Valuing the Whole Child:

Education Beyond Test Scores

Michael Diedrich, Education Fellow Meredith Pozzi, Graduate Research Fellow Luke Plutowski, Policy Associate

August 2014





Minnesota 2020

2324 University Avenue West, Suite 204, Saint Paul, MN 55114 www.mn2020.org

Editing: Deb Balzer Design & Layout: Rachel Weeks

All work published by Minnesota 2020 is licensed under a Creative Commons Attribution-No Derivative Works 3.0 Unported License.



TABLE OF CONTENTS

1. Executive Summary
Key Findings Recommendations
II. Introduction
Why Education Funding Matters Why Spending Wisely Matters Inputs, Outputs, and Outcomes Thinking Outside the Bubble Sheet: Broader Definitions of Opportunity and Equity District-by-District Variations in Experience
III. Enriching Courses
Literature Review: Spending Money on Instruction Case Study: Decline in Rochester Summary: A Matter of Priorities
IV. Whole-Child Support Services
Literature Review: Spending Money on Support Services Case Study: Duluth Summary: A Need for Consistency
V. Key Student Categories
Literature Review: Spending on Key Student Categories Summary: Keeping Up with Enrollment
VI. Extracurricular Activities
Literature Review: Spending on Extracurricular Activities Case Studies: Anoka-Hennepin and Saint Paul Summary: Different Districts, Different Choices
VII. Early Childhood Education
Literature Review: Spending on Early Childhood Education Case Study: Bemidji Summary: A Growing Priority
VIII. Recommendations
Conclusion: Progress Has Begun, and We Must Sustain It
IX. Works Cited

How education money gets spent reflects a combination of values.



I. EXECUTIVE SUMMARY

The Pawlenty era was a tough time for Minnesota school districts, which saw state education aid stagnate or shrink in the face of inflation. Many communities proved how much they value their school systems by agreeing to take on higher property tax burdens so that their schools could make up the difference and continue to serve an increasingly diverse population with more students of color, more students from families struggling to get by, more students receiving special education services, and more students with limited English proficiency. The Great Recession did significant damage to many communities, but recent years have seen a rise in state aid with a change in political control at the state capitol.

How education money gets spent reflects a combination of statewide values, local values, and the priorities emphasized by state policy. This report examines five key areas of education spending—enriching coursework, student support services, targeted spending for particular student groups, extracurricular activities, and early childhood education—to see how they weathered stingier state budgets and the Great Recession.

Key Findings

- ✓ Enriching courses like arts, business, and computer science lost 10 percent of their funding between 2003-04 and 2012-13. This is a statement of shifting instructional priorities, since expenditures on math education increased by 10 percent.
- Support services also weathered cuts, with some districts seeing particularly large drops in service. Duluth, for example, cut over 60 percent of its student support spending.
- Categorical investments by the state in special education and support for English Language Learners allowed both categories to keep up with growing enrollment.
- While extracurricular expenditures in aggregate remained flat, districts made very different decisions. For example, Anoka-Hennepin increased extracurricular spending while Saint Paul cut it.
- Early childhood education received an increase in investment, possibly reflecting its growing prominence in policy debates.





Recommendations

After reviewing these changes, as well as the literature on what makes for effective investments in each of these important areas, the following four recommendations are offered:

- 1. Increase overall investment for the state.
- 2. Widen the definition of "a good school" to include opportunities.
- 3. Include families, students, teachers, and community members in financial decision-making.
- 4. Invest in the whole child.

Educational equity has gained prominence, with many calling for greater discussion of the opportunity gaps in our school system. Each of the areas discussed in this report represents a set of opportunities for students, and it is our responsibility as a state to ensure that our school funding and spending reflects how we value equity and excellence.

II. INTRODUCTION

The relationship between school funding, school performance, and educational equity is complex, but deserving of more serious attention than it often receives. Various powerful policymakers and advocates throughout U.S. history have treated school funding as everything from the definition of state support for education to a virtual irrelevance in producing educational outcomes. As such, it is worth investigating Minnesota's recent investments in education as a statement of values and a foundation for building schools' capacity.

Why Education Funding Matters

At the most basic level, schools require resources to operate. As such, the major debates about investing in schools are about *how much* funding should go to schools and *how to spend it*.

The question of adequacy—how much money schools need to function effectively—formed the basis for many judicial decisions about educational equity throughout much of the 20th century. In part, this comes from the racist history of policymaking in education. Systematic underfunding of schools serving African-Americans during the Jim Crow era, for example, was clearly not a benevolent attempt to encourage efficiency in those schools. It was a statement of policymakers' values, and the courts interpreted it as such.

In the modern era, many states have adopted equalization formulas of various sorts so that school districts that lack significant wealth stand a chance of keeping up with those that have it. This again reflects a belief that school funding is one objective metric of educational equity, even as policymakers and advocates increasingly recognize that funding alone is not enough.

Why Spending Wisely Matters

Just as it is obvious that funding is necessary as a foundation of educational effectiveness, it has also become obvious that funding alone is not sufficient. Investing in schools gives leaders an opportunity to build capacity in various areas, from physical resources like buildings or technology to more abstract notions like staff skills.

