EDUCATION FINANCE:

More money or different spending choices. What factors make a difference?

The latest in a series of reports on the changing face of public education

January 2005

education | evolving

A joint venture of the Center for Policy Studies and Hamline University

ABOUT EDUCATION|EVOLVING

Millions of America's students head off to school each morning sporting brightly colored backpacks and determined to make this their "best school year yet." At the same time, federal and state policymakers are making tough new demands that our schools change and improve – so that "All students learn at high levels." New standards, tests, timelines and consequences are all being put in place to make sure that "No child is left behind."

Yet, all across the country, many policymakers, journalists, teachers, parents and students themselves are troubled by a haunting feeling that all this effort may not really produce the degree of change and improvement that we need. At a minimum, we are now taking a series of risks that are neither wise nor necessary to be making with other people's children. These are, after all, demands and results well-beyond what we've ever expected of American public education – all at a time of severe budgetary pressures on states, districts and individual public schools.

That, at least is the serious concern of a small group of Minnesota-based public policy veterans who have come together as Education|Evolving… a joint venture of the Center for Policy Studies and Hamline University. The individuals behind this initiative believe…

… it's an unwise and unnecessary risk for the state and nation to be trying to get the results we need solely by changing the schools we now have…

… the issues about teachers and teaching should not be debated only in the old employer/worker framework…

… the solution to maintaining financially viable public education in rural areas may not lie in the three old 'solutions' of excess levies, consolidation and state aid…

… today's schools should not go on largely failing to take advantage of new electronic technologies and other substantially different ways of teaching and learning…

… and the critical discussion about the future of K-12 education in Minnesota and nationally must not proceed solely as a discussion among adults, with students largely left on the outside looking in.

Education|Evolving is undertaking a number of initiatives during the current year. They include a national initiative to convince policy makers, education reform leaders, journalists and others that *creating new schools* should be an essential element in achieving needed changes and improvements in teaching and learning – at least equal in importance to *changing the schools we now have*.

One focus of this initiative is to introduce the concept of an "*Open Sector*" – to help create the kind of legal and political environments in which new schools can be created and succeed. Another is designed to challenge the fundamental premise that teachers in schools must always be "employees." Another initiative is looking at the premises used in asking the critical question, "How are chartered schools doing?" Other ongoing Education|Evolving projects focus on strengthening and enhancing the role of the agencies and organizations that sponsor chartered schools – and on how policymakers, journalists and others can more routinely and substantively tap into the experiences and perspectives of students and of young people not now attending school.

Education|Evolving's leadership is provided by two Minnesota public policy veterans: **Ted Kolderie**, senior associate at the Center for Policy Studies, and **Joe Graba**, a senior policy fellow at Hamline University. Its coordinator is **Jon Schroeder**, former director of Charter Friends National Network. Education|Evolving's activities are regularly updated on the initiative's unique and continually refreshed web site **www.educationevolving.org**. To receive print and electronic updates of Education|Evolving initiatives, contact **info@educationevolving.org.**

Education Finance

More Money or Different Spending Choices?

The latest in a series of reports on the changing face of public education

JANUARY 2004

How money is spent matters, not just *how much*

Introduction

The drive to improve student achievement in our public schools has focused much attention on the question of money: Will more money improve our schools?

The presumptive answer has been yes. Polls report that, nationwide, seventy-five percent of Americans are willing to raise their taxes by $200 to $500 per year to improve their schools. School district referenda for higher taxes for more education spending are commonplace.

Numerous lawsuits have asserted a connection between money and student achievement, pressing for inter-distict equity, adequacy, and more recently, intra-district equity. Yet none of these efforts has been able to demonstrate that more money actually leads to higher student achievement. They simply assume that more money is the answer, without considering the way it is spent or the effectiveness with which it is spent.

The empirical evidence is inconclusive. An estimated *four hundred* research studies have attempted to draw the connection between spending and student achievement and still, no conclusive evidence exists that students learn more when educational spending goes up.

Yet understanding the impact of money is more important than ever. Too many students are falling behind, and as resources become more constrained, every dollar must count fully.

Does it always take more money to achieve educational objectives? Or is it possible to make different spending choices with the money we now have?

This paper explores spending choices. It asks: Must there be more money to elevate instructional spending? Or is it possible to make choices that spend more on instruction, while maintaining current levels of *overall* spending?

This is especially important given the emerging discussions about "adequacy" that hold that certain minimum thresholds of money are necessary to meet higher learning standards. But, what if it's possible to meet those higher expectations through different spending choices instead of simply adding more money?

To begin to answer these questions, we looked at spending patterns in 338[1] districts and 60 chartered schools in Minnesota. Our goals was to identify which ten of each category spent the largest percentage of their expenditures on instruction, *regardless of whether overall spending was high or low*.

Who are these districts and charters that spend more of their available resources on instruction? And do they share anything in common?

We found, much to our surprise, some very interesting parallels:

[1] Special education and consolidated districts were not included.

All of the ten districts that spent the largest portion of their budget on instruction were small rural districts.

For chartered schools (which are small by design), schools operated by teacher-cooperatives (where a collective of teachers is the decision-maker) were disproportionately represented in the top ten.

Both these districts and charters also tightly manage their budgets, with an overarching spending principle that *students come first*— the needs of their students drive their spending choices.

And, they all seem to share a decision-making structure that is transparent and especially close to teachers, students and parents.

This paper does not attempt to link spending levels and student achievement; nor does it argue that more money would be ineffective in raising student achievement.

This paper simply assumes that students are in school to learn. It also presumes that the portion of the budget spent on instruction is the portion most directly linked to learning. And it presumes that most of the demand for more money is typically tied to additional instructional expenditures. In other words, this paper accepts the assumption that the most productive part of the school budget for learning is instructional expenditures.

We view this paper as an initial foray into the question of spending choice. It does not purport to be a rigorous empirical study. Rather, we're trying to introduce a new question into the debate about money—away from "how much more do we need," and toward "How is the money used?" and "Can we make more effective spending choices with the money that we have? And, if so, what would it take to do that?"

