their impact at the interdistrict and intradistrict level. The article is divided into five sections. The first section contrasts the economic paradigm that underlies educational entrepreneurship with one that supports fiscal equity while the second section sets the context for the study within the growing interest in educational entrepreneurship, defining entrepreneurship as it pertains to public education and exploring the range of activities which schools and districts undertake in order to generate additional revenues. Section three presents methods and data sources utilized in the study with the fourth section presenting the results of the case studies. The final section offers a concluding discussion and recommendations for policymakers attempting to balance education finance equity goals with the growing interest of schools and districts in educational entrepreneurship.

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Economic Paradigms Underlying Educational Entrepreneurship and Equity

The story of school and district entrepreneurship is one of conflicting paradigms and values. To that end, the case study analysis rests upon two economic paradigms; the theory of social goods and neoclassical economics. The economic paradigm that underlies most discussions of education finance equity is derived from theory in which education is viewed as a social good (Musgrave & Musgrave, 1989). Entrepreneurship, on the other hand, is based solidly in neoclassical economic concepts of markets, competition, and scarce resources. The values that underlie these paradigms are in direct conflict. When equity is the predominant concern, welfare of the whole, cooperation, redistribution of revenues, and sensitivity to the nature of the resource base for fund-raising⁴ comprise the primary value orientations. Where entrepreneurship is most highly valued, self-interest, competition, individual accumulation of funds and a neutral stance toward disparities in resource bases are the dominant value orientations. (See Table 1.) Paradigmatic conflict between equity and entrepreneurship may arise along four dimensions: 1) among schools within a district; 2) between a school and the district in which it is located; 3) among school districts; and 4) between school districts and the state.

Table 1. Dimensions of Paradigmatic Conflict Between Equity and Entrepreneurship

Equity	Entrepreneurship
Welfare of the whole	Self-interest
Cooperation	Competition
Redistribution	Individual accumulation
Resource base sensitivity	Resource base neutrality

The first value orientation addresses the conflict between the welfare of the whole versus self-interest. Equity demands that the fiscal welfare of the whole, e.g., the state education system over individual school districts or the district rather than a single school, be placed above individual fiscal gain while entrepreneurship espouses self-interest over the welfare of the whole. The second value orientation contrasts cooperation with competition. For example, equity considerations would posit that schools within a district collaborate in fund-raising ventures, and at the state level, cooperation among school districts seeking alternative revenues would be encouraged. Adjoining school districts interested in securing corporate sponsorships would decide jointly which businesses to approach. On the other hand, competition is a prized aspect of entrepreneurship; under this rubric, schools districts seeking corporate sponsorships would compete against each other to secure the most lucrative deals.

The third conflict in value orientation arises between redistribution and accumulation of entrepreneurial revenues. In school districts where equity is the predominant value, revenues from schools' entrepreneurial activities would be pooled at the district level for redistribution among all schools so that every student would benefit. Under an entrepreneurial approach, a school would own the revenues it generates. Within a state, equity concerns would dictate that entrepreneurial revenues be considered part of a school district's wealth and figure into the calculation of equalized state support, but under an entrepreneurial system, revenues from school district entrepreneurship would not be considered relevant for calculation of state aid. The fourth value orientation addresses the resources available for generation of entrepreneurial revenues. For example, within a socioeconomically diverse school district, schools in more affluent neighborhoods may find it easier to fundraise while schools in

economically deprived areas may not have as many readily available sources to tap. If equity is the primary concern, school districts would be sensitive to the differences in resource bases and perhaps compensate schools in less affluent areas. A similar philosophy would be followed at the state level with regard to school districts. However, a system that values entrepreneurship above equity would remain neutral; that is, the school district would not attempt to adjust for differences in the resource base across the school district. At the state level, there would be no concern regarding the differing capacities of school districts to raise entrepreneurial revenues.

Growing Interest in Educational Entrepreneurship

Entrepreneurship within public elementary and secondary education is not new. For decades schools and districts have generated moneys outside state and local tax revenues, largely for extracurricular activities. What appears new is the increased sophistication and aggressiveness with which schools and districts are pursuing entrepreneurial sources of revenue (Vail, 1998). This section of the paper defines educational entrepreneurship, distinguishes it from the concepts of commercialization and privatization, and provides examples of traditional and new forms of educational entrepreneurship.

Defining Entrepreneurship

Entrepreneurship, derived from the French "entreprendre," meaning "to undertake," appeared in the English language as early as the fifteenth century where it was defined as "one who undertakes; a manager; controller; champion." In the nineteenth century, it began to appear in the writings of political economists. Today an entrepreneur refers to "one who undertakes an enterprise, one who owns or manages a business; a person who takes the risk of profit or loss" (The Oxford English Dictionary, 1989).

While the application of the notion of entrepreneurship to elementary and secondary schools and districts may appear to be relatively new, it has a long history found in the transfer of private sector terminology and concepts to education. Researchers have noted that as early as 1910 education engaged in significant "borrowing" of business terminology and concepts due primarily to the larger scale of both business and educational organizations (Callahan, 1962; Kerchner, 1990). Later, in the 1920s and 1930s, education embraced scientific management, a popular business management philosophy developed by Frederick Taylor, a mechanical engineer (Taylor, 1911). Hence it comes as no surprise that entrepreneurship and its embedded values of autonomy, innovation, risk, and profit would be embraced by education in the 1990s. Autonomy, defined in neoclassical economic terms, refers to freedom from regulation, particularly government regulation. Business leaders involved in education reform efforts often view entrepreneurship in economic terms to signify innovation and successful change efforts that involve financial risk (Gerstner, 1995; Halachmi & Bouckaert, 1995). Although entrepreneurship has come to refer to a wide variety of activities in education, for the purposes of this study, it is defined as the process of generation additional revenues for schools and districts outside traditional tax sources.

Educational Entrepreneurship vs. Commercialization and Privatization

In this study, educational entrepreneurship is distinguished from the concepts of commercialization and privatization. Commercialization refers to the introduction of profit-oriented private sector activities in schools and districts. Examples include free or low cost educational materials provided by private sector firms that contain frequent references to their products (Consumer Union Education Services, Inc., 1995). While educational entrepreneurship and commercialism are, at times, viewed as encompassing similar activities, this study draws an important distinction

between the two: whereas commercialism is generally viewed by educators as exploitative of students, entrepreneurship has a proactive connotation in that schools and districts have made a conscious decision to raise additional funds for education.⁵ Privatization also may be distinguished from entrepreneurship. In education, privatization has come to refer to two classes of activities: 1) contracting for services or outsourcing; and 2) private management of public schools. The first is not a new activity for many school districts and most commonly includes contracting with a private sector, for-profit firm for a noninstructional activity, such as student transportation or food service. A second and newer form of privatization refers to management of public schools or districts by private sector management firms. Proponents view privatization as an efficiency measure instead of a revenue raising activity (Bauman, 1996).

Traditional Forms of Educational Entrepreneurship

A number of entrepreneurial activities have become well-established in schools and districts and include: school and parent fund-raising; local education foundations; business-education partnerships, and student fees.

School and Parent Fund-Raising

For many years, school fund-raisers such as bake sales, carnivals, raffles, bingo and the collection of grocery coupons have provided discretionary funds, usually targeted for specific educational or extracurricular purposes. Schools and districts also have realized profits from ongoing enterprises, such as supply stores and vending machines. These efforts remain important for raising funds for extracurricular activities (Graham, 1995). Parent involvement in fund-raising takes several forms—from individual parent activities to organized parent-teacher groups and special task forces.

Local Education Foundations

Nonprofit foundations formed to assist local school districts represent another means of attracting money to augment general operating funds. Because most states consider school districts quasi-governmental units, the school district and foundation usually must be separate entities with independent governance structures and boards with the role of school district officials limited to an advisory capacity. Local education foundations raise funds in a number of ways in addition to soliciting direct monetary donations. Beginning in California as a reaction to Proposition 13, over 2,500 district-level foundations exist nationwide (Bradley, 1995). A survey of Nebraska school districts in the early 1990s revealed that while forty percent had local education foundations, wealth and expenditure level were not strong predictors of formation of a foundation (LaCost, 1991). A later study in Michigan yielded more disturbing results, finding a strong relationship between school district wealth and the presence of a local education foundation (Addonizio, 1999).

Business-Education Partnerships

The number of school business partnerships has increased steadily over the 1980s into the 1990s (McGuire, 1990). The most common example of local business-education partnerships is the adopt-a-school program. These partnerships range from volunteering time to donating goods and services. For example, a business may release employees to speak to a classroom on careers or to serve on a school or district committee. A computer company may donate used equipment to a school or a grocery store may provide soft drinks and snacks for a school-related event. In cases of donated equipment, maintenance and repair costs are normally the ongoing responsibility of the school district. Often these are in-kind partnerships that do not involve direct financial assistance.

Student Fees

School districts can not charge resident students a true user fee, *i.e.*, tuition, for general education because of state constitutional provisions

providing free public schools. However, fees are widely used for both curricular and extracurricular activities. Some school districts charge a yearly textbook rental or supply fee as well as fees for elective courses, such as art and music. More recently, some school districts have sought to expand that traditional base to include services, such as student transportation (Portner, 1996). Extracurricular fees are directed at activities in which students engage voluntarily and do not earn credit for graduation, such as athletics and drama. However, student fees are a potential burden for low income families and may be a disincentive for these students to pursue educational and extracurricular activities (Hardy, 1997).