Even within a given priority, such as technology, schools and districts choose how to invest in tools, training, and additional staff. Different uses of money can produce dramatically different effects for students, teachers, and families. Identifying effective uses of money and following through appropriately on investments are important for schools looking to spend wisely.

¹ Pallas, A.M. (2010). "Meeting the basic educational needs of children and youth." Children and Youth Services Review, 32(9), pp. 1199-1210.

Inputs, Outputs, and Outcomes

This report will describe how the state of Minnesota as a whole invested in five different areas from the 2003-04 school year through the 2012-13 school year. Data on expenditures come from the state's Uniform Financial Accounting and Reporting Standards (UFARS) system. Since these investments only reflect inputs (resources being put into the school system) each section will also include a discussion of how best to convert those financial inputs into outputs (the programs and services schools provide) that affect student outcomes (the end result of the school system, which is generally understand as learning).

While financial inputs alone are not an adequate assessment of effectiveness or equity, they are often a precondition for the outputs that produce the outcomes we expect of our school system. They are also a statement of what we value and prioritize in our public policy, which is useful information for members of the public who want to see their values reflected by elected and appointed officials.

Thinking Outside the Bubble Sheet: Broader Definitions of Opportunity and Equity

Specifically, this report will focus on five areas reflecting a broader vision of the school experience than mere test scores. While test scores have gained prominence as a quantitative proxy for school outcomes, they are not the only consideration families make when assessing school choices, nor are they the primary experience students have of school. If we are to comprehensively address opportunity and equity gaps in our school system, we must pay attention to priorities beyond test scores.

The five investment priorities being considered are:

- Enriching curriculum beyond English, math, science, and social studies
- ✓ Student support services such as nurses, counselors, and social workers
- ✓ Key student categories such as special education and English Language Learners
- Extracurricular activities
- Early childhood education

Taken together, these priorities represent an understanding of the school experience that goes beyond test scores. Families with the means to choose their living location based on the schools do not just consider test scores. They are looking for a wider set of opportunities, and part of building an equitable school system that closes opportunity gaps is ensuring opportunities are more equitably available to all families, including those unable to choose their home based on schools.

District-by-District Variations in Experience

Finally, individual districts have the ultimate say over how much of their money gets spent. For most funding priorities, a specific district will also be profiled. Sometimes, this district will reflect the statewide trend, while in other cases the district may be an exception. Understanding the importance of district-level decision-making is an important consideration for voters, families, and advocates looking to shape the priorities of the school system.



III. ENRICHING COURSES

For families in a position to choose between schools or districts, one of the major considerations is often what courses are available. While the four core subject areas—English, math, science, and social studies—are always provided, it is the opportunities that schools offer outside that core that distinguish schools on this front. In some cases, such as the arts, the variation between schools is in how many options they offer for meeting state graduation requirements. In other cases, the question is whether a school offers a particular discipline like business or computer science. The combined forces of shrinking state aid and accountability systems that emphasize math and reading have forced many schools and districts to decide how they prioritize enriching courses against core and tested subjects.

Definition

For the purposes of this report, "enriching courses" are those outside English, math, science and social studies. In the UFARS system, this meant combining expenditures on instruction for business, computer science, family/living science, foreign language, health and physical education, industrial education, vocational education, music, and visual and performing arts.

Rationale

Enriching courses offer students the opportunity to learn with both breadth and depth. By supporting students' ability to sample different disciplines and build interdisciplinary connections, enriching courses broaden students' experiences of education. By giving students the opportunity to spend multiple years on a subject of interest, they also facilitate deep engagement and learning. While the "core four" of English, math, science, and social studies are meant to provide students with a foundational set of skills applicable in many areas, enriching courses will offer many students the chance to explore what may be a lifelong hobby, or even their future career. Additionally, building a depth of knowledge and skill in one subject allows students to more easily connect material between their courses. In an age when a significant policy focus is put on tests meant to isolate particular reading and math skills, enriching courses become even more important as avenues for students to build contextual knowledge and a passion for learning.

Literature Review: Spending Money on Instruction

As stated in the introduction, the effectiveness of expenditures depends heavily on local context.² Using instructional money to reduce class sizes, for example, has proven quite effective when students work with experienced teachers, but less so when states or districts rush to hire novices on emergency licenses.³ However, various research supports spending instructional money on hiring more teachers to reduce class sizes (given the caveats just listed), increasing teacher

² Pallas, 2010.