Background

The question of money is being fought out in many forums. In the courts, equity arguments focus on making sure that spending between school districts or between schools is roughly on par with one another.

Adequacy arguments attempt to identify a threshold level of spending that is necessary to attain learning standards. However, neither the equity nor the adequacy arguments address choices about **how** money is used.

In addition to lawsuits throughout the country, taxpayers are often asked for more money through local referenda. Minnesota's recent experience illustrates this well. In 2001, Minnesota reformed education financing by shifting responsibility away from local property taxes and moving primarily toward state income and sales taxes.

In 2002, eighty school districts responded by seeking funds above and beyond what the state provides, in excess levy referenda totaling $141, clearly reflecting the dominance of the assumption that more money matters. One hundred and fifteen million was approved by voters.

Lawsuits and referenda are very public avenues for debating the money issue. Behind the scenes is an equally contentious debate among those who study and research education finance and spending. Numerous studies over the past twenty to thirty years have attempted to identify whether money matters.

The research has done little to clarify the issue, and may well have produced more controversy than clear thinking. Even though an estimated 400 production function studies (which try to link inputs to student achievement) had been completed by 1977[2], the only conclusive statement that can be made is that no consensus exists.

For example, one well known study analyzed the results of a number of studies, concluding that there is no clear evidence that money does matter. A second set of researchers looked at the same data and found the opposite.

Studies looking at the economies of scale of district or school size have produced somewhat more conclusive results, generally suggesting that the most cost-

[2] Reported in Harold Wenglinsky, "School District Expenditures, School Resources and Student Achievement: Modeling the Production Function," in Developments in School Finance, 1997 (Washington D.C.: NCES, 1998).

effective districts and schools are small to moderate size. For total costs, the optimal district size seems to be around 6,000 students, but for instructional or operating costs, the optimal size drops to the 2,000 to 3,500 range.[3]

However, when student performance is added to the equation, the optimal school size seems to drop even further because some studies suggest that student performance declines as school enrollment grows, especially for economically disadvantaged students. Moderately sized elementary schools of 300 to 500 students and high schools of 600 to 900 students may be most cost-effective overall—that is, they balance the economies of large size with the performance gains of smaller schools.[4]

One study found that small rural single unit schools (K-12) are the most cost-effective, reducing per pupil costs by over $1,000 compared to conventionally graded, specialized high schools.[5] This last study is of particular interest given the findings of this paper.

Absent from most research attempts that look at the relationship between money and student performance is a notion that how money is spent may matter. Most studies assume a certain pattern of expenditures—that is, expenditure comparisons are based on traditional methods of doing business.

The research does not contemplate that there may be different ways of organizing and providing education – such as individualized learning, project-based or on-line learning – that might bring about very different, and possibly more productive, patterns of expenditure. Instead they assume a certain set of activities about what students and teachers do in the classroom, generally "batch processing" students through courses and classes.

Even though the research is being conducted to identify what might improve education, it studies the status quo, not what could be, and we know that the status quo doesn't work all that well. Likewise, when we study "how much do we need" we're very possibly studying spending patterns that are ineffective. New choices about spending may get us further and faster than focusing only on getting more money.

A look at spending choices—the 'top ten' districts and the 'top ten' chartered schools

We began our inquiry into spending choices by looking at the expenditure data in Minnesota and quickly ran into a data problem common to most cost studies. The spending data is too aggregated to discern meaningful differences in spending patterns.

The level of aggregation across districts may hide many important distinctions that are taking place at the school, classroom, or student level—distinctions that may reduce dropout rates, or engage students or parents more, or create safer schools.

Data that do exist at the school level often rely on allocations of expenditures. (Fortunately, a 2004 Minnesota law will rectify this problem by requiring that all districts report expenditures at the school level by actual spending, including using actual, not average, salaries.)

So to get at the question of spending choice, we asked a different question: Which ten school districts and ten chartered schools in Minnesota are spending the most of their resources on instruction, and what, if anything, distinguishes them from other districts and chartered schools?

The underlying assumption is that the more that is spent on instruction as a percentage of overall spending, the more productive the use of the education dollar for the purposes of improving student achievement. But, such budgetary allocations involve conscious choices that can and are being made.

For example, nationwide, districts made only marginal increases in the fraction of spending devoted to

[3] Andrews, Duncombe and Yinger, "Revisiting Economies of Size in American Education: Are We Any Closer to a Consensus?," Economics of Education Review 21 (2002): 251.
[4] Ibid., 246.
[5] Bickel, Howley, Williams and Glasock, "High School Size, Achievement Equity, and Cost: Robust Interaction Effects and Tentative Results," Education Policy Analysis Archives 9, 40 (October 8, 2001).

instruction from 1992 to 1997 (even though significant education reforms were supposedly taking place.) In fact, spending for instruction even dropped in the highest spending districts.[6]

The term "instruction" is used because it refers specifically to a category of expenditure found in the data set we analyzed. Because reliable data on expenditures are currently only available at the district level, the spending of traditional school districts is being compared to the spending of individual chartered schools, which, in Minnesota, are technically designated as districts.

Chartered schools are included as a separate category because, unlike most district schools, chartered schools have full budgetary control. So one might expect to see different spending patterns in chartered schools than in districts – at least districts with multiple schools.

But chartered school spending also has a few different drivers that influence statistical measures of the amount spending on instruction—such as virtually no spending on vocational education or extra-curricular activities and minimal spending on support staff such as guidance counselors.

Using UFARS[7] data from the 2001-2002 school year, the "top ten" school districts and "top ten" chartered schools were identified by adding the reported expenditures for "regular" instruction, special education and vocational instruction[8], and dividing this amount by total current expenditures.

Percentages were used rather than absolute dollars because the amount of total money spent per pupil varies significantly from district to district and from chartered school to chartered school. Capital spending was also excluded as non-comparable from district to district.

Finally, an additional screen was added: To be included in the study, chartered schools and districts had to spend at least to the state average for regular instruction. This eliminated a few schools and districts whose overall spending was high due to significantly highly spending on special education.

Summary statistics were then compiled compareing these districts and schools to statewide averages. In reviewing the data, we noted that extra-curricular and co-curricular activities are defined as "instruction" in Minnesota's education finance accounting system.