New Forms of Educational Entrepreneurship

In addition to traditional sources, schools and districts have found several new sources of entrepreneurial revenues, including: commercial advertising; corporate sponsorships; merchandising efforts; recruitment of tuition-paying students; and utilization of development impact fees.

Commercial Advertising

A Colorado Springs school district is believed to be the first in the nation to allow commercial advertising on school hall walls, athletic uniforms, newsletters, district reports, maps, stadium walls, and buses (Huspeni, 1994). Advertisers included a soft drink company, a fast food restaurant, and a local grocery store chain. The school district sought and obtained special permission from the Colorado Department of Education to engage in commercial advertising. School district guidelines include a ban on any advertising that promotes hostility, disorder, or violence; attacks on ethnic, racial, or religious groups; the promotion of politics or religion; and the use of drugs, alcohol, or firearms. The Denver Public Schools soon followed their example (Kirksey, 1995). Subsequently, a number of districts nationwide, including the New York City schools, have turned to advertising for additional revenues (School Board News, 1995; Sandham, 1997). A recent study by the U.S. General Accounting Office (2000) confirmed that school-related commercial advertising has been on the rise for the past several years.

Corporate Sponsorships and Merchandising

In the past, securing corporate sponsors for state high school athletic tournaments was not unusual, but school districts in several states also seek corporate sponsorships for academic and extracurricular activities as well (Harp, 1994). Other school districts are following the fundraising traditions of colleges and universities in marketing products bearing the school or district logo. These efforts include direct marketing of products, such as coffee mugs and tee shirts as well as royalties from the use of logos by other companies and catalog marketing. In addition, school districts have issued affinity credit cards with their respective logos.

Recruitment of Tuition-Paying Students

Some school districts, particularly those in more affluent suburbs, have recruited tuition-paying students from outside their boundaries. While tuition programs have existed for many years, they appear to be on the rise (Hernandez, 1995).

Development Impact Fees

Development impact fees are single payments required of home builders or developers to provide a share of the capital cost of providing infrastructure such as roads and parks (Nelson, 1988). Although they have been utilized to fund such projects for years, development impact fees are now being used for the construction or expansion of school facilities in some states, particularly in localities experiencing rapid population growth. Traditionally, ad valorem taxation, through voter-approved bond issues, has been the primary source of school capital construction funds. Although the use of impact fees for school facilities has been challenged

legally in at least two states, enabling legislation has been adopted in nineteen (Nelson, 1994). However, no state allows revenues from impact

Table 2. Forms of Educational Entrepreneurship

<i>Traditional</i>	<i>New</i>
School and parent fund raising	Commercial advertising
Local education foundations	Corporate sponsorship and merchandising
Business-education partnerships	Recruitment of tuition-paying students
Student fees	Development impact fees

fees to be spent for school district operating expenses. Table 2 presents a summary of traditional and new forms of educational entrepreneurship.

Methods and Data Sources

This research draws from case study methods, utilizing qualitative and quantitative data to answer two major research questions: 1) What is the impact of entrepreneurial revenue activity on interdistrict fiscal equity; and 2) What is the impact of entrepreneurial revenue activity on intradistrict fiscal equity? The purpose of this research was exploratory, endeavoring to begin the process of building a body of knowledge about entrepreneurship in a small number of school districts with a range of demographic profiles. Purposive sample was used to select three Colorado school districts with distinct demographic profiles. One school district selected was urban with neighborhoods ranging from upper middle to low income, but overall the district had a significant poverty rate. The second school district was suburban, affluent, and relatively homogenous in terms of socioeconomic status. The third school district was rural, and its socioeconomic level would be described as middle to lower middle income. As this research represents a study of interdistrict and intradistrict fiscal equity, it has embedded units of analysis: school; school district; and state.

Within each school district, two schools were nominated by the superintendent or his/her representative as particularly effective at generating entrepreneurial revenues.⁶ Structured interview protocols and checklists of entrepreneurial activities were developed for the superintendent and school principals. A spreadsheet listing all the relevant account codes for entrepreneurial revenues was developed in collaboration with state budgeting and accounting officials for completion by the chief financial officer of the school district. In addition, the chief financial officer was asked to complete a demographic profile of the school district and the nominated schools. A follow-up interview with the financial officer was conducted to clarify any ambiguities found in the spreadsheet or demographic profile. Through structured interviews with the superintendents, information was gathered on the range of entrepreneurial activities engaged in at the school district level over the 1994-1995 school year. Interviews with principals focused on description of school level entrepreneurship, and they were asked to estimate the amount of revenue each activity raised.

In addition to interviews and completion of checklists, spreadsheets, and demographic profiles, subjects were encouraged to share documents and artifacts related to entrepreneurship, e.g., promotional flyers, news clippings, annual reports, coupon books. At the district level, annual budgets and other relevant documents were collected while at the state level, documents describing the state accounting system and financial recordkeeping requirements of schools were gathered.

The analytic strategy sought to reject the null hypothesis that entrepreneurial revenue raising activities had no impact on interdistrict or intradistrict

fiscal equity, resting upon the theoretical framework outlined previously. In order to reject the null hypothesis, pattern analysis and explanation building techniques were utilized, first engaging in individual school district case study analysis and the cross-case analysis.

Analysis of Results

Results of the study are presented first as individual case studies of the three school districts with each case study built around a theme reflecting the district's attitude toward entrepreneurship and fiscal equity. A cross-case analysis follows, utilizing the dimensions of paradigmatic conflict between equity and entrepreneurship described earlier. (See Table 1.)

Case #1:

Entrepreneurship in an Urban School District: Mixed Messages, Mixed Feelings

This urban school district enrolled approximately 57,000 students. Although the school district contained a range of neighborhoods, from low to upper middle income, over half of the students received free or reduced price lunches. The single largest minority group in the district was Hispanic, followed by African American. The district was recently released from a court-supervised desegregation plan and was returning to the concept of neighborhood schools, but not without some community concern around the potential for resegregation. The superintendent, in his third year with the district, suffered a significant setback when voter rejected an increase in the operating levy in November 1995 that was designed in part to finance an ambitious education reform agenda he had proposed. The school district subsequently experienced cuts in programs and staff. The superintendent declined to be interviewed, selecting instead the newly appointed Director of Entrepreneurship, a central office position that had been created at the beginning of the 1995-96 school year, staffed by a person who had formerly been the coordinator of school volunteers. The creation of this position was an important symbol of the district's efforts toward greater entrepreneurship. Overall the case study revealed unresolved conflicts at the district level triggered by its sensitivity to equity issues and its desire to generate additional revenues through entrepreneurship.

This urban school district engaged in a mix of traditional and new entrepreneurial activities. With regard to traditional forms of entrepreneurship, the district was associated with local education foundation and had formed a number school-business partnerships, but avoided charging student fees. According to the Director of Entrepreneurship, the local education foundation, which was only two years old, was "floundering" and was not yet a source of revenue. When first organized, the foundation was not a separate entity from the school district, but it now is. The district also was involved in business-education partnerships, of which the majority were in-kind. However, local banks and insurance companies underwrote the funding needed by the district to operate a homework helpline. The school district refrained from charging student fees, a well-established form of traditional entrepreneurship, because of the burden they might place upon families of economically disadvantaged students. Hence there were few fees associated with general instructional materials, although some advanced placement courses did charge them. Neither were students charged transportation or parking fees. However, admission to athletic events was charged, but any fees collected at the school level were retained by the individual school.

With regard to newer forms of entrepreneurship, the district engaged in a range of creative activities that could loosely be classified as merchandising as well as commercial advertising. This school district appeared particularly successful in transforming what have been traditionally considered educational or school business services into profit centers. One well-established area of entrepreneurship was the sale of curriculum materials which had been developed by the district to market to school

districts across the country. The district also was considering marketing its assessment and testing materials. Rental income from buses and facilities appeared to be a second area of entrepreneurship. The district rented school buses to community groups during off hours, and even schools were required to pay bus rental from their school level budgets for field trips. Rental of school facilities by community groups was extensive. Nonprofit groups received higher priority than for-profit ones, and fee schedules were based upon ability to pay. Some entrepreneurial activity took place around food services and catering within the school district with more activity being expected in the future with the hiring of a new food services director. The school board approved commercial advertising on buses and in school facilities during the 1994-95 academic year. For the 1995-96 school years, revenues of \$250,000 were projected, with a goal of over one million dollars annually. Unfortunately with a recently hired chief financial officer, the district was unable to provide precise revenues for these activities, but it was the district's hope to have a better sense of the potential and actual profitability of each of these ventures within the next fiscal year.

According to the Director of Entrepreneurship, entrepreneurial activity at the school level varied by site. She used the example of the tradition parent-teacher association, citing that approximately forty percent of the schools did not have an active organization. Revenues from fundraising by parent "booster" clubs and student organizations remained at the school. The Director admitted the school district had difficulty in tracing school level entrepreneurial revenues because some schools maintained their own checking accounts at local banks in which they deposited these revenues without reporting them to the district. The new chief financial officer had set the tracking of these moneys as one of her goals. The district did have a full range of community services activities which they also viewed as potential profit centers: adult education; extended day programs; and daycare centers. However, the revenues realized remained at the program level with the school site.