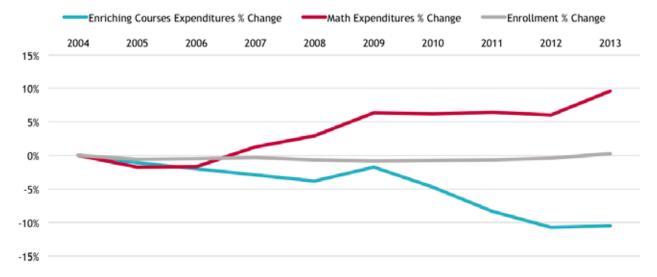
³ Finn, J.D.; Gerber, S.B.; Achilles, C.M.; Boyd-Zaharias, J. (2001). "The enduring effects of small classes." Teachers College Record, 103(2), pp. 145–183.

pay⁴, supporting teacher-led professional development⁵, and offering a wide range of learning experiences and formats.⁶ This last points to the importance of offering a broad collection of enriching courses, which by their very existence and nature will create more opportunities for learning in different ways that best fit students' different needs. This may be one contributing factor to the demonstrated positive effects of enriching arts courses on students' academic performance in other areas and in their cognitive development generally.^{7,8}

Statewide Trend

Despite the positive effects of enriching courses, statewide expenditures on these valuable classes declined roughly 10 percent between 2003-04 and 2012-13. This is a dramatic downturn, representing a drop of over \$88.5 million. At the same time, expenditures on math education *increased* by roughly 10 percent, or \$20.5 million. That math education received such a sustained investment during a period of shrinking state aid followed by the Great Recession shows the importance of priorities.

Statewide Expenditures on Enriching Courses and Mathematics (Percentage Change Relative to 2004)



⁴ Chaudhary, L. (2007). "Education inputs, student performance, and school finance reform in Michigan." Economics of Education Review, 28(1), pp. 90-98.

⁵ Garet, M., et al. (2001). "What makes professional development effective? Results from a national sample of teachers." *American Educational Research Journal*, 38(4), pp. 915-945.

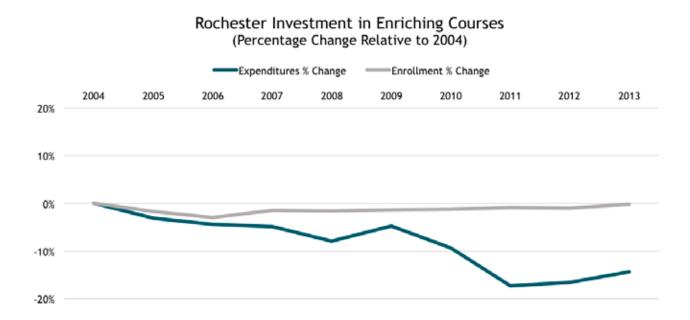
Armstrong, T. (2009). "Multiple intelligences in the classroom," Association for Supervision and Curriculum Development.

⁷ Deasy, R.J. (Ed.). (2002). Critical links: Learning in the arts and student achievement and social development. Washington, DC: The Arts Education Partnership.

Schellenberg, E.G. (2006). "Long-term positive associations between music lessons and IQ." Journal of Educational Psychology, 98(2), pp. 457-468.

Case Study: Decline in Rochester

The decrease in spending on enriching courses was even more dramatic in Rochester, which saw a 17 percent drop between 2003-04 and 2010-11. Since the end of the Pawlenty-era budgets, Rochester has regained some of the ground it lost, but expenditures on enriching courses in 2012-13 were still 14 percent below their 2003-04 levels.



Summary: A Matter of Priorities

Investment in enriching courses has declined, particularly in the latter years of the Pawlenty administration and during the Great Recession. More recent investments in education have helped the decline level off, but there is still significant work to do. Unfortunately, this work is not made easier by the pressures of an accountability system that prioritizes a subset of "core" skills above a broad education. The fact that districts managed to increase their investment in math during the same period that investment in enriching courses declined speaks to state and district priorities. Unless the nature of the education debate changes, we risk seeing renewed investments in education channeled into the same narrow, test-focused areas that received attention during difficult times. This would be a loss of opportunity for all the students who could benefit from a stronger set of enriching opportunities.

IV. WHOLE-CHILD SUPPORT SERVICES

Just as it is important for students to have access to a wide range of courses, it is also important for them to be supported by a strong web of services in school.

Definition

This section combined expenditures on: counseling and guidance services, psychological and health services, social work services, and "other pupil support services."

Rationale

Students who need the services of counselors, social workers, nurses, and other health workers will come to school with those needs regardless of whether these services are provided. In the absence of the appropriate trained professional, it will fall on teachers, administrators, and other staff to make do, which can prove both less effective and less efficient.

Teachers who must devote a significant share of their time and energy to trying to meet these needs will have less time and energy to spend on the actual job of teaching, and the same is true for administrators and other staff. Ensuring that each school provides a baseline of support services adequate to its students' needs should be a priority.

These needs tend to be more common and more severe for students from families struggling to get by. Since the share of students from such families has been increasing for years in Minnesota, one would hope to see these services increasing as well.

Literature Review: Spending Money on Support Services

The main goal of support services expenditures should be providing an adequate amount of support for students. Since most of the practitioners in this category are trained specialists performing their specialty, the primary consideration is ensuring that they have a tolerable workload allowing them to provide the health and academic benefits they've been proven to make. These benefits include measurable positive effects on student achievement from having a trained and well-equipped nurse present at a school⁹, the increased integration of guidance counselors in efforts to raise academic performance and prevent dropouts¹⁰, and the central role of school social workers as leads or primary contact points for multi-tiered student support efforts.¹¹

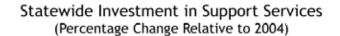
⁹ Baisch, M.; Lundeen, L.; Murphy, M. (2011). "Evidence-based research on the value of school nurses in an urban school system." *Journal of School Health*, 81(2), pp. 74-80.