Because the object of this analysis was to identify expenditures on academic instruction, we netted these amounts out and report them as "net spending." While these types of activities contribute to overall student development, they are not academic in nature.

The top ten districts and chartered schools were also surveyed. The response rate was only 50%, which limits the conclusions that can be drawn. Nevertheless, both the survey information and the numerical data reveal some themes or similarities that suggest why these districts and schools made it into their respective "top tens."

The data and patterns

Summary data on the top ten districts and chartered schools are provided in four tables that begin on page 6.

Table One on page 6provides a summary of the student population being served. The student population is an important variable because the amount of money available to a district or school varies with the grade levels being served, the number of students on free or reduced price lunch, and the number of English language learners and special education students.

Table Two on page 7 provides a summary of spending data. Instruction can be looked at in a number of

[6] Hannaway and McKay, "Reform and Resource Allocation: National Trends and State Policies, "Developments in School Finance, Developments in School Finance, 1999-2000 (Washington D.C.: NCES, 2002), 64.

[7] Uniform Financial Accounting and Reporting Standards.

[8] The use of the term instruction refers to definitions according to which school districts and chartered schools report expenditures under Minnesota's Uniform Financial Accounting and Revenue System. Regular instruction includes classroom instruction, Title I-IV programs, gifted and talented programs, limited English proficiency, music, and co-and extra-curricular activities, including athletics. In addition to the instructional categories, expenditures are reported in administrative categories, support services and community education.

ways—total instruction, regular instruction, or either of these netted out for co-and extra-curricular activities.

Therefore, Table Two reports the dollar amounts so that all of the various options can be calculated. It also reports two measures of instruction as a percent of current spending: the highest amount (total instruction divided by total current spending) and the lowest amount (regular instruction minus co-and extra curricular activities divided by total current spending).

Tables Three and Four on pages 8 and 9 summarize data about staffing patterns in the districts and the schools.

The tables provide statewide district averages for comparison. In Tables One and Two it is important to note that the state average reports the average among districts, not student-level data averaged across the state. In other words, small districts receive as much weight in the averages as large districts.

Table One

Top Ten Districts and Chartered Schools by % of Spending for Instruction	Student Population				
	Grades	ADM Served	% Free and Reduced Lunch	% English Language Learner	% Special Education
Districts					
COMFREY	K-12	185	36.0%	0.0%	12.6%
CLOQUET	PK-12	2,613	29.9%	0.3%	13.0%
MENAHGA	PK-12	729	50.5%	0.6%	14.4%
PINE ISLAND	PK-12	1,225	13.4%	0.0%	9.1%
SWANVILLE	PK-12	389	34.4%	0.2%	17.7%
LANESBORO	PK-12	356	47.5%	0.0%	14.2%
ONAMIA	PK-12	832	47.3%	0.2%	17.5%
ESKO	PK-12	1,075	7.8%	0.2%	11.4%
VERNDALE	PK-12	472	61.5%	0.0%	14.3%
BELLE PLAINE	PK-12	1,276	10.4%	1.9%	8.6%
Average- Top Ten Districts		***915***	***33.9%***	***0.3%***	***13.3%***
Average-Minnesota Districts		***2,463***	***30.9%***	***1.8%***	***14.2%***
Chartered Schools					
MINNESOTA NEW COUNTRY SCHOOL	7-12	111	21.6%	0.0%	14.7%
RIVERBEND ACADEMY	7-12	138	22.8%	0.0%	28.9%
HIGH SCHOOL FOR RECORDING ARTS	9-12	88	100.0%	0.0%	15.7%
CITY ACADEMY	7-12	111	95.7%	0.0%	0.0%
COMMUNITY OF PEACE	K-12	472	80.8%	43.6%	11.2%
LAKES AREA CHARTER	9-12	30	54.5%	0.0%	36.4%
NERSTRAND CHARTER	K-5	151	15.9%	0.0%	7.3%
NORTH LAKES ACADEMY	6-9	149	13.3%	0.0%	12.7%
AVALON SCHOOL	9-12	105	17.3%	0.0%	10.6%
ACHIEVE LANGUAGE ACADEMY	K-7	299	85.2%	55.0%	4.8%
Average- Top Ten Chartered Schools		***165***	***50.7%***	***9.9%***	***14.2%***
Average-Minnesota Chartered Schools		***160***	***53.6%***	***10.4%***	***14.2%***

Source: Minnesota Department of Education, Fall Populations by District, 01-02 (populations based on fall enrollments); Minnesota Department of Education, 2002 District Expenditures per ADM (adm served)
note: fall enrollment numbers are not always equal to ADM