The Director nominated one elementary and one middle school as the most successful in generating entrepreneurial revenues for the 1994-95 school year. These schools served very different student bodies, but both relied upon traditional forms of entrepreneurship. The elementary school, with approximately 450 students in pre-kindergarten through seventh grade, was located in the central city in an economically poor neighborhood although it also drew students from a more affluent neighborhood within its boundary. The school enrolled a higher percentage of Hispanic students and students with developmental disabilities when compared to the rest of the district. The school building itself was a registered historic landmark and attractively maintained, factors in which the principal took obvious pride. The 1995-1996 school year marked the principal's third year at the school.

This school owed its success to traditional forms of entrepreneurship, in particular, school and parent fundraising. The single most successful entrepreneurial activity was the annual holiday tour of historic homes with associated bake and art sales sponsored by the school's parent/teacher/student association (PTSA). In 1994-95, the house tour generated \$10,300, the bake sale, \$1,300, and the art sale, \$1,400, for a total of \$13,000. Because PTSA's normally keep independent accounts independent, this type of revenue usually would not be reported at either the school or district levels. According to the principal, the PTSA would have liked to have used the proceeds to hire two part-time vocal music teachers but experienced difficulties in making acceptable arrangements with the central administration. In addition, the school raised \$1,650 through the sale of coupon books. However, the principal, conscious that many families in the area could not afford them, sold most of them herself to personal and professional acquaintances. The principal expressed some concern about new accounting requirements for entrepreneurial

revenues from the district level. She believed the additional time such recordkeeping entailed acted as a disincentive for schools to engage in entrepreneurship. She also expressed concern that schools might not be allowed to keep entrepreneurial revenues when the central office became aware of the amount generated.

The middle school, which enrolled approximately 940 students in grades 6-8, was located in a more affluent neighborhood in the eastern section of the city. The only students who received free or reduced price lunches were those who came to the school from other parts of the city in order to attend a bilingual program. For the principal, the 1995-96 school year was her third year with the school. It too relied upon traditional forms on entrepreneurship that included school and parent fundraising and business-education partnerships. Like the elementary school, this school's success in entrepreneurship was largely due to an active PTSA. Through a number of entrepreneurial activities, such as sales of holiday items and book sales, the PTSA raised \$20,000 in 1994-95. These activities differed from those of the elementary school in that students actively sold items in the community. The revenues were used for special assemblies, small grants for teachers, and updating of the auditorium's sound system. In addition, the school maintained a student store run by the student council and had a business/education partnership with a local company. The student council was allowed to keep the profits from the store to finance its activities. The business-education partnership involved in-kind contributions, such as employee volunteers for after-school tutoring and donations of books, computers, and software.

Case #2:

Entrepreneurship in a Suburban School District: The Ultimate Entrepreneur

This affluent and highly populated school district of 77, 800 students would be described as holding firm entrepreneurial values outlined in Table 1 and was supportive of school level as well as district-wide entrepreneurial activities. A range of traditional and new entrepreneurial ventures could be found at the district level. Traditional activities included the use of student fees, access to a local education foundation, and business-education partnerships, while new forms of entrepreneurship were concentrated in merchandising efforts. Also, like its urban counterpart, this school district had transformed some educational services into entrepreneurial opportunities.

The district generated a significant revenue stream from traditional entrepreneurial activities when collected and reported in the aggregate at the district level. For example, the district generated, \$1.4 million in textbook rentals and \$500,000 from high school athletic fees annually. In addition, the local education foundation raised \$250,000 from private sources during the 1994-95 school year. The central administrative offices in the district had developed the capacity to compete for public and private funds while initiating a variety of partnerships and joint ventures with local business and industry. For example, the district newsletter, with a larger circulation than the local newspaper, was published by a local printing company in return for advertising space. The district marketed curriculum materials it had developed and collected royalties. Plans were underway to develop software for teachers to assist them in the implementation of statewide curriculum standards which could then be marketed to districts throughout the state. Also over \$3 million was generated in extended day and childcare programs throughout the district. Unlike its urban counterpart, this district pooled revenues from site-based programs at the district level.

The two schools nominated by the superintendent, the first, a high school, and the second, an elementary school differed in their approaches to entrepreneurship. In the high school, the principal stated that their most important entrepreneurial activity was the school's food service program, which generated \$40,000 over the 1994-95 school year. These

revenues were targeted to support student recognition programs throughout the year. The principal of the elementary school recently had been promoted to a district level administrative position in large part due to his entrepreneurship which included traditional forms such as business-education partnerships and new forms like merchandising. For example, he had created a business-education alliance where he organized a rebate program with local real estate agents in exchange for tours of neighborhood schools by potential home-buying parents. Also, he had initiated the publication of several children's books, based upon students' writings, which generated royalties for the school. The principal estimated that these activities along with other traditional forms of fundraising resulted in revenues of \$100,000 during the 1994-95 school year.

While this school district appeared to be the ultimate entrepreneur, the present stance had not been arrived at without conflict. Two years prior, public controversy erupted over the potential uses of entrepreneurial revenues, and an equity task force, appointed by the school district, generated a report on the need to distribute entrepreneurial revenues more evenly among schools. Shortly after the release of the report, the task force disbanded, and the document was tabled by a school board who preferred to actively promote entrepreneurship and competition for new dollars. In 1993, the school board increased student fees as a means to balance its \$340 million annual budget. In particular, the board raised athletic fees to \$75 per sport, and elementary school book fees were doubled to \$30 per student. In an attempt to deflect public concern over the higher fees, one board member described the need to move to a new set of values embracing entrepreneurship, which included "new ways to raise revenue other than student fees."

Case #3.

The Rural School District: Entrepreneurship as Community Engagement

The rural school district in this study encompassed three small mountain communities in a sparsely populated area of the state. In 1994-95, the district operated one high school, one middle school, and three elementary schools. The enrollment for the entire district was 2,389 students. Population within the district's boundaries was growing due to the recent passage of limited stakes gambling in a nearby mountain community. The employment base in the district had moved away from agriculture and mining to service-related occupations, for example, service positions in local gambling casinos and hotels which required long daily commutes. Many adults were forced to hold two or three jobs to meet living expenses in a part of the state with a relatively high cost of living due to its remoteness from a metropolitan area. At the same time, there were pockets of wealthy families with large homes on large tracts of land in the school district.

The theme in this district can be described as entrepreneurship as community engagement. According to the superintendent, there was limited interest in entrepreneurial activities because of the relatively high funding levels obtained through the state school finance formula. As a high growth rural county, the superintendent considered the school district was well-financed from general tax sources. Entrepreneurial activities were primarily school-based functions designed more for community engagement than for revenue generation. When the school board recently discussed the commercial advertising taking place in an adjacent school district, the superintendent pointed out the high administrative costs versus low revenues from such activities, and the school board abandoned the idea.

Also the district had avoided entrepreneurial activities due to conflicting interpretations of Colorado's tax and spending limitations. Passed in 1992, Amendment 1 required voter approval in order for either state and local governments to increase tax revenues in addition to limiting the overall

rate of increase in government spending (King & Whitney, 1995). However, most school district administrators and legal experts assumed that in-kind partnerships between public agencies were not tax-related revenues or expenditures. Relying upon this more conservative interpretation, the district had pursued entrepreneurship through some innovative twists to traditional forms of entrepreneurship, such as business-education partnerships. For example, the largest city within the rural district did not have a public recreation center. Under a district-city agreement, community members had access to the high school gymnasium; in exchange, the district received snow removal services from the city, no small expense in a mountainous area. The district's chief financial officer and the city clerk maintained an informal ledger of the estimated value of the services exchanged, but it was not reported through the state's accounting system.

Given the small size of the district, the superintendent chose to nominate only one school, an elementary school. The principal reinforced the superintendent's view of entrepreneurship as community engagement, citing a very traditional school and parent fundraising activity. She explained how she and the teachers identified families who were unable to purchase Christmas gifts. These families were asked to share their "wish lists" with the principal who in turn found families and community members who anonymously purchased gifts. In essence, more affluent families adopted less fortunate ones for the holiday season. In addition, the elementary school operated a day care and after-school program within the building. The program was viewed positively by district administrators as well as the principal as a means to increase parental involvement and foster good school-community relations. However, all of the revenues from the program were forwarded to the district level and managed by the district's finance office. Unlike their urban and suburban counterparts, the rural school district superintendent and principal did not consider the day care and after-school program entrepreneurial activities.

Cross Case Analysis

This section of the paper presents the results of the cross case analysis, utilizing the framework, "Paradigmatic Conflict Between Equity and Entrepreneurship," presented earlier. (See Table 1.) The results are divided into four parts, as follows: 1) Comparison of district attitudes toward entrepreneurship; 2) analysis of the relationships between the districts and their respective schools across cases with regard to entrepreneurship; 3) analysis of school-to-school relationships with regard to entrepreneurship; and 4) analysis of the relationship between the school district and the state over policies which impact educational entrepreneurship.