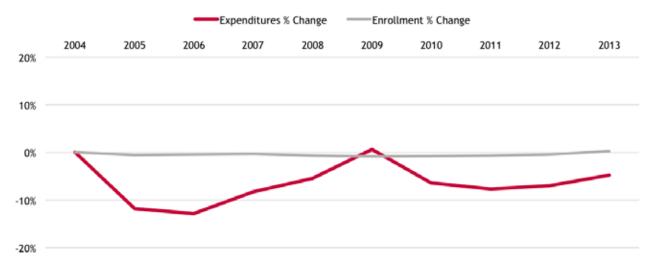
¹⁰ White, S. (2010). "The school counselor's role in school dropout prevention." Journal of Counseling & Development, 88(2), pp. 227-235.

¹¹ Teasley, M.; Canfield, J.P.; Archuleta, A.J.; Crutchfield, J.; Chavis, A. (2012). "Perceived barriers and facilitators to school social work practice: A mixed-methods study." Children & Schools, 34(3), pp. 145-153.

Statewide Trend

Expenditures on support services have struggled to keep up with enrollment, with spending most years between 2004-05 and 2012-13 lower than in 2003-04, even as enrollment has remained largely unchanged. The dips in expenditures have at times reached 12-13 percent below 2003-04 expenditures, even as the need for these services has, at best, stayed the same. There is a case to be made that the increase in the percentage of Minnesota students receiving free and reduced price lunches—a proxy for students from under-resourced families—indicates an increasing need for support services.

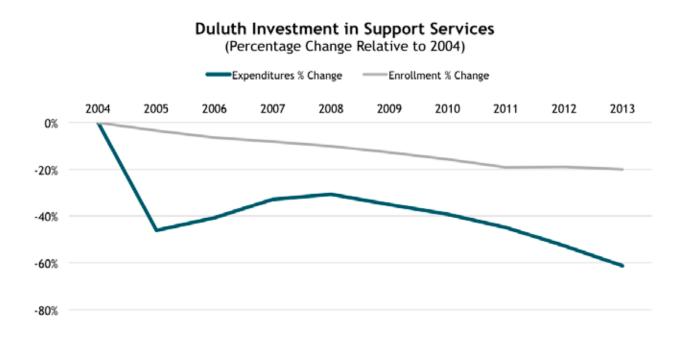






Case Study: Duluth

In some districts, the situation is even more severe. Duluth, for example, saw expenditures on these support services drop over 60 percent between 2003-04 and 2012-13. This is much faster than the decline in enrollment, which only dropped 20 percent.



Summary: A Need for Consistency

The tight budgets forced on schools by inadequate state funding meant that support services in much of the past decade were slipping relative to the likely need for such services. However, in recent years, expenditures on support services have been increasing back towards where they were in 2003-04. There was a brief upward trend similar to this a few years ago, but it was not sustained. The present trend offers an opportunity to do what should have been done then; rebuild investment in support services to where it needs to be.

V. KEY STUDENT CATEGORIES

One route to maintaining investment in critical areas is to use categorical funding that sets aside certain funds to meet the particular needs of student groups identified as likely to need additional support. This section will explore how effectively categorical funding is able to achieve its goal of keeping up with relevant enrollment.

Definition

Specifically, this will examine how special education spending and spending on services for English Language Learners (students who do not speak English as a first language and who are still building proficiency in English equivalent to their peers raised speaking English). Enrollment in both of these categories has increased in Minnesota in recent years; categorical spending targeted at these areas should have increased as well.

Rationale

Creating categorical funds for targeted student needs is a way of shielding those expenditures from other changes in priorities. As seen in the preceding two sections, tight budgets and policy-driven pressures like accountability systems can lead districts to cut courses and services that many students and families value. Targeting some spending to particular student needs should ensure that those students continue to receive support when they might otherwise lose it. This protection can be especially important for students from families who face the most barriers to organizing pressure on school boards and school leaders.

Literature Review: Spending on Key Student Categories

Schools have significant leeway in how special education dollars are turned into supports and accommodations. Some research suggests that schools get the most return on investment from special education expenditures by doubling up selected general education classes (such as math or English) at the expense of electives, in contrast to the push-in (teacher or paraprofessional supporting a student receiving special education services in a general education classroom) or pull-out (students receiving special education services in a separate room) models.¹² This obviously represents a trade-off of depth for quality, which is where the judgments and priorities of teachers and families become important. Other research suggests that districts can increase the efficiency of speech and language therapy by using small groups of two or three students at times in place of the more common one-to-one support.¹³

¹² Levenson, N. (2012). "Academic ROI: What does the most good?" Educational Leadership, 69(4), pp. 34-39.