Table Two

Top Ten Districts and Chartered Schools by % of Spending for Instruction	Spending Data										
	Total ADM Current Spending	ADM Spending on Total Instruction	ADM Spending on Regular Instruction	ADM Spending on Co- & Extra-Curriculars	Net Spending on Instruction (minus co-/extra- curriculars)	% Spending on Total Instruction	% Net Spending on Regular Instruction	% Spending on Special Ed	% Spending on Vocational Ed	% Spent on Instructionald Pupil Support Services	% Spending on Adm. And Distirct Support
Districts											
COMFREY	$9,478	$6,767	$4,920	$378	$6,389	71.4%	47.9%	18.5%	1.0%	6.7%	7.7%
CLOQUET	$7,623	$5,390	$3,751	$284	$5,106	70.7%	45.5%	20.2%	1.3%	5.9%	8.4%
MENAHGA	$7,068	$4,960	$3,949	$388	$4,572	70.2%	50.4%	12.2%	2.1%	4.7%	9.2%
PINE ISLAND	$6,295	$4,414	$3,666	$257	$4,157	70.1%	54.2%	8.6%	3.3%	5.8%	8.9%
SWANVILLE	$7,381	$5,171	$3,700	$264	$4,907	70.1%	46.6%	17.6%	2.3%	2.8%	10.3%
LANESBORO	$7,345	$5,145	$3,822	$537	$4,608	70.0%	44.7%	13.5%	4.5%	2.2%	7.3%
ONAMIA	$7,716	$5,403	$3,955	$250	$5,153	70.0%	48.0%	18.1%	0.7%	4.8%	8.4%
ESKO	$6,225	$4,334	$3,437	$285	$4,049	69.6%	50.6%	12.1%	2.3%	5.5%	8.4%
VERNDALE	$6,576	$4,577	$3,364	$269	$4,308	69.6%	47.1%	15.6%	2.8%	3.3%	10.0%
BELLE PLAINE	$6,810	$4,721	$3,430	$227	$4,494	69.3%	47.0%	16.8%	2.2%	5.3%	7.5%
Average- Top Ten Districts	***$7,252***	***$5,088***	***$3,799***	***$314***	***$4,774***	***70.1%***	***48.2%***	***15.3%***	***2.2%***	***4.7%***	***8.6%***
Average-Minnesota Districts	***$7,563***	***$4,834***	***$3,606***	***$202***	***$4,632***	***63.9%***	***45.0%***	***14.2%***	***2.0%***	***6.9%***	***9.5%***
Chartered Schools											
MINNESOTA NEW COUNTRY SCHOOL	$6,680	$5,744	$4,746	$0	$5,744	86.0%	71.0%	14.9%	0.0%	1.6%	6.9%
RIVERBEND ACADEMY	$7,821	$6,140	$4,858	$0	$6,140	78.5%	62.1%	16.4%	0.0%	6.5%	12.3%
HIGH SCHOOL FOR RECORDING ARTS	$12,682	$9,775	$8,679	$0	$9,775	77.1%	68.4%	8.6%	0.0%	2.9%	11.8%
CITY ACADEMY	$9,838	$7,521	$7,020	$0	$7,521	76.5%	71.4%	5.1%	0.0%	1.8%	18.5%
COMMUNITY OF PEACE	$7,047	$5,385	$4,839	$45	$5,340	76.4%	68.0%	7.7%	0.0%	7.6%	15.0%
LAKES AREA CHARTER	$9,943	$7,525	$6,173	$0	$7,525	75.7%	62.1%	13.6%	0.0%	0.4%	19.7%
NERSTRAND CHARTER	$5,511	$4,129	$3,610	$0	$4,129	74.9%	65.5%	9.4%	0.0%	4.9%	12.0%
NORTH LAKES ACADEMY	$7,084	$5,307	$4,720	$111	$5,196	74.9%	65.1%	8.3%	0.0%	0.9%	17.1%
AVALON SCHOOL	$8,612	$6,364	$5,794	$1	$6,363	73.9%	67.3%	6.6%	0.0%	2.7%	14.2%
ACHIEVE LANGUAGE ACADEMY	$7,039	$5,153	$4,567	$0	$5,153	73.2%	64.9%	8.3%	0.0%	1.9%	12.0%
Average- Top Ten Chartered Schools	***$8,226***	***$6,304***	***$5,501***	***$16***	***$6,289***	***76.7%***	***66.6%***	***9.9%***	***0.0%***	***3.1%***	***14.0%***
Average-Minnesota Chartered Schools	***$8,198***	***$5,015***	***$4,179***	***$19***	***$4,996***	***61.2%***	***50.7%***	***10.0%***	***0.2%***	***4.6%***	***21.9%***

Source: Minnesota Department of Education, 2002 District Expenditures per ADM (adm served)

Table Three

Top Ten Districts and Chartered Schools by % of Spending for Instruction

	STAFFING, 2001-02					
	Average Teaching Salary	Average Teaching Years of Experience	% of Teachers w/ Masters as Highest Degree	% of Teachers w/ Bachelors as Highest Degree	Ratio Licensed Teachers to Teaching Aids (FTEs)	% First Year Teachers
Districts						
COMFREY	$37,160	18.4	16.0%	84.0%	20.1%	5.9%
CLOQUET	$42,490	13.4	37.0%	63.0%	38.8%	3.7%
MENAHGA	$38,434	15.8	24.0%	74.0%	22.4%	2.0%
PINE ISLAND	$38,573	16.9	32.0%	68.0%	20.8%	6.3%
SWANVILLE	$35,027	9.3	19.0%	81.0%	22.0%	7.4%
LANESBORO	$40,748	15.5	28.0%	72.0%	20.3%	6.7%
ONAMIA	$38,495	16.0	12.0%	86.0%	30.4%	0.0%
ESKO	$42,308	16.0	57.0%	43.0%	11.0%	3.4%
VERNDALE	$37,433	15.5	15.0%	83.0%	8.2%	3.2%
BELLE PLAINE	$40,776	16.1	46.0%	54.0%	11.3%	2.6%
Average- Top Ten Districts	***$39,144***	***15.3***	***28.6%***	***70.8%***	***20.5%***	***4.1%***
Average-Minnesota Districts	***$41,812***	***14.1***	***37.9%***	***61.6%***	***28.6%***	***4.8%***
Chartered Schools						
MINNESOTA NEW COUNTRY SCHOOL	$44,244	9.3	44.0%	56.0%	0.0%	14.3%
RIVERBEND ACADEMY	$39,517	7.8	50.0%	50.0%	0.0%	8.3%
HIGH SCHOOL FOR RECORDING ARTS	$34,383	5.3	0.0%	100.0%	66.7%	0.0%
CITY ACADEMY	$38,429	5.0	100.0%	0.0%	23.3%	0.0%
COMMUNITY OF PEACE	$34,426	6.1	28.0%	72.0%	40.6%	11.4%
LAKES AREA CHARTER	$35,000	13.3	0.0%	100.0%	0.0%	0.0%
NERSTRAND CHARTER	$45,600	15.8	40.0%	60.0%	39.3%	0.0%
NORTH LAKES ACADEMY	$39,893	10.9	14.0%	86.0%	0.0%	0.0%
AVALON SCHOOL	$39,000	4.8	50.0%	50.0%	0.0%	28.6%
ACHIEVE LANGUAGE ACADEMY	$33,578	3.8	17.0%	79.0%	19.9%	9.1%
Average- Top Ten Chartered Schools	***$38,407***	***8.2***	***34.3%***	***65.3%***	***19.0%***	***7.2%***
Average-Minnesota Chartered Schools	***$34,700***	***6.9***	***26.2%***	***71.6%***	***27.0%***	***17.1%***