School District Attitudes Toward Educational Entrepreneurship

The three school districts manifested disparate attitudes toward educational entrepreneurship. The urban school district's theme of mixed messages and mixed feelings described the internal conflict experienced by a school district as it moved toward a more aggressive pursuit of entrepreneurship through the creation of a dedicated central office position, while, at the same time, maintaining an informal policy discouraging student fees out of equity concerns. In addition, a new chief financial officer was making a concerted effort, the first of its kind in the district, to track school level entrepreneurial revenues, in part out of concern for intradistrict equity. In direct contrast to the attitude of the urban school district was that of the affluent suburban school district whose theme was the ultimate entrepreneur. This district engaged enthusiastically in a wide array of entrepreneurial activities, encouraged schools to do so, and considered student fees an important revenue source. In the past when equity concerns were raised by the school board, a study was conducted. However, it was eventually shelved even though the results pointed to potential intradistrict inequities. The rural district's

approach to educational entrepreneurship as community engagement distinguished it from its urban and suburban counterparts. In clear contrast to the other two districts, this district felt it had adequate revenues to provide students with a good education without pursuing alternative sources of funds.

Relationships Between Districts and Schools

The relationships between schools and their respective districts around educational entrepreneurship also varied considerably across the cases. In the urban school district, the relationship was characterized by mistrust. For example, the school district central administrators interviewed believed schools were deliberately withholding accounting information from them in an effort to hide entrepreneurial revenues; and the school principals interviewed acknowledged that they did not report all entrepreneurial revenues to the central office because, in part, they believed they were not required to do so, but also because they feared that if the central office knew of the revenues they would be taken from the school. One principal claimed that such reporting requirements would act as a disincentive to school level entrepreneurship. In the suburban school district, the relationship could be characterized as *laissez-faire*. The superintendent was openly supportive of district and school level entrepreneurial activities, and school principals enjoyed wide discretion in the entrepreneurial activities selected and the manner in which revenues were spent. Neither school principal interviewed expressed concern that full accounting for these revenues to the central office jeopardized their ownership of them. In the rural school district, the relationship between the district and the single school nominated could be characterized as trusting, based upon a common understanding of and commitment to entrepreneurship as a means of community engagement.

School-to-School Relationships

The attitudes of individual schools within a school district toward educational entrepreneurship can have a significant impact on intradistrict fiscal equity. For example, in the urban school district, the two principals interviewed were unconcerned about the inequities that their entrepreneurial revenues might create; neither did they see any reason for sharing them with other schools. Both of these schools, judged the most successful entrepreneurs in the district by the superintendent, were fortunate to have active parent organizations that raised substantial funds, between \$15,000 and \$20,000 per school. According to the central office administrator interviewed, forty percent of the district's schools did not have an active parent organization. In the suburban district, the school principals considered competition for entrepreneurial revenues healthy, based upon the belief that there was ample opportunity for any school to access such funds. However, there was a wide disparity in the revenues raised by the two nominated schools: the high principal estimated her school had raised \$40,000 in the previous year whereas the elementary principal estimated his school raised \$100,000. In the rural district, such a comparison was not possible as only one school was nominated.

The Relationship Between School Districts and the State

There is a growing realization on the part of state policymakers that entrepreneurial activities by schools and districts may impact state education finance equity goals. In Colorado, two state forces have the potential to shape school districts' attitudes towards educational entrepreneurship. First is Amendment 1, a revenue and expenditure limitation measure, that limits the growth of government and hence school district revenues and expenditures to inflation plus growth in student enrollments. The second is the development of a new state education accounting system that will attempt to capture most categories of entrepreneurial revenues. With regard to Amendment 1, many school districts remain unclear as to its application to entrepreneurial revenues. The suburban

school district did not include entrepreneurial revenues under its interpretation of Amendment I, and hence it had no effect on its entrepreneurial activities. On the other hand, the superintendent of the rural school district interpreted the amendment to include such revenues, providing a disincentive for entrepreneurship. With regard to the urban district, central office administrators interviewed were unsure of the potential impact of Amendment I. At the time of the interviews, none of the districts was aware of the new developments in the state education accounting system. As might be expected, the urban and suburban school districts expressed concern that they might have to report entrepreneurial revenues to the state. The rural district, given its limited scope of entrepreneurial revenue raising activities, did not see such a reporting requirement as troublesome.

Concluding Discussion and Policy Implications

Because these three Colorado school districts did not use consistent district or school level mechanisms to account for entrepreneurial revenues, direct comparisons are difficult. Looking to the state education accounting code, the only relevant category where entrepreneurial activities might be tracked was the pupil activity fund. From the perspective of the framework of entrepreneurial activities used for this study, the pupil activity fund is very limited as it is usually the source of student fees for courses, supplies and materials, and admissions to extracurricular events. In addition, this category may not capture all such fees generated in a particular district, particularly if some revenues remain at the school site level. However, the pupil activity fund represented a starting point and ultimately reinforced the qualitative data gathered. For example, the school district with the most aggressive attitude toward entrepreneurship, the affluent suburban district, raised over thirteen million dollars in its pupil activity funds alone, compared with \$167,241 for the urban district and \$288,424 for the rural district. (See Table 3.) Particularly when translated into per pupil amounts, the differences are stark: \$171 per pupil in the suburban district compared to approximately \$3 per pupil in the urban district and \$120 in the rural district. Also the suburban district had the highest per school amounts of entrepreneurial revenues when compared with the other two districts, with one elementary school raising \$100,000 in the previous school year. While in all three districts there were substantial differences between schools in the entrepreneurial revenues raised, they were most pronounced in the suburban district.

With regard to district attitudes toward equity, the suburban school district, while aware of the intradistrict inequities created by educational entrepreneurship to the point of conducting a study, had made a conscious decision to ignore the results. The urban school district was struggling with reconciling entrepreneurship with equity in a district where over half of the students qualified for free or reduced price lunches. The rural school district, with moderate amounts of entrepreneurial revenues, seemed largely unconcerned with the potential for intradistrict inequities.

Clearly, broad generalizations cannot be drawn from a small number of school districts within a single state. Further research, such as statewide studies, is needed in this area as the results of this study demonstrated educational entrepreneurship did have a disequalizing impact on intradistrict and interdistrict fiscal equity. However, one barrier to statewide studies is the variation in state education accounting codes. Currently there is tremendous variation in the degree to which entrepreneurial revenues are captured in accounting requirements. As Colorado implements a new, more comprehensive state education accounting code, school districts will be required to report a larger range of entrepreneurial revenues. Although some school district personnel may fear that systematic reporting of such revenues may act as a local disincentive, the state has the ultimate responsibility for an equitable funding system. As such, the inclusion of entrepreneurial revenues in the calculation of a school's wealth appears inevitable.

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Table 3. Entrepreneurial School District Revenues

School District	Total Number of Students	Total General Fund Revenue	General Fund Revenue per Pupil	Total Pupil Activity Fund Revenue	Pupil Activity Fund Revenue Per Pupil	Pupil Activities Fund Revenue as a Percentage of General Fund Revenues
Urban School District	52,274	292,062,218	5,099	167,241	2.92	0.06
Suburban School District	77,870	353,927,163	4,545	13,296,354	170.75	3.76
Rural School District	2,389	10,635,903	4,452	288,424	120.74	2.72

Source: Colorado Department of Education.

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Endnotes

1. The views expressed in this article do not necessarily reflect those of the National Education Association.
2. See Long (1999) for a listing of individual states and associated school finance litigation cases.
3. See, for example, Adams (1991); Bouman & Brown (1995); Addonizio (1999).
4. Please note that while the "resource base for fund-raising" will hereafter be referred to simply as "resource base," its use differs from the traditional use of the phrase "resource base" with regard to funding of schools. The traditional resource base for funding of schools consists of revenues from local, state, and to a much smaller extent federal taxation.
5. See, for example, Molnar & Morales (2000), who view commercialism in schools globally to include entrepreneurial activities such as commercial advertising and corporate sponsorships as well as the broad area of privatization (pp. 3-4).
6. The exception was the rural school district, where the superintendent chose to select only one school, based on the small size of the district.

“...Monetary benefits abound, should the program be successful...The monetary risks, should the venture fail, appear great....”

Collaborating on Web-Based Instruction in Higher Education: Benefits and Risks

**Barbara Y. LaCost
Jody Isernhagen
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The United States spends \$600 billion on education of all types each year, making it the second largest industry after health care. Dunn (2000) estimates that the typical citizen will need the equivalent of 30 semester credits of coursework every 10 years to stay current with coming changes in their fields and lives. Innovative ways of providing such access to education, an absolute imperative in the merging global knowledge society, are required. Distance education provides access through multiple technologies and oftentimes includes some on-site instruction (Dunn, 2000; LaCost, 1998). Networked education (in higher education often referred to as a virtual university) furnishes a web of educational providers that distribute services to the client at the time, place, pace and style desired by the client. In the 1997-98 academic year, postsecondary institutions reported that the most popular delivery technologies were asynchronous Internet instruction (58%), two-way interactive video (54%), and one-way pre-recorded video (47%). (U.S. Department of Education, 1999). Hundreds of university degrees are now available through distance education; one estimate suggests that 50,000 university-level courses are now available through distance-education delivery systems (Dunn, 2000). The quality of education obtained is determined both by the client (through informed choice) and by a variety of approving and accrediting bodies.