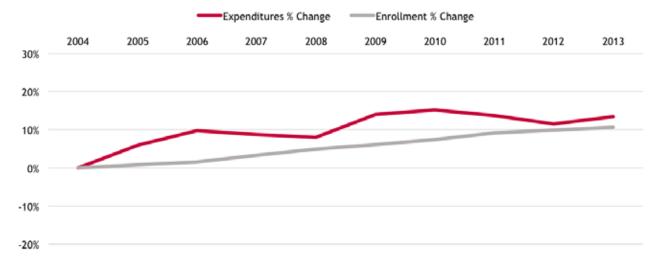
¹³ Cirrin, F.M.; Schooling, T.; Nelson, N.; Diehl, S.; Flynn, P.; Staskowski, M.; Torrey, T.; Adamczyk, D. (2010). "Evidence-based systematic review: Effects of different service delivery models on communication outcomes for elementary school age children." *Language, Speech, and Hearing Services in Schools,* 41, pp. 233-264.

For students building English proficiency, the earlier supports can begin, the better.¹⁴ Deploying particular instructional techniques and supports holds significant potential in many areas, making the presence of high-quality teachers of English Language Learners who can work with students, families, and teachers and staff in other disciplines particularly important.^{15,16,17}

Statewide Trends

Special education expenditures initially outpaced growth in enrollment, growing 15 percent between 2003-04 and 2009-10 while enrollment only grew by 7 percent. After 2009-10, expenditures dropped slightly while enrollment continued to rise, so that by 2012-13, expenditures were only 13 percent above their 2003-04 levels and enrollment was 11 percent higher.

Statewide Investment in Special Education (Percentage Change Relative to 2004)



¹⁴ Yang, C.W.; Sherman, H.; Murdick, N. (2011). "Error pattern analysis of elementary school-aged students with Limited English Proficiency." *Investigations in Mathematics Learning*, 4(1), pp. 50-67.

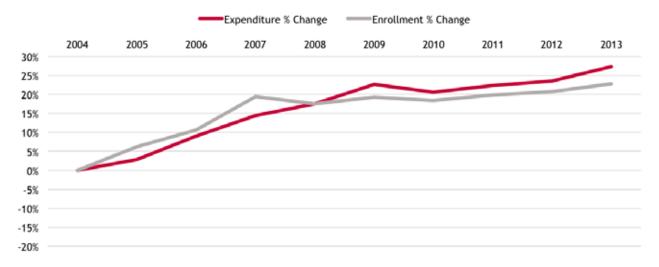
¹⁵ Lau, S.M.C. (2012). "Reconceptualizing critical literacy teaching in ESL classrooms." Reading Teacher, 65(5), pp. 325-329.

¹⁶ Conteh-Morgan, M. (2002). "Connecting the dots: Limited English proficiency, second language learning theories, and information literacy instruction." Journal of Academic Librarianship, 28(4), pp. 191-196.

¹⁷ Vega, T.; Travis, B. (2011). "An investigation of the effectiveness of reform mathematics curricula analyzed by ethnicity, socio-economic status, and limited English proficiency." *Mathematics and Computer Education*, 45(1), pp. 10-16.

Growth in English Language Learner expenditures struggled to keep up with growth through 2005-06, after which appreciable increases allowed it to catch up by 2007-08. By the end of the decade, growth in expenditures managed to slightly surpass growth in enrollment.

Statewide Investment in English Language Learner Education (Percentage Change Relative to 2004)



Summary: Keeping Up with Enrollment

This section demonstrates how even the presence of categorical funds does not mean that expenditures on important programs will change in lockstep with enrollment. While special education spending outpaced enrollment during much of the last decade, the changes in the two have converged more recently. If special education funding levels in 2003-04 were adequate to student needs, this may reflect a change in the cost of supporting the shifting mix of disabilities of students in education. If, however, the 2003-04 levels were not adequate, this could represent temporary, but ultimately unsustainable, efforts by districts to use their own resources to meet changing enrollment needs.

The case of expenditures for English Language Learners is a slightly different story of expenditures at first trailing enrollment, but then catching up and growing. This will hopefully benefit future English Language Learners, who are likely to continue growing as a share of Minnesota's students.

VI. EXTRACURRICULAR ACTIVITIES

While the term "extracurricular" might suggest activities that are less important for learning, before and after school activities can and do play a key role in many students' lives. They can offer significant opportunities for both academic and personal growth, and a consideration of opportunity gaps should include them.

Definition

This section includes expenditures on the full range of before and after school activities, including but not limited to athletics.

Rationale

Like enriching courses, the availability and variety of extracurricular activities can be a decision-making factor for families with the resources to choose where they want to live based on educational opportunities. Extracurricular participation can also be important to students who apply to college, and extracurricular opportunities increase in importance as admission grows more competitive.

Additionally, before and after school activities offer a safe, welcoming place to many students who may not enjoy the same stability outside of school. They can increase a sense of connection and engagement with school. Finally, some schools use athletics in particular as an incentive, requiring students to be at a minimum academic level before they can participate in sports.

Literature Review: Spending on Extracurricular Activities

One piece of research summarizes the literature on extracurricular participation as follows: "engagement in such activities has been broadly linked to a variety of positive developmental outcomes." Additionally, extracurricular participation has been shown to reduce substance use and risky related behaviors for student groups that schools have historically struggled to serve well, such as American Indians. Other research has demonstrated the importance of offering a wide variety of extracurricular options so that students can build the right combinations for their needs and interests. Even if none of these benefits was measurable, the presence of a wide range of extracurricular options would still be important for students applying to college, as many colleges and universities consider extracurricular participation in applications.