Source: Minnesota Department of Education, Teaching Staff by School and District, 2001-02

Table Four

	Students per Staff Members (2000-01)					
	Teachers	Instructional Aides	Guidance Counselors	Librarians/Media Specialists	District-level Administrators	School-Level Administrators
Districts						
COMFREY	10.4	53.0	n/a	250.0	218.8	250.0
CLOQUET	17.1	43.6	450.0	722.7	245.9	372.7
MENAHGA	13.4	59.8	361.5	n/a	344.3	361.5
PINE ISLAND	14.9	71.5	622.0	1244.0	414.7	414.7
SWANVILLE	14.4	65.6	n/a	n/a	258.1	413.0
LANESBORO	12.0	61.0	1800.0	1200.0	514.3	180.0
ONAMIA	15.6	51.3	4310.0	431.0	210.2	287.3
ESKO	18.4	172.7	1360.0	362.7	544.0	544.0
VERNDALE	13.1	159.3	1155.0	n/a	355.4	462.0
BELLE PLAINE	15.6	137.8	1240.0	620.0	516.7	413.3
Average- Top Ten Districts	***14.5***	***87.6***	***1412.3***	***690.1***	***362.2***	***369.9***
Chartered Schools						
MINNESOTA NEW COUNTRY SCHOOL	14.5	21.5	n/a	n/a	n/a	n/a
RIVERBEND ACADEMY	12.4	62.1	n/a	n/a	n/a	n/a
HIGH SCHOOL FOR RECORDING ARTS	34.0	51.0	n/a	n/a	n/a	n/a
CITY ACADEMY	13.5	58.0	n/a	n/a	145.0	n/a
COMMUNITY OF PEACE	13.3	32.8	n/a	n/a	473.0	473.0
LAKES AREA CHARTER	5.5	n/a	n/a	n/a	n/a	11.0
NERSTRAND CHARTER	18.0	45.8	n/a	n/a	n/a	302.0
NORTH LAKES ACADEMY	12.3	83.3	n/a	n/a	83.3	n/a
AVALON SCHOOL	14.2	n/a	n/a	n/a	n/a	n/a
ACHIEVE LANGUAGE ACADEMY	12.6	63.3	n/a	n/a	291.0	291.0
Average- Top Ten Chartered Schools	***15.0***	***52.2***	***n/a***	***n/a***	***n/a***	***n/a***
Minnesota Average*	***16.4***	***74.5***	***887.1***	***913.5***	***755.6***	***444.1***

**State averages vary by grade level: average teachers per student is 17.4 for grades 9-12; 14.8 for 6-9; and 14.1 for K-7.*

Source: greatschools.net, from the National Center for Education Statistics, 2000-01.

Do the 'top ten' districts and chartered schools share any characteristics?

District comparisons

The most notable finding among the top ten districts is that they are all small rural districts (see Table One) with small class sizes. Their total current spending is slightly less (4%) than average, yet they serve considerably more students on free/reduced price lunch than the average district.

However, these populations do vary considerably from district to district.

For example, the top ten districts serve about the same proportion of special education students as the average district, and they have slightly fewer English Language Learner students.

The number of students per teacher is also two students less than the statewide average. The number of students per administrator is greater in the top ten schools, perhaps due to a lack of economies of scale for administrative functions. Yet overall, their spending on administration and district support is slightly less than the statewide district average.

Chartered school comparisons

The top ten districts are small (averaging 915 students), but the top ten chartered schools are even smaller, averaging 165 students. Compared to the average of Minnesota chartered schools, the top ten chartered schools serve more students on free or reduced price lunch and more special education students, and slightly fewer English Language Learners. These populations vary considerably from school to school.

Among the top ten chartered schools, the most noteworthy finding is that four of the top ten chartered schools belong to the EdVisions Cooperative, and a fifth is a separate EdVisions school. EdVisions is a cooperative, owned and managed by teachers, for the purposes of operating schools. In EdVisions schools, the teachers work not as employees, but as part of a professional partnership which contracts with school boards to operate schools.

The EdVisions cooperative operates eights schools, and the teachers have authority over all aspects of running the school, from budget to personnel decisions and salaries, to curriculum and pedagogical methods.

While the average chartered school spends a fairly high amount on administration and district support, the top ten chartered schools spend much less, and EdVisions schools spend even less than other charters in the "top ten.".

District to chartered school comparisons.

In comparison with the top ten districts, the top ten chartered schools serve considerably more students who receive free or reduced price lunch and English Language Learners. The numbers of special education students are comparable. The population differences may be due to the fact that the top ten chartered schools include urban schools as well as rural schools, whereas all of the top ten school districts are rural.

Even though all of the top ten districts and chartered schools are small, it is interesting that there is considerable variation both in the student populations and in how learning is organized. Some of the districts and schools described themselves as being structured quite traditionally, with courses and classes, and limited teacher input to budgeting and curriculum.

Some of the chartered schools are project-based and use non-age based learning groups. Some schools have very limited opportunity for individualized student work, while others (project-based) are based almost entirely on individualized work.

How do spending patterns compare?

Total spending in the top ten chartered school ranges from $5,511 to $12, 682 per pupil, while the district range is less varied at $6,225 to $9,478. Districts

in the top ten tend to spend slightly less than districts on average; the top ten chartered schools spend about the same as the average for all chartered schools. But the average total spending for the top ten chartered schools was higher than the district average.

While there may be any number of reasons for this difference, three possibilities are:

1) The chartered schools serve a higher proportion of high school students, who are weighted more heavily in funding formulas;

2) Chartered schools serve a higher proportion of students receiving free and reduced price lunch, who entitle the school to State Compensatory Aid Revenue;

3) The chartered school average falls considerably (by $500 per pupil) if the very highest spending chartered school is excluded.

On average, Minnesota school districts spend 64 percent of every operating dollar on instruction, which includes regular instruction, as well as special and vocational education and co- and extra-curricular activities. In comparison, the top ten districts in this analysis spend 70 percent for total instruction.