Collaboration is a requirement for future on-line education. Collaboration provides multiple arrangements and flexible alliances among participants. There is now greater availability of grant money for forging collaborations between and among institutions and accrediting bodies. For example, the Andrew W. Mellon Foundation is interested in funding collaborative technical projects (Young, 2000), and the U.S. Department of Education has announced \$10 million in awards to higher education institutions and nonprofit organizations to assist in providing access to distance-learning opportunities (Confessore, 1999).

The purpose of this paper is two-fold. The first is to describe a current collaboration between an accrediting agency for P-12 schooling and two divisions of the University of Nebraska - Lincoln. The partnership was created to offer web-based learning opportunities and specialized certification to professionals in the field of P-12 education. The second purpose is to explore the costs and benefits associated with such a partnership

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focusing on the effects on the Department of Educational Administration in Teachers College, one member of the partnership.

The Partnership

Three units dedicated to offering educational opportunities make up the alliance. The North Central Association Commission on Schools (NCA/COS) is an independent accrediting agency for approximately 8500 P-12 schools within 19 states. Membership in the NCA/COS is voluntary. The Division of Continuing Studies at the University of Nebraska - Lincoln promotes and offers technical support for the provisions of distance education coursework for all departments and colleges on the campus. The Department of Educational Administration, Teachers College, University of Nebraska - Lincoln has eleven faculty members and offers multiple masters degrees and doctorates in both education and philosophy. The programs address administration both in P-12 schooling and in higher education and leadership.

NCA/COS promotes standards for school accreditation that extend the meaning and scope of our traditional view of state standards. The NCA/COS standards, aimed at improved learning for students, differ from the state accreditation standards that have been established as a part of a school improvement process. Specifically, the NCA/COS is interested in providing educators with skills and expertise to improve learning for students; *i.e.*, to lead local school improvement processes, not merely establish them. The organization's interest was piqued by the wave of school reform issues that have inundated educators over the past few years and that are likely to confront educators in the years to come. School districts need qualified persons to lead and monitor their school improvement efforts. NCA/COS sees school administrators and teachers with administrative responsibilities as groups that would use the skills and expertise to implement and maintain reform efforts. But how to encourage the educators to invest in themselves for the aim of improving schools?

The NCA/COS has committed to certifying educators who meet a series of criteria as School Improvement Specialists (SIS). The major component of the criteria includes the completion of a four graduate-level course sequence (12 credit hours). NCA/COS leaders anticipate training 4500 SISs. The question that emerges: How to provide a common core of coursework to educators in 8500 schools in 19 states?

In order to provide commonality to the certification standard, web-based courses are to be offered on-line through an interactive web-site. The three units have joined hands-and dollars-to provide four courses to educators that meet NCA/COS selection criteria and who are involved in education at NCA/COS accredited schools in the 19 states. The coursework requires a two-year commitment from students and their respective schools.

Initiative

Called the NCA School Improvement Specialist Program, the initiative is offered exclusively through the University of Nebraska's Department of Educational Administration with support from the university's Division of Continuing Studies. The collaboration between NCA and the two divisions of UNL covers a six-year period, beginning in 1999 and ending officially in 2005, with a contingency to continue the program if the evaluation supports such an effort. The initiative is divided into two phases, development and delivery. The 1999-2000 academic year was devoted to development. The remaining five years is focused on the delivery of the program and will, by the close of the contract, have involved three cohorts of students. Each cohort will take four courses, one per semester, for four consecutive semesters, with limited access during the summer sessions.

The Students

Qualifications to engage in the program include three or more years of experience in education and, of course, the desire to provide leadership in

the P-12 setting. The first cohort is made up of ten educators that promote and direct the professional development efforts for NCA/COS, members of the steering committee for the project, sub-committee chairs, invited external leaders to schools, teachers, and school administrators. In addition, the NCA/COS staff has asked for an educator to be recommended by each of the 19 state directors. Subsequent cohorts will be formed as individuals complete the application procedure.

The Certificate

The NCA Credential as a School Improvement Specialist will be issued to those who:

- Complete the four-graduate-course sequence,
- Produce a portfolio within the course sequence that meets rubric criteria,
- Provide documentation from three professionals in the student setting of school improvement in the student's context,
- Participate in a meeting with Commission on Schools staff and the NCA/COS state director for networking purposes.

Expectations of the Initiative

The development team from the two UN-L units and NCA/COS met extensively through the 1999-2000 academic year to create the course content and sequence of coursework. The course content is centered on developing, implementing and evaluating a school improvement process for a specific P-12 site. The plan calls for multiple sections of each of the four courses to be offered over the five-year delivery time period with an additional year added to "teach out" the sequence with the stipulation that no new course work be initiated.

A total of 131 sections of course work are planned over the five-year period of time-112 sections during the contract period and an additional 19 sections that must be taught as "teach out" sections after the close of the contract. Each course, after its initial offering, will be available through multiple simultaneous sections of course work planned from 2000-2001 through 2004-2005. Course 1 commenced in the fall of 2000 and will then be offered over the next four years in multiple sections terminating in 2005. Course 2 will commence in the spring of 2001 and 29 sections will then be offered through the spring semester of 2005 with four sections available to "teach out" the sequence for students who are completing the program. Course 3, similarly, will commence in the fall of 2001 with multiple sections offered until the 33 sections have been completed. This strategy requires six "teach out" sections. Finally, Course 4 will commence in the spring of 2002 and will be offered in multiple sessions, culminating with nine "teach out" sessions after the close of the five-year cooperative effort.

The partnership members expect to have 42 enrollees per each teaching section offered resulting in a maximum of 1,376 students [(42 enrollees * 131 sections) / 4 courses per student]. Allowing for a 10% attrition rate over the two-year period of courses, the projected number of students to complete the four-course sequence is 1,238 (42 enrollees * 131 sections, less 10% of the total, divided by 4 courses per student). These 1,238 students, at \$3500 per student for a four-course menu, would generate for the partnership in excess of \$4.3 million over the time period.

Costs Associated with the Program

Waugh and Handler (1998) point out that both technical and curricular support must be provided for distance programs to function effectively. Access, training and support are three essential areas and include costs to both students and university personnel. In this program, there is also a major cost in marketing the program to ensure that participants know of and recognize the relevance of the product offered to the educational environment. NCA/COS will undertake the marketing of the program as well as offering expertise on content associated with the standards for

improving the learning of students in accredited schools. The Division of Continuing Studies at UNL is providing all technical and managerial support. The Department of Educational Administration has shouldered the responsibilities associated with content development and instructional strategies.

The total development and delivery costs are forecast to be nearly \$2.7 million. The members of the partnership between the North Central Association and two divisions of the University of Nebraska - Lincoln assessed themselves a total of \$37,500 of "seed money." In addition to the actual dollars committed to the project, the two entities at UNL have projected a portion of salaries and benefits of personnel and a portion of general management of the departments to the costs of the project. NCA/COS posts no costs in the development phase of the program although they have had personnel involved with the development team.

Costs were partitioned into the two categories of development and delivery. Development costs totaled \$ 456,900 and delivery costs are projected to be approximately \$2,214,000. Tables 1 and 2 display the costs across a variety of components required to implement the initiative. The data in Table 2 illustrates that the bulk of cost to the Department of Educational Administration in the development phase is related to the purchase of content experts (both faculty and consultants) and in the delivery phase, in the area of course instruction (again, in faculty). There is a two-pronged commitment on the part of the three members of the partnership— cash input and a portion of annually budgeted salaries and general unit costs for services to be provided. The layout of the costs across categories in both tables illustrates that the Division of Continuing Studies assumes the technical and provision costs. The one-time entry of nearly one-quarter of a million dollars attributed to NCA/COS is expected to support marketing and to offset costs associated with putting the program in place.

Revenue Associated with the Program

Each of the three entities of the partnership provided initial program development funds that totaled \$37,500. Students are assessed a fee of \$875 per course (\$3,500 for the four-course sequence) and are guaranteed no increases. This fee includes NCA/COS credential fee, all university fees including tuition, graduate college fees and distance education fees, and the software required to access the web-based programs.

Table 3 provides a summary of the costs, revenues and revenue sharing that is anticipated. The partnership has projected a \$4.3 million revenue stream from program fees based on 42 students per section and 131 sections per course offering (32 sections for course 1 and 33 sections for each of the subsequent three courses, including teach out sections after the close of the contract). Cost recovery is projected by the beginning of the 2002-2003 academic year. The partners expect to share the excess

Table 1. Program Development Costs

Components	Dept. of Ed. Admin.	Div. of Cont. Studies	NCA/COS
Coordination	\$ 6,255	\$ 3,342	\$ -0-
Instructional Design and Production	-0-	110,988	-0-
Instructional Materials	3,663	3,850	-0-
Content Experts	283,506	-0-	-0-
Permission Fees	-0-	3,350	-0-
Travel	22,191	19,755	-0-
TOTAL	315,615	141,285	

Table 2. Program Delivery Costs

Components	Dept. of Ed. Admin.	Div. of Cont. Studies	NCA/COS
Program			
Coordination	\$119,562	\$ 19,340	\$240,225
Server Maintenance	-0-	131,961	-0-
Tech. Support	-0-	227,425	-0-
Materials Handling	-0-	124,964	-0-
Student Services	-0-	170,406	-0-
Course Instruction:			
Faculty	\$783,253	-0-	-0-
Equipment/Adjuncts	59,100	-0-	-0-
Grad. Assistants	89,264	-0-	-0-
Enrollment Costs	-0-	247,574	-0-
TOTAL	1,051,179	921,670	240,225

Table 3. Summary of Costs, Revenues, and Revenue Sharing

Summary Item	Details For Each Summary Item	Total
Costs:		\$2,669,974
Development	Delivery	
\$ 456,900	\$2,213,074	
Revenue:		\$4,370,500
Development Funds (seed money from the three entities)	Proposed Program Fees (\$875/course * 4,952 enrollments in 131 sections [based on 42 students/section less 10% attrition rate])	
\$ 37,500	\$4,333,000	
Revenue Sharing:	Revenues less cost recovery for 1999-2005	\$1,700,526
	Dept. of Ed. Admin.	\$ 566,842
	Div. of Cont. Studies	566,842
	NCA	566,842

revenue generated by this technology initiative. The potential revenue available for sharing after cost recovery is forecast to be approximately \$1.7 million, or \$566,842 per unit over the life of the contract. Of course, the numbers of students enrolled in sections may vary and that factor certainly impacts the point of cost recovery. In fact, 24 students enrolled per section would fully meet all development and delivery costs over the six-year period with minimal revenue production.