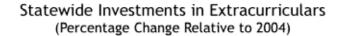
Bundick, M.J. (2011). "Extracurricular activities, positive youth development, and the role of meaningfulness of engagement." *The Journal of Positive Psychology*, 6(1), pp. 57-74.

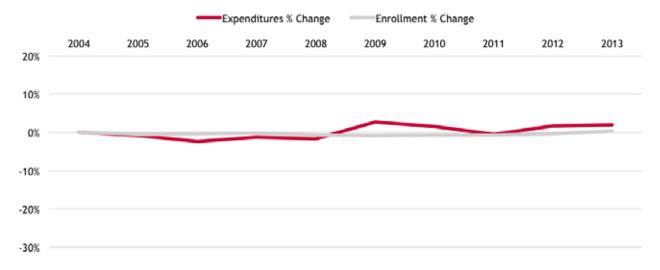
¹⁹ Moilanen, K.L.; Markstrom, C.A.; Jones, E. (2014). "Extracurricular activity availability and participation and substance use among American Indian adolescents." *Journal of Youth and Adolescence*, 43(3), pp. 454-469.

²⁰ Feldman, A.F. and Matjasko, J.L. (2007). "Profiles and portfolios of adolescent school-based extracurricular activity participation." *Journal of Adolescence*, 30(2), pp. 313-332.

Statewide Trend

In aggregate, expenditures on extracurricular activities stayed relatively flat, as did enrollment.

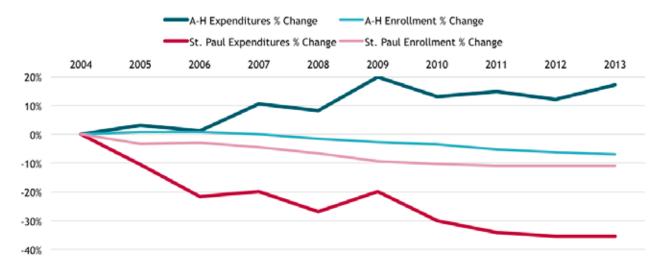




Case Studies: Anoka-Hennepin and Saint Paul

However, the statewide trend does not mean that every district's expenditures stayed the same. Anoka-Hennepin's, for example, increased by 17 percent, while Saint Paul's dropped by 35 percent. This cannot be attributed solely to changes in enrollment, since both districts' enrollment levels dropped between 2003-04 and 2012-13.

Anoka-Henn. Investments in Extracurriculars (Percentage Change Relative to 2004)



Summary: Different Districts, Different Choices

This section demonstrates how it is possible for individual districts to make decisions that differ dramatically from the norm. Anoka-Hennepin's sustained increase in investment in extracurricular activities defies the average behavior for the state, while other districts, including Saint Paul, cut extracurricular spending. This does not have to mean that activities go away (although that is sometimes the case), but districts may increase participation fees, imposing an additional barrier on who participates. This is also a reminder that statewide expenditures reflect the aggregate of hundreds of districts' priorities.



19

VII. EARLY CHILDHOOD EDUCATION

Early childhood education has gained prominence in recent years as a high-potential area for investment. School districts are well-suited to offer early childhood education services to families and to align those services with the K-12 system.

Definition

This section includes expenditures on pre-kindergarten programs, early childhood and family education (ECFE) programs, and transition to kindergarten services.

Rationale

School districts can offer both child care services and intentional early childhood education, both of which are important to families. The costs of child care have grown dramatically in the past few decades, and the average U.S. family making less than \$18,000 a year now spends roughly two out of every five dollars on child care. Ensuring that students have safe and supportive places to be while their caregivers work is an important priority for health, human services, and economic development needs.

School districts are a particularly good fit for going beyond child care to provide intentional instruction to students and support for new parents and other family members. This is the difference between "child care" and "early childhood education," and it can be significant for children's development and academic readiness. Districts that offer strong early childhood education can also align it with their early grades curriculum, providing greater continuity and stability for children as they transition into the K-12 system.

Literature Review: Spending on Early Childhood Education

The benefits of high-quality early childhood education are by this point well-documented, including returns on investment ranging from \$2.50 to \$16 for every dollar spent.^{21,22} Common characteristics of most of these programs include strong family engagement, intentionally and effectively designed learning environments, and small class sizes. Additionally, there is evidence that a public, universal early childhood program at the state level can have significant benefits for children.²³

²¹ Campbell, F. and Ramey, C. (2010). "Carolina Abecedarian project." In A. Reynolds, A. Rolnick, M. Englund, and J. Temple (Eds.), Childhood Programs and Practices in the First Decade of Life: A Human Capital Integration (pp. 76-95). New York, NY: Cambridge University Press.

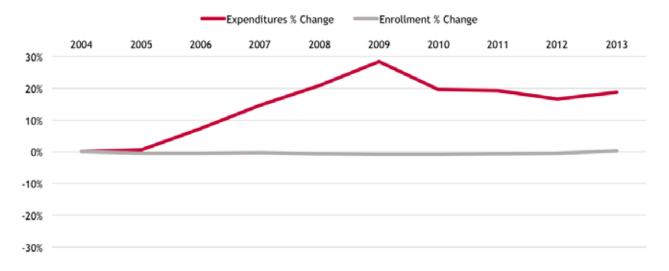
²² Reynolds, A.; Temple, J; Ou, S. (2010). "Impacts and implications of the child-parent center preschool program." In A. Reynolds, A. Rolnick, M. Englund, and J. Temple (Eds.), Childhood Programs and Practices in the First Decade of Life: A Human Capital Integration (pp. 76-95). New York, NY: Cambridge University Press.