Total per pupil spending in the top ten districts averages $300 less than the average Minnesota district, yet the top ten spend $250 more on instruction. The difference between the top ten and the district average narrows if co- and extra-curricular activities are subtracted because the top ten spend more per student on these activities.

Overall, the top ten spend slightly more on special education and about the same for vocational education. The top ten spend less on instructional and pupil support services, as well as administration and district support.

The top ten chartered schools spend an average of 77% on instruction, compared to an average for chartered schools of 61%. The top ten spend slightly more per pupil ($25), but their spending on instruction greatly outpaces the average chartered school—by about $1,300 per pupil.[9]

Chartered schools tend not to spend money on co-and extra-curricular activities, so netting these amounts out has negligible effect. The top ten spend the same as the average for chartered schools on special education and vocational education; slightly less on instructtional and pupil support, and considerably less for administration and district support.

A noticeable difference between chartered schools and districts is spending for administration and district support. In general, the small size of chartered schools may account for disproportionately high spending on administration because of the lack of economies of scale for items such as financial reporting.

Yet a number of the top ten chartered schools are able to approach the average district's administration costs, even despite their very small size. Some EdVisions schools, in particular, choose to organize without any separate administrative staff. Instead, teachers are paid extra to take on administrative duties. In this way, they minimize their administrative costs.

Perhaps the most interesting result is that the top ten districts, the average district and the average chartered school track somewhat closely in total spent on instruction, and the percentages of spending going to the various expenditure categories.

But the spending of the *top ten* chartered schools does look very different. Their spending on instruction is significantly higher, and as noted above, their student populations tend to be about the same proportion of special education students (although the severity of the disability is unknown) with significantly higher proportions of students on free and reduced lunch.

Based on these overall findings, then, we asked a serious of rhetorical questions:

[9] These results are partly due to the one very high spending school. If this school is omitted from the averages, the top ten total average spending drops below the chartered school average to $7,730 and instructional spending to $5,901.

Is higher instructional spending a function of higher teacher salaries?

Instructional spending could be pushed up with higher than average teachers' salaries, but this is not the case with the top ten districts. Teachers in the top ten districts earn six percent less than the average district salary, perhaps a function of the rural areas in which these districts are located. Rather than higher teacher salaries, the top ten districts put their money into small class sizes.

The top ten chartered schools spend more on teachers' salaries than the average chartered school (11% more), so it is possible that some of them may be in the top ten as a result of spending on teachers' salaries. A possible explanation for this is that the teachers in the top ten schools have more experience. In comparison with districts, however, their teacher salaries are lower.

So, relative to all public education in Minnesota, it would not be appropriate to conclude that the extra amount spent on instruction is a function of higher teacher salaries.

How do spending patterns compare for co-and extra-curricular activities?

The spending comparisons above netted out spending on co- and extra-curricular activities, which is an item of expenditure included in "regular instruction" in Minnesota's UFARS data. The top ten chartered schools spend negligibly ($16 per student) for extra- and co-curricular activities and athletics, while the top ten school districts spend $314 per student, more than the average of all districts, which is $202 per student.

Patterns in administration and philosophy about spending

Each of the top ten districts and schools was contacted with a brief survey about procedures and attitudes toward spending. The response rate was fifty percent, but weighted more heavily toward chartered schools, six chartered schools and four districts responding. Nevertheless, there were some general themes than could be drawn from the survey responses.

Is there an overall guiding philosophy for schools and districts in the top ten?

All of the schools and districts were aware that they had high spending for instruction—because that is their intent. And all expressed, in one form or another, that "kids' needs must come first."

When they set budgets, they set them with the students' needs in mind. Sometimes this philosophy results in smaller class sizes. In other cases, it results in budget decisions to hold down salary increases or to maintain programs and services at desirable levels. One chartered school stated that it uses its mission statement to guide budgeting.

Are there other principles that drive spending?

The top ten districts and chartered schools articulate clear expectations and set a strong tone from the top, although these differ.

Some districts and schools are clear that, as one district superintendent said, "If you come to work here, you're going to work."

In this district, administrators serve a number of functions, and set the tone by working hard, including on weekends. A number of the districts and schools expect staff to double-up on duties and tasks. In one chartered school, there is no separate administrative staff. Teachers take on administrative duties for a small extra stipend.

Another priority for some schools and districts is teacher morale and support.

Some schools and districts support teachers by giving them some discretion over spending and how they

use their time. Some schools give each teacher a budget allocation to use at their discretion. Others have a pool from which teachers can make requests for needed materials and supplies, which are rarely denied.

One district gives each teacher ninety minutes of preparation time during each school day, and often teachers end up using this time to counsel individual students. Teacher development and continuing education is a budget priority in a number of these schools.

Finally, these districts and chartered schools seem to be pragmatic about the availability of funding—they know that times will be tight, and they are determined to find ways of living within budget while maintaining programmatic integrity.

How do they manage to put so much of their dollars into instruction?

Most of the districts and schools make conscientious decisions about non-instructional spending and continuously look for ways to reduce administration and support costs.

As noted above, some schools insist that administrative and support personnel take on extra duties.

Teachers comprise the curriculum development team in one school. In another school, a teacher also serves as the business manager. They find ways to lower transportation costs. One district owns its own buses and has very low transportation costs. A chartered school determined that providing its own busing would be the least costly way to serve a specific need.

Another chartered school is developing parental volunteer opportunities to help with tasks ranging from math tutoring, office help and facilities maintenance.

One district houses all students, K-12, in a single building, which helps reduce maintenance costs.

When they must cut back on spending, they make deliberate decisions not to reduce instructional programs for students.

How adaptable and flexible is their spending?

One characteristic the top ten chartered schools and districts seem to share is that they continuously evaluate their spending in an effort to always find ways to serve their students better.

One chartered school hires an evaluator to rigorously evaluate how students are doing each year, and to assess what improvements can be made.

One district mentioned that they change schedules and teaching assignments as needs arise, and that they are considering several changes to improve student learning. For example, they are trying to determine how to reconfigure algebra courses to encourage more enrollment.