Risks and Benefits Associated with the Initiative

Bromley and Jacobson (1998) suggested that technology initiatives in education should be subjected to four questions.

- Is this initiative technology driven or educationally driven?
- Does the initiative have social vision built into the technological delivery, and, if so, what are they?
- Does the initiative consider the context of use?
- Does the initiative consider disaggregation of the impact?

We want to discuss this initiative in the context of these four areas, with a major emphasis on question four. First, is this initiative technology driven or educationally driven? Bromley and Jacobson suggest considering if the initiative is undertaken as a means to reach a goal or is it

undertaken to capitalize on resources available for investment in technology. In this case, the initiative is educationally driven. The three units were not seeking to create an exemplary technological innovation nor was their primary interest that of revenue generation. Specific goals were articulated by NCA/COS in light of the national emphasis on standards. A web-based approach to training 4500 school leaders for a standardized certification is a logical and rational solution.

Second, does the initiative have social visions built into the technological delivery, and, if so, what are they? Pedagogical and organizational issues have been at the center of the discussion of the development team. Bromley and Jacobson ask program developers and implementers to consider if the technological medium being used is compatible with multiple views of the purposes of schooling. The development team—the content experts and the consultants, in particular—has focused content and context above the use of technology for its own purpose.

Third, does the initiative consider the context of use? The use of technology to offer this web-based sequence is centered in schools and on school personnel. The screening procedure, the ultimate end result (certification by NCA/COS), the marketing that will address the benefits to both schools and school personnel and the provision of software, books and materials from one central source are means by which this team has tried to link context to the initiative. Further, the course content is developed in such a way that plans and processes for school improvement will always be site specific.

Fourth, does the initiative consider disaggregation of the impact? Bromley and Jacobson suggest that implementers determine both who, in the long run, will be helped by the offering and what harm may occur because of this offering. We believe that this question is really about the risks and benefits that are produced as a result of this initiative.

For the Division of Continuing Studies, the unit that provides technical and mechanical support for the provision of distance education courses at the university, the benefits are mainly monetary. The unit supports itself through grants and contracts; this venture, if successful, provides an influx of dollars that will assist them in maintaining and improving their services to the university as a whole. A spokesperson for the division stated that the greatest loss would be the development costs, because everything is in place to provide delivery; all that is needed is the minimum number of 18 students.

For NCA/COS, benefits include a more informed administrative force within the organization itself, recognition of teachers who are dedicated to leadership through certification, greater credibility for teacher leaders that may assist them in forging closer linkages between themselves and their teacher-colleagues in P-12 buildings across the nation. Of course, the risk is that, in each of the described benefits, those leaders may not perform well, or may be unable to provide enough impetus to “improve” the school setting, thus impacting linkages and credibility. The ultimate risk is that certification as a school improvement specialist may never result in improved processes in the school. If this should be the case, the initiative is a costly venture—costly in terms of dollars and time on the part of students and school districts, costly in terms of social impact for NCA/COS.

What are the risks and benefits to the Department of Educational Administration? First of all, involvement in the initiative aligns the department with long term college and university goals to increase student enrollment and to generate grants and contracts at the unit site. The initiative, if successful, provides a model for other departments in the college to pursue. The department’s enrollment in P-12 coursework will of course be elevated. More important, the department has an opportunity to increase the number of master degree candidates seeking administrative expertise and certification. Though the initiative only offers four courses for NCA/COS certification, it provides the opportunity for the department

to encourage those students to apply for admission and take other coursework offered by the department as a part of a master of education degree. Furthermore, involvement in the initiative, whether ultimately successful or not, provides a multiple year, multiple-subject research stream for faculty members.

Monetary benefits abound, should the program be successful. With a current \$50,000 per year budget for operating costs and travel, an influx of dollars for a three-year period of time provides multiple opportunities for departmental development. Furthermore, the department will be able to invest in state of the art technological advances, provide more comprehensive faculty development opportunities, provide graduate student assistance for future research projects, provide greater parity to faculty research endeavors by equalizing resources between both grant-funded research and self-funded research, and show good faith for matching funds for future grant-seeking initiatives.

The monetary risks, should the venture fail, appear great, but the costs associated with various inputs are already built into the departmental budget. Physical resources are re-allocated to this alternative use of personnel and equipment. The worst case scenario is no student enrollment. The original \$37,500 seed money would, of course, be lost (however, departmental contributions came from internal grants offered by the university), and the half-million dollar investment in the development phase (through reallocation of already committed resources) might, at first glance, seem ineffectual or futile. But both seed money and development dollars were spent during the first year for travel to brainstorm, to confer, to consult, and to build content and strategies. The faculty involved has gained extensive knowledge about course-building and adapting content for web-base courses. Professional development gains certainly have occurred, and thus offset costs associated with the activities. Of greater concern is the effect of such an investment on the organizational structure of the department. Risks of over-extension and of reallocation of unit dollars from current initiatives to an unknown initiative should be considered. Certainly the impact on organizational morale and departmental climate may be either positive or negative. The devotion to new program development prevents devotion to other initiatives in each of the divisions and shifts, in the case of the Department of Educational Administration, the burden for on-going academic programs and services to the shoulders of the remaining faculty and staff. With its dual doctoral program and multiple masters programs, the services of all faculty members are likely to be spread even more thinly than is the current practice.

Closing

The purpose of this article was to provide an overview of a six-year collaborative venture undertaken by two units within a university and a national accrediting agency and to assess the benefits and risks involved. The members of the alliance, called the NCA School Improvement Specialist Program, are the North Central Association Commission on Schools (NCA/COS); the Division of Continuing Studies at the University of Nebraska-Lincoln; and Department of Educational Administration, Teachers College, University of Nebraska-Lincoln. Development and delivery costs as well as revenue potential were presented. Using a framework developed by Bromley and Jacobson (1998), the risks and benefits of the partnership were assessed. Now in its second year, the path ahead for the initiative has been plotted, the journey has begun; but the outcome is unknown.

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“...Education finance is at a crossroads...Can it maintain a ‘winner-take-all’ political economy?”

We Can Do Better: An Essay on Education Finance and Generational Continuity in a Globalizing Economy

Maureen W. McClure

For the last two decades, education finance research has been framed almost solely within a traditional policy framework of neoclassical economics. This Hobbesian (North, 1981) framework provided analysts with well-constructed theories and methods of measuring transactions. These allow our field to move beyond the problems created by relying primarily on the contending opinions of powerful politicians and the junkyard politics of competitive self-interest.¹ This framework will remain necessary to the field of education finance, but it is no longer sufficient for today’s reform policies. Other frameworks are successfully contending for political and economic legitimacy. Some of them do not share our understandings of the truth.²

Education finance is at a crossroads. Can its transactional, domestic orientations adequately meet the growing challenges of reform policy in a globalizing economy? Can it maintain a “winner-take-all” political economy (Frank & Cook, 1995)? During the twentieth century, educational finance policy assumed that political, economic and cultural boundaries were roughly contingent. This may no longer be true, if it ever was. Today’s school districts are sometimes rent by religious ideology and economic wealth.

Globalization is ripping apart local communities, realigning them into translocal political, economic and cultural networks.³ Globalizing economies are rapidly both generating and concentrating transnational wealth (Arnove and Torres, 1999). Education finance policy remains over focused on domestic distributional (access and equity), institutional (class size, teacher quality, etc.) and sectoral (public v. private) policy issues, and underfocused on revenue generation, cultural expectations and their consequences in a globalizing economy. This must change.

As globally mobile wealth grows comparatively faster in the private sector, it is reasonable to predict that market pressures for tax relief and deregulation will weaken governments. At the very time that education finance policy most needs to be seen as a tax investment strategy for regional and generational development, reformers quibble over local means, not transgenerational and transnational ends. Alas, others who may share our same general goals may not agree with our means for creating fair policies. Education finance analysts need to learn how to speak convincingly to others who may share some but not all of the assumptions, attributions and expectations of our policy frameworks.

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There are many ways of consistently framing policy. Some of them tap into deeply held beliefs that are rarely examined for their historical and cultural roots, or the filters they create to include or screen out meaning. Only three are briefly discussed here. Also included is an example of schooling in Bosnia and Herzegovina that is not easily contained by transactional market frameworks.