²³ Gormley Jr., W.T. and Gayer, T. (2005). "Promoting school readiness in Oklahoma." Journal of Human Resources, 40(3), pp. 533-558.

Statewide Trend

Minnesota saw an extended investment in early childhood education, which tapered off somewhat after the onset of the Great Recession and which has only recently begun to recover.

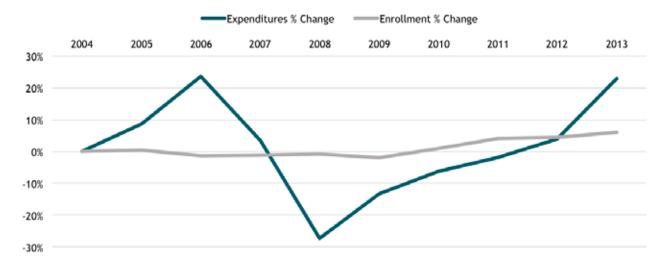
Statewide Investment in Early Childhood Ed. (Percentage Change Relative to 2004)



Case Study: Bemidji

The consistent statewide investment has not always been quite as smooth at the district level, as demonstrated in Bemidji where expenditures increased 24 percent in two years, reversed sharply for another two (down 27 percent from 2003-04 levels), then gradually recovered between 2007-08 and 2012-13 to 23 percent above 2003-04 levels.

Bemidji Investments in Early Childhood Ed. (Percentage Change Relative to 2004)



Summary: A Growing Priority

The case of early childhood education shows what happens when an educational area becomes a general priority. Sustained attention to early childhood saw a sustained increase in spending from 2005 through 2009 across the state, weakened somewhat by the Great Recession, and only recently starting to recover. Bemidji's experience shows how turbulent this story can sometimes be at the district level, but from 2008 onwards has shown significant attention to this priority.



VIII. RECOMMENDATIONS

The various trends in key expenditure areas over the last decade in Minnesota show that overall spending trends can mask a variety of subtler statements of priorities and values. As overall state aid decreased, followed by the Great Recession, investments in enriching courses and support services also shrank. At the same time, investments in math education and early childhood increased. Targeted funding for two groups of students—those receiving special education services and English Language Learners—behaved differently as enrollment increased, although both proved reasonably stable thanks to categorical formulas for state aid.

Minnesota's policy priorities, reflecting the values of a successful set of advocates and policy makers, likely shaped districts' spending decisions, with some variations based on local context and the ability of community members to assert their own values. Some recommendations emerge from these trends.

1. Increase Overall Investment for the State

Most of the spending areas studied here showed at least some increase from 2011-12 to 2012-13, reflecting increased investment from the state. Many showed losses during the Great Recession, reflecting both the last Pawlenty budgets and the difficulty some districts had sustaining local property tax levies during tough economic times. This speaks to the importance both of maintaining a strong level of investment during the good times (so that districts aren't already in difficult situations when the economy suffers) and of making countercyclical investments when the economy does go off track to offset local losses.

2. Widen the Definition of "A Good School" to Include Opportunities

The experience of the past decade of Minnesota expenditures also reflects statewide priorities and values in education. Those areas that are deemed important see increased investment, while other areas see cuts. Math education and early childhood education, for example, both saw increased investment as they gained prominence in the definition of "a good school." Without similar attention to enriching courses such as arts, business, or computer science or to needed student support services, those areas received less priority and saw investments drop or struggle to maintain.

Our policy makers' definition of a good school should include more than test scores and the fields that relate directly to them. Families and students value a variety of courses and having the right services provided at school to meet students' needs, but policy makers' spending priorities have not reflected these values.

3. Include Families, Students, Teachers, and Community Members in Financial Decision-Making

However, districts can be responsive to families' wants and needs. Anoka-Hennepin's increase in extracurricular spending, even as statewide spending on that area remained flat, shows how much power districts have in setting their own priorities. Since each community elects its own district's leadership and can place pressure on them to reflect local values, district-level organizing offers a clear opportunity for families, students, teachers, and community members in general to affect financial decision-making.

Districts that invite and recruit these stakeholders into more representative and democratic decision-making processes—as occasionally frustrating as they may be—are more likely to spend in ways that reflect community priorities. This should be an active process, with particular attention paid to those groups that rely on the school system but who face barriers to participating in school board meetings or contacting school board members directly. School boards should not simply listen to the loudest voices among those who show up, but rather seek to build a table that represents all groups in the community.

4. Invest in the Whole Child

Finally, as seen in each section of this report, it is possible to invest wisely in each of these areas. Together, enriching courses, student support services, categorical spending for targeted student needs, extracurricular activities, and early childhood education represent a broad, rich view of what education can and should do to support the whole child. Public schools can and should be places that welcome and support all students, regardless of what family or neighborhood they come from. The only way schools can do so is if they have the necessary resources and use them well.