They have also expanded reading classes to the middle school. One chartered school described spending more money on reading materials this year because of lower reading abilities of its new students.

The top ten chartered schools and districts also seem to share, perhaps because of their small size, an ability to make and implement decisions quickly.

This means their budgets can be more responsive to changing student's needs and fiscal realities.

How do they approach school budgeting and finance?

These schools/districts are highly deliberate about how they budget and plan. They tend to be fiscally prudent, or even frugal, as well as financially sophisticated.

They do not compromise their students' well-being by making decisions that will create future shortfalls. They closely study and watch their financial situation. They strive to develop and maintain fund balances.

A number of them mentioned long-term budget plans (three to five years) that are prepared to help guide

current year decisions. In one case, a longer-term projecttion predicted a future shortfall if a certain salary increase was granted, so the chartered school cut back on the salary increase even though it had hoped to maintain salaries at a certain percentage of the local district's salaries.

Beyond being fiscally prudent, they use a variety of methods to develop budgets. Some use a great deal of teacher input, others use a top-down approach. One chartered school includes students on its board, and so students have a direct opportunity to shape the budget.

Another commonality seemed to be that a significant attempt is made to educate and inform all parties about budgeting and finances—from the board to teachers and parents.

This improves understanding about how and why certain decisions are made, and seems to create consensus about spending decisions.

One chartered school, in particular, spoke of the need to "reeducate" teachers who came from district schools about their perceptions of school budgeting and finance, to eliminate complaining. Likewise, a superintendent mentioned that he doesn't tolerate complaining from teachers about to budget decision-making.

What do they do when dollars get tight?

These districts and schools simply review their budgets, move things around, and make decisions that cut back where possible without hurting the students. They reconfigure staffing patterns in a way that preserves the staffing they need for the students. ***They are creative***.

One said, "It's amazing the items that can be found and collected if a true need arises." A number of them mentioned that they've developed healthy fund balances that they may need to rely on in the tight fiscal times ahead. One district recently sought and passed a levy referendum—even though it is in the top ten in spending on instruction, it had had the lowest total per pupil revenue of all Minnesota districts.

Analysis

The results from these top ten districts and chartered schools seem to support the findings from three areas of research: 1) the benefits of small schools; 2) the benefits of school-level budgetary authority; and 3) the benefits of new schools that work outside existing established organizations.

Small schools

Educational research is clear about the benefits of small school size—size does matter. Studies have found that, on average, small schools outperform larger schools in student achievement, graduation rates, attendance, discipline problems, and student, parent and teacher satisfaction.

One recent study found that small schools mitigate the effect of poverty on student learning.[10] Students' will explain the findings by saying that they feel more noticed and important in small schools.[11] For a nice summary of the small schools research, see "Smaller, Safer, Saner, Successful Schools"[12] by the Center for School Change and "Dollars & Sense, The Cost-Effectiveness of Small Schools."[13]

This top ten survey suggests that small schools may have another added advantage: they provide the opportunity for more transparency, and therefore greater consensus, ownership and understanding around budgets and spending. It may be that the smaller size enables

[10] Howley and Bickel, Small Works: School Size, Poverty and Student Achievement, (Arlington, VA: The Rural School and Community Trust, 2000).
[11] See Positive School Culture, education/evolving, www.educationevolving.org, September 2003.
[12] Nathan and Febey, Smaller, Safer, Saner, Successful Schools, (Washington DC: National Clearinghouse for Educational Facilities, Center for School Change, Humphrey Institute of the University of Minnesota, 2001).
[13] Barbara Kent Lawrence et al., Dollars & Sense, The Cost Effectiveness of Small Schools, (Cincinnati, OH: KnowledgeWorks Foundation, 2002).

key relationships to develop more readily, fostering the exchange of information between teachers, administrators, parents and students, and leading to a common understanding of financial objectives and how they relate to educational goals.

District superintendents, chartered school principals and finance officers in these top ten schools and districts take considerable pride in both their financial planning as well as the level of knowledge about education finance possessed by teachers and administrators.

These findings may question whether economies of scale on a per pupil basis (often touted as a reason for larger schools) are the right results to be looking for. As one alternative measure, "Dollars & Sense" shows that small schools cost less per graduate than larger schools.

Budgetary authority

Currently, state education finance systems are set up on a two-tiered allocation system. First, the state allocates dollars to a district. Then, the district decides how much schools get. The second allocation is typically hidden—few states' finance systems produce meaningful spending data on the school level. Even school principals do not know what their actual budget or expenditures are.

Research by William Ouchi of UCLA's Anderson Graduate School of Management suggests that a key ingredient in successful schools is the ability of schools to control their own budgets.[14] All chartered schools control their own budgets. Few district schools do. However in this case, the districts are so small that the distance between school and central administration is negligible.

It cannot be concluded from the top ten data that budgetary control breeds success. However, the pattern among these schools is high levels of spending devoted to instruction. The other pattern is deliberate command—to the point of pride-- over budgeting and finances.

New schools

New possibilities for organizing education have a parallel in the private sector as described by Clayton Christensen of the Harvard Business School in his book, "The Innovator's Dilemma."[15] Large, mature firms have established production processes with associated cost structures.

New, more nimble, firms develop newer products and production processes at lower cost structures, eventually taking over the market. Studying economies of scale and production functions in the mature firms tells you only about how the mature firms operate—but nothing about the possibilities inherent in the upstart firms.

The charter law is public education's version of access to the "market." The question is whether chartered schools, by being free of established district bureaucracies and certain regulations, will produce innovation that puts education dollars to more productive use.

While nothing definitive can be said as a result of this top ten study, two interesting phenomena stand out with respect to chartered schools: 1) the percentage spent on instruction by the top ten charted schools materially exceeds that spent by the top ten districts; and 2) the novel EdVisions schools are disproportionately represented in the top ten.

So it would appear that Minnesota's chartering law, while not necessarily producing innovation in all chartered schools, at least provides a vehicle where some schools do truly innovate, and find ways to invest more of the education dollar in instruction.

[14] William Ouchi, Making Schools Work: A Revolutionary Plan to Get Your Children the Education They Need, (New York: Simon & Schuster, 2003).