The acknowledgement of multiple frameworks as a method of addressing complex policies requires a different approach to reform. Salaries comprise the largest part of our budgets, so we need to better understand how different policy frameworks tacitly treat teachers. Instead of stating our positions as self-evident, we increasingly need to acknowledge different frameworks/schema that belong to key stakeholders. We are not bound to treat all other frameworks equally. We do need to make sure our frameworks are clear, compelling, and well-situated within the contests for legitimate financial value. Indeed, we can offer others a great service by working with others to map, compare, and share complex interpretations of what will be often contradictory views, especially when the contradictions are within.

Neoclassical Policy Frameworks: One Best System of Natural Laws

Neoclassical economics rests on powerful historical beliefs that natural law can best explain social order. In the closing decades of the twentieth century it ran headlong into cultural and historical traditions that did not accept the basic assumptions needed for its framework or scripts to function. Most people don’t think much about what it means to be cognitively committed to the traditions of meritocracies, theocracies and democracies. Most of us think even less about the contradictions we create for ourselves by our unreflective, simultaneous commitments to more than one framework. Ancient traditions may script conflicted expectations.

Schemas are scripts of assumptions, attributions and expectations held together by an internal logic consistent with personal experience. They help us learn to create patterns of cultural responses that can be considered automatic. They can be very useful for everyday activities. For example, according to Azar (1997), a script for a living room for a middle-class child in US suburbs may contain assumptions the living room contains a couch, rug, television, books, etc. There will be attributions that living rooms are for certain purposes and not others, such as bathing. If this child walked into a living room and saw a large purple cow sitting in the middle of it, while the experience may be delightful or scary, it would not be expected. It was not part of the living room schema, which scripts expectations to exclude purple cows.

What do purple cows have to do with education finance policy? Schemas help us to map, compare and share our varied interpretations of experience. They help us understand what meaning we include and what we filter out. For example, Herbert Spencer used neoclassical natural laws to justify Social Darwinism. He saw education as the mechanism for sorting and promoting the natural superiority of those who were destined to lead by birth or effort. Spencer may have unacknowledged descendents in the teaching profession—unity under one voice for one best way.

For example, a math teacher may say she teaches math, not children, and if some children can’t keep up, this is natural and not her problem. Her academic goals may be to identify the best students, have them attain the highest scores on achievement tests, and see that they get into the best schools. She may have strong support from some parents if she fights inclusion mandates, and may be among the most easily recruited for charter or voucher schools. Her meritocratic frameworks tend to filter out the problems of divisive social meaning. If neoclassical education reformers, for example, focus on the accountability produced by winner-take-all achievement scores, then what are the implications for inclusion

policies based on civil rights? Will our math teacher believe inclusion taints the purity of meritocratic ideals?

Our neoclassical traditions are rooted in late medieval Deism. The claims to education as a social science are based on this association. Deism asserts that God is the great Clockmaker of existence. Deism is a system of existence or ontology that claims "...solely on the evidence of reason, in the existence of God as the creator of the universe who after setting it in motion abandoned it, assumed no control over life, exerted no influence on natural phenomena, and gave no supernatural revelation.." (*The American Heritage Dictionary of the English Language*, 1981, p. 348). If one assumes that God is the universe's collective Subject or Mind, then Deism schema neatly eliminates the mind-body distinction; all knowable phenomena is material—a mechanism subject to the endless causal forces. Intelligence is necessarily assumed to be external to the mechanism. Descendants of this rich tradition include logical positivists, behaviorists and market evangelists. In education, those with deist ancestors focus their research efforts on the material world, from discovering how brain functions cause learning to how to economically engineer efficient markets.⁴

Within this framework, teachers function as factors of a production process designed to efficiently engineer achievement. Thus teachers are essential, but not necessarily significant, participants in ordered, externally controlled systems. Reform policy may contain tacit assumptions that classroom teachers, like factory and fast food workers, function as conduits for the external intelligence of managers. From this schema teachers are assumed to be in need of external control and managerial guidance so they don't 'shirk.'

External market control for education usually frames taxpayers as managers and parents as consumers. Governors are increasingly adopting a market identity of transactional consumption. Governors have greater incentives to act as consumer protectors than teacher empowerers, setting curriculum standards to regulate the education profession, and offering education consumers more convenient choices through charters and vouchers.

From a production framework, teachers are meant to be institutionally contained and controlled. Like doctors in HMOs,⁵ they are viewed primarily as input costs to be reduced relative to outputs. Teachers may be seen as assets that need to be developed. Market efficiency from this view suggests, but does not demand diminished roles for teachers. For example, cost efficiencies suggested by Blaug (1987) might be achieved by schools that: a) hire teachers to serve 'at will;' b) reduce professional rents (union membership); c) introduce substitute technology for labor; and d) increase the use of standardized curriculum 'packages' and testing mechanisms. A 'deskilled' teacher is a cheaper teacher. A professional, independent teacher designing safe places for children to learn could be a purple cow.

Fundamentalist Policy Frameworks: One Best Way Through God's Voice

Deism is a direct counter to another important system of existence held by millions of people: Theism. Theism claims "belief in a personal God as creator and ruler of the world" (*The American Heritage Dictionary of the English Language*, 1981, p. 1334). Many teachers, administrators and elected officials in US schools live by the cognitive frameworks created by these beliefs. Some theists also believe that God reveals His mind through chosen special agents. These special agents or visionaries are destined by God to explain the world; therefore, the state needs to be a theocracy, unified by a common understanding and acceptance of God's voice.

There have been at least two thematic responses to Theism over the centuries: Divine Right and Chosen Ones. Divine rights advocates claim the right to rule because they are descended from God or gods directly or from one of God's most important agents.⁶ The chosen ones claim to be

God's representatives on earth because God speaks personally through them. He has called on them to bear witness to error and to lead their communities back onto the path of righteousness. They are above the laws of men and nature because God speaks to them directly.

Educational reform policy from this framework focuses on the moral order of social identity. Theists know who they are because they exist in relationship with God. Teaching children to think critically and independently may put them at odds with the need for the loyalty of faith. How many good-hearted public school teachers took what they thought were well-researched educational reform models into classrooms, only to run into buzz saws of parents, preachers and committed others who appeared to be unable to translate the school's perfectly reasonable explanations? Few school districts know how to take pulse of their communities so they can adequately predict budgetary and governance responses to reform efforts.

Theocracy is quite clear about its opposition to democracy (Lugg, 1998). The necessarily reflective, self-questioning, democratic self-governance of a generationally informed people is by definition inferior to the rock-solid certainty of God's absolute laws as told through His chosen agents. Many theists who fought for political control of public schools in the closing years of the twentieth century are now looking for tax exits and alternative forms of subsidies for schooling in which they can control their children's socialization.

Vox Populi Vox Dei: Learning As Linguistic Engagement

Not all reformers view education as consumption composed of an aggregation of choices of schooling preferences and marketable packages: (textbooks and curriculum materials, training modules, information systems and standardized testing). What happens when learning occurs within the imaginations of individual children, is unique to each person, and is not easily observed?

Cognitive frameworks for learning, central to teacher education reform for many years, addresses the problems of multiple validity created by many voices, many developmental, cultural and historical experiences and no external authority to control them. Research on cognition 'situates' learning within the context of social experience (Lave and Wenger, 1991). This adds a new dimension to educational policy reform by creating a critical shift in the portrayal of teachers not as passive responders to external stimuli, but active, engaged professionals creating meaning in their lives (Reed and Ross, 1998a, 1998b).

Far from assuming a neoclassical framework that tries to discover natural laws for social order, this framework focuses on how children in communities create meaning for themselves.⁷ Cognition is more than literacy; it is the responsibility that children assume for the construction of their own schema or voice. It resonates with the concepts of self-governance through civil discourse needed both for democracies and market economies. Some cognitive frameworks are descended from traditions that hear the irresistible voice of God (Vox Dei) in the voice of the people (Vox Populi), not just in His chosen agents.

Linguistically engaged teaching recognizes the importance of acknowledging parental and community traditions.⁸ Engaged teachers daily need to be able to rapidly, often 'intuitively' assess each student's content mastery, cognitive development, and general well being. No small feat. It is this need for mindful, continuous assessment of individual learning within a generational conversation that places the teaching and learning relationship at the center of education.⁹ From this framework, professional authority in the classroom is at least as important as institutional control.¹⁰ Teachers, students and their communities create and sustain these local networks through generational responsibilities for each other. Some aspects of it are 'in loco parentis' and thus outside of market authority.¹¹ Teachers may also act as daily guardians of children's security, creating 'safe havens' for learning, protected from the violence around

them. Teachers need institutional authority to protect children. They also need professional and community networks to maintain their autonomy.

Constructivists generally reject the objectivity of deists, claiming that the material is not a perfect substitute for mind, and that truth can be as much about personal and social portrayals of self and others as it is about the discovered truths of collective observation.¹² Constructivists revive the mind rejected by deists. By focusing on the mental constructions of thinking, language and meaning making, they reject the high priority given the management of certainty through laws in neoclassical frameworks. Instead, they give high priorities to the acknowledgement of ambiguities created by many different voices, and personal rights and responsibilities for the affirmation of 'others'. If the policy hallmarks for neoclassical frameworks are consistency and prediction, then the policy hallmarks for constructivists are portrayal and consequence.¹³

Education finance needs to begin to expand its reform policy repertoire to better account for research in classroom teaching and learning. What will be the consequences for revenue generation as states mandate more and more control of classroom time through exclusive academic standards AND inclusive civil rights?