Conclusion: Progress Has Begun, and We Must Sustain It

The past decade has been very difficult for many Minnesota schools. To roll from shrinking state aid directly into the Great Recession meant that district leaders had to make many hard choices. What they chose to cut and what they chose to sustain reflect a combination of statewide policy priorities and local pressures.

Now, Minnesota has a state government willing to invest in schools again. While the state economy is doing better than the country as a whole, too much of that recovery has accrued to those who were already comfortable. Many working families are still struggling to get by. It is critical that our statewide investment in public schools build on the progress of the last two years.

Minnesota's state and local leaders must make smart choices about how to use these resources in their schools. That means broadening our definition of "a good school" to include the opportunities it offers beyond test scores. It also means inviting democratic participation in financial decision-making. Finally, it means investing in supporting every child appropriately based on what they need and deserve from their public schools.



IX. WORKS CITED

Armstrong, T. (2009). "Multiple intelligences in the classroom," Association for Supervision and Curriculum Development.

Baisch, M.; Lundeen, L.; Murphy, M. (2011). "Evidence-based research on the value of school nurses in an urban school system." *Journal of School Health*, 81(2), pp. 74-80.

Bundick, M.J. (2011). "Extracurricular activities, positive youth development, and the role of meaningfulness of engagement." *The Journal of Positive Psychology*, *6*(1), pp. 57-74.

Campbell, F. and Ramey, C. (2010). "Carolina Abecedarian project." In A. Reynolds, A. Rolnick, M. Englund, and J. Temple (Eds.), *Childhood Programs and Practices in the First Decade of Life: A Human Capital Integration* (pp. 76-95). New York, NY: Cambridge University Press.

Chaudhary, L. (2007). "Education inputs, student performance, and school finance reform in Michigan." *Economics of Education Review*, 28(1), pp. 90-98.

Cirrin, F.M.; Schooling, T.; Nelson, N.; Diehl, S.; Flynn, P.; Staskowski, M.; Torrey, T.; Adamczyk, D. (2010). "Evidence-based systematic review: Effects of different service delivery models on communication outcomes for elementary school age children." *Language, Speech, and Hearing Services in Schools*, 41, pp. 233-264.

Conteh-Morgan, M. (2002). "Connecting the dots: Limited English proficiency, second language learning theories, and information literacy instruction." *Journal of Academic Librarianship*, 28(4), pp. 191-196.

Deasy, R.J. (Ed.). (2002). *Critical links: Learning in the arts and student achievement and social development*. Washington, DC: The Arts Education Partnership.

Feldman, A.F. and Matjasko, J.L. (2007). "Profiles and portfolios of adolescent school-based extracurricular activity participation." *Journal of Adolescence*, 30(2), pp. 313-332.

Finn, J.D.; Gerber, S.B.; Achilles, C.M.; Boyd-Zaharias, J. (2001). "The enduring effects of small classes." Teachers College Record, 103(2), pp. 145–183.

Garet, M., et al. (2001). "What makes professional development effective? Results from a national sample of teachers." *American Educational Research Journal*, 38(4), pp. 915-945.

Gormley Jr., W.T. and Gayer, T. (2005). "Promoting school readiness in Oklahoma." *Journal of Human Resources*, 40(3), pp. 533-558.

Lau, S.M.C. (2012). "Reconceptualizing critical literacy teaching in ESL classrooms." *Reading Teacher*, 65(5), pp. 325-329.

Levenson, N. (2012). "Academic ROI: What does the most good?" Educational Leadership, 69(4), pp. 34-39.

Moilanen, K.L.; Markstrom, C.A.; Jones, E. (2014). "Extracurricular activity availability and participation and substance use among American Indian adolescents." *Journal of Youth and Adolescence*, 43(3), pp. 454-469.

Pallas, A.M. (2010). "Meeting the basic educational needs of children and youth." *Children and Youth Services Review*, 32(9), pp. 1199-1210.

Reynolds, A.; Temple, J; Ou, S. (2010). "Impacts and implications of the child-parent center preschool program." In A. Reynolds, A. Rolnick, M. Englund, and J. Temple (Eds.), *Childhood Programs and Practices in the First Decade of Life: A Human Capital Integration* (pp. 76-95). New York, NY: Cambridge University Press.

Schellenberg, E.G. (2006). "Long-term positive associations between music lessons and IQ." *Journal of Educational Psychology*, 98(2), pp. 457-468.

Teasley, M.; Canfield, J.P.; Archuleta, A.J.; Crutchfield, J.; Chavis, A. (2012). "Perceived barriers and facilitators to school social work practice: A mixed-methods study." Children & Schools, 34(3), pp. 145-153.

Vega, T.; Travis, B. (2011). "An investigation of the effectiveness of reform mathematics curricula analyzed by ethnicity, socio-economic status, and limited English proficiency." *Mathematics and Computer Education*, 45(1), pp. 10-16.

White, S. (2010). "The school counselor's role in school dropout prevention." *Journal of Counseling & Development*, 88(2), pp. 227-235.

Yang, C.W.; Sherman