[15] Clayton Christenson, The Innovator's Dilemma, (Boston, MA: Harvard Business School Press, 1997).

It should be noted that some small districts, as represented by the top ten districts in this study, have also found ways to put more money into academic instruction.

Summary and conclusions

Enormous amounts of legal efforts and research have gone into the question of whether more money will produce better student achievement. Far less attention has been paid to how that money is spent and what circumstances might contribute to differences that can be observed.

This paper attempts to contribute to the latter question, by identifying which districts and chartered schools in Minnesota spend the most on instruction, in percentage terms, and the circumstances that seem to be conducive to these choices.

Districts and chartered schools do make choices in their spending decisions. Those that dedicate the most to instruction are small, and tend to closely manage their spending. Their guiding principle in spending decisions is that kids come first, but it is not just rhetoric—they put this principle into practice. When dollars are tight, they rearrange spending in ways that do not harm their instructtional goals. They open the books, and they take pride in the knowledge teachers and board members gain in education finance.

This paper offers no definitive answers about how spending choices might influence student learning. But it does suggest that spending choices do matter, and as such, these choices should receive at least as much attention as efforts to look at how much money matters.

It also suggests some important questions that might be fruitful to tackle. For example, is the level of information-sharing and knowledge about budgets and education finance generally greater in small schools and districts? Do state financing arrangements regarding the allocation of dollars to districts instead of schools lead to different spending patterns than would be seen if the dollars were allocated directly to schools? Does it lead to more consensus and clearer objectives around spending? Are teacher professional partnerships, such as EdVisions, a path to the more deliberately balanced, and therefore productive, use of education dollars? If differences in student population were controlled for, would innovative charters show more productive use of education dollars?

These are all critical questions given the fiscal stress our schools now face and the cuts in programs that have been made. Every effort must be made to understand how to use every last dollar for maximum value.

ABOUT THE AUTHOR

Stacy Becker manages her own consulting practice, where she advises local and regional governments, foundations, policy groups and private developers on issues of housing, education, organizational effectiveness, and innovation. She is known for her leadership in designing and facilitating the work of high-level task forces. In this capacity, she has been working with the Education/Evolving project for over two years. As part of her work, Stacy served on Saint Paul Mayor (now United States Senator) Norm Coleman's blue ribbon panel on charter schools, facilitated a national meeting on teachers as owners, and is currently leading Education/Evolving's exploration of how financing relates to the priorities and performance of public schools and districts.

Stacy has a B.A. degree from Macalester College, a M.P.P. from the John F. Kennedy School at Harvard University, and a M.Sc. from the London School of Economics, which she attended as a Bush Leadership Fellow. She previously served as Public Works Director for the City of Saint Paul, where she was the first non-engineer to hold the title. Stacy was also Director of Research and Development for the Saint Paul Police Department and Budget Director for the City of Saint Paul and the City and County of San Francisco.

Funding for this publication was provided by the Annie E. Casey Foundation. We thank them for their support, but acknowledge that the findings and conclusions in this document are those of the authors alone and do not necessarily reflect the opinions of the Foundation.

ABOUT THE CONCEPT OF AN 'OPEN SECTOR' IN EDUCATION

Much of the work being done by Education|Evolving is to help create and sustain an "Open Sector" in public education – in Minnesota and elsewhere in the country. By "Open Sector," we mean a "space" in public education that is open to new entrants – new schools that are started from scratch by teachers, parents, community organizations and multi-school networks. The "Open Sector" is also open to new authorizers or sponsors – entities other than school districts that oversee schools. The "Open Sector" is open to new learning programs and to new ways of governing and managing schools. And, as part of a broadening definition of public education, the "Open Sector" is open to all students who choose to attend schools in that sector.

The "Open Sector" is based on the premise that we cannot get the degree of change and improvement we need in education by relying only on fixing the schools we now have. And, to get enough new schools that are fundamentally different, we need a combination of public policies and private actions that will allow new schools to emerge and that will create an environment in which they can succeed. This kind of positive environment for creating and sustaining new schools can be established on a state-level through actions led by state policy makers. It can also be done – and is certainly needed – in major urban communities all across America.

Though chartered schools may be the most visible part of the "Open Sector" today, this concept of a positive environment for creating and sustaining successful new schools is not limited to charters. The "Open Sector" can also include schools operating within a district or state on some kind of contract other than a charter – as long as they are truly autonomous, accountable and open to all students who chose them.

There is also no prescribed or uniform learning program presumed by this vision for creating many more schools new. In fact, there's an urgent need to better understand, respect and address the individual differences in students. It's likely, however, that successful new schools in the "Open Sector" will be smaller and that they will make it possible for all students to take a more active role in their learning and to develop more direct and nurturing relationships with adults.

ABOUT THIS REPORT AND ITS AUTHOR

This publication is the latest in a series of E|E reports on the changing face of public education, both nationally and in Minnesota. The report seeks to go beyond the usual discussions about the role of money in education. Almost always, this discussion focuses, endlessly, on '*how much?*' with the conclusion almost always '*not enough*.' Instead, this report looks inside schools and districts to determine whether differences can be discerned in '*how and where money is actually spent*.' The findings, though needing further inquiry, suggest that factors like school and district size, nature of governance and how teachers are involved in decision-making can influence how much money actually ends up in the classroom. That's critical information for policymakers who are struggling to find ways to add resources to the learning programs in schools within today's overall fiscal realities.

Research and writing for this publication was done by Education|Evolving associate **Stacy Becker**, **Stacy** is an independent consultant and former public works and budget director for the city of St. Paul and former budget director for the city and county of San Francisco. Guidance/feedback was provided by E|E associates **Bob Wedl, Joe Graba** and **Ted Kolderie** and final editing and production supervision was provided by E|E's coordinator, **Jon Schroeder**.

education | evolving
A joint venture of the Center for Policy Studies and Hamline University

1295 Bandana Boulevard / Suite 165
Saint Paul, Minnesota 55108

telephone: 651-644-6115
e-mail: info@educationevolving.org
web site: www.educationevolving.org