Teachers Design Safe Places For Learning Generational Conversations

Education is a generational conversation, fragile and easily lost. Teachers are often lone sentinels on the generational frontiers of civilization. During crises, institutions can collapse as teachers and students are abandoned. A generation can be lost. During the war, teachers in Bosnia and Herzegovina responded to more than market forces (Vargas-Baron and McClure, 1998; McClure, Dizdar, Fullerton & Lin, 1997). Daily they made heroic efforts to ensure generational continuity. When soldiers deliberately shelled schools for sport, teachers could not turn to the institutions and the external authority charged with protecting them.

They turned instead to each other, to parents and to neighbors. When the power was cut, they taught in the dark. When buildings were destroyed they taught in basements, in homes, wherever they could. Meliha Alic, the director of the Druga Gymnazija in Sarajevo kept her school open six days a week during the siege. Students and teachers from all over the city daily risked their lives to go to school. Their stories of courage and inventiveness in the face of inhuman violence are remarkable. Their school was an idea, a form of resistance, an assertion of humanity and dignity while their worlds collapsed around them. Education itself became a national symbol: the preservation of a fragile generational legacy. Children learned math and science, they sang and created stories, they created beauty and comfort for each other. These bold, reckless and artful performances demonstrated an engagement with and affirmation of life that ran far deeper than the reporting ink of standard test scores.

Teachers and students were 'there' for each other, through the daily drama of cultural insanity. They often cared for and protected each other from "giving up" on life. This mutual responsibility was not limited to teachers. When there weren't enough teachers, parents taught. When parents couldn't teach, neighbors risked their lives to teach the children of others. Not all the stories are noble, but together they tell a story of education as a humanitarian response, an affirmation of beauty and civility that confronted bullies.

Without the security of stable institutions, education was transformed into a communications network among teachers and committed community members who moved heaven and earth to help their children learn in hell. This commitment to a generational legacy re-asserts the importance of responsible communities creating 'safe places' for children to learn. How can children learn to inherit a complex society if they are too scared or too focused on achievement scores to learn, play and

invent? It should not take a war to remind us that teaching and learning is more than a market transaction, but a generational duty and the hallmark of a civilized society.

Multiple Frameworks for Complex Policy: Now What?

Multiple frameworks can be quite useful to map complex stakeholder perspectives in culturally complex conditions. They can help us better understand the inclusionary, participatory, policymaking practices of a voiced democracy. Democracies differ from neoclassical meritocratic and theocratic traditions because they rest on the need to negotiate the ambiguity of many voices, rather than discovering the single, certain voice of God or Nature, as heard through the chosen ones.

Policy dialogue between people speaking from different frameworks can create misunderstandings because they cannot, by definition, share the same assumptions, attributions and expectations. Educational policy analysts increasingly need to be able to speak the 'languages' of these different frameworks, especially if they constitute the 'languages' of major policy stakeholders. In a democracy, theists can win elections and become school board members and legislators. In theory, theists could vote public funding for both democratic public schools and meritocratic vouchered schools out of existence. Education finance policy analysts are increasingly called on to become 'multi-lingual' so they can help ensure adequate public and private investment in education.

Education finance policy analysts need to learn how to comparatively map ambiguity (Paulston, 1999). They need to better understand the voices of those stakeholders who pay taxes, and those who avoid them. This mapping requires a scholarly acknowledgement of, if not an acceptance of, purple cows. Policy analysis requires a regular commitment to include the voices of legitimate, civil counter positions.

Our field rests on the willingness of one generation to invest in the next. It rests on cultural assumptions that other people's children are not mistakes to be contained and controlled or silenced. We can no longer afford to assume that our values are self-evident truths. We need to explain and defend them, convincing others that each of us has generational rights and responsibilities that cannot be traded away in the marketplace or delegated in the voting booth.

Teaching and learning reach far beyond our traditional understanding of education as achievement scores. They serve as the core of a child's generational identity and understanding of the world. Educational reformers tend to ignore the issues that parents and many, if not most, teachers cannot—that they are charged with a generational responsibility that goes beyond the transactional identities of economic hierarchies.

Education is a critical investment in generational development because so much can be accomplished for so little. After so many years of sovereignty contests, where winners take all and others have no voice, is our field ready for allies?

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Endnotes

1. These policy frameworks' greatest strengths derive from their capacities to differentiate independent external (exogenous) forces on rational (or passive mechanisms) in comparable ways. Generic rationality is a particularly useful method for understanding the responses of traditionally rational actors (e.g. to laws of supply and demand). The strengths of generic causality and statistical methods efficiently engineer generic

knowledge both sequentially and comparatively into a predictable 'one best way' that minimizes error terms.

2. Education finance analysts can no longer assume that stakeholders in the education reform process necessarily share the same 'ontology' or system to explain existence. Some claim neoclassical frameworks contain a deep structural flaw called an 'ontic fallacy.' This is committed by "understanding knowledge as a reflection, a dependent effect of an independent cause ("real objects").. [This]...naturalization of knowledge to, or its determination by, being...This necessarily involves the dehumanization of discursive, justifying subjects.." (Bhaskar 1991:32). Unfortunately, many people throughout the world associate neoclassical traditions with colonialism and the intentional, systematic and pervasive silencing of voices through the use of generic research language (Said, 1993).

3. A University of Pittsburgh professor's local talk about Outcomes Based Education (OBE) was printed in a church bulletin in Texas. The world price of oil may drive local revenue generation as much as local trade (Barber, 1996; Friedman, 1999). Local retail chain stores may be closed, even if they are profitable, if the demand for global return can generate higher profits elsewhere. Immigrant communities that remain bilingual find economic reward in diaspora networks.

4. Indeed, the scientific legacy of Deism-objectivity- requires a "god's eye" vision that is generically outside of the influences of history and culture. Understanding 'reality' means seeing the world as a visible and knowable causal mechanism to be measured and manipulated externally. Those who are the most objective earn the right to govern in a meritocracy based on natural law.

5. It is this engineering model that has seized thinking about educational finance policy reform, treating schools as production processes. Alas, as strategists teach us, great strength in the context of an 'engineered economy' could become great weakness in the context of an 'innovation economy.' Engineering thinking is structured to efficiently produce and distribute goods such as computers and toothpaste. Alas, these frameworks may prove clumsy in the face of new economy issues such as innovation through civil discourse (Freidman, 1999; Arnove & Torres, 1999).

6. In Tibet, head monks are seen as living gods who have reincarnated over many centuries. In Japan, the imperial throne is linked to the Sun God. In China, the emperor was the Son of Heaven. In Egypt, early pharaohs were considered gods in their own right. Usurper pharaohs would claim that a god visited their mothers and that they were the product of that union. After suffering military defeats, pharaohs increasingly portrayed themselves as God's agents. After the pharaohs lost Egypt to the Greeks and Romans, the priest class retained claim to privileged access to the voice of god. In Rome, a ruler could be made a god. In Europe, much of the ruling aristocracy believed it had a Divine Right to its governing claims.

7. Here education is not a series of concrete packages of materials applied in an organized sequence of steps that result in learning for a 'generic' student. Learning instead results from the highly complex linguistic interactions of individual teachers and students. The quality of this interaction or engagement is very important because it requires a construction of self and other through interactive discourse.

8. The construction and responsible ownership for the ways in which individuals and communities learn to portray themselves and others is at least as important as the demonstration of behavior acceptable to others, which is the center of achievement production. Teachers need to understand children not only as unique individuals with quirky and hopefully joyous imaginations, but also as children who are deeply connected to their families' and communities' cultural and historical experiences. These connections may not define a child's classroom experiences, but they can rarely be ignored.

9. Students are linguistically connected to teachers in ways not possible on the shop or sales floor. Teachers model logic, imagination and civility through their interactions with children. What is learned is more than literacy or vocational skills. What emerges is the test of a self-governing society—the quality of judgment that demonstrates competence, civility and inventiveness. Each student needs to develop his or own reflective and inventive voice, situating it within histories and cultures of many generations. Neither commercial packages or ideological scripts can substitute for the single, real voice of an excellent teacher.

10. Students inherit not only language skills from teachers, but social skills and aesthetic views as well. Teachers are not the sole proprietors of these generational conversations. They share this privileged relationship with parents and a civil community.

11. Markets are poor parents because they accept violence. Businesses are allowed to fail and die. Children cannot be eliminated because consumers construct them as market inefficiencies.

12. Some constructivists believe much is lost in the quest for the certainty of materiality at the expense of social identity within a community. Scholars, such as Kuhn and Feyerabend argue, knowledge production is an irreducible social process frequently open to revision and transformation..social systems are open and historical in character... Hence...theory is necessarily incomplete.” (Bhaskar, 1991).

13. Take two children, both the same age. One child has just moved to a different country. A classroom teacher discusses soccer. One child has never seen or held a soccer ball, has never seen a game and knows no one who has. The other child's father is an international soccer star. The teacher who has both children in the same class should not expect both children to learn the lesson's objective in the same way.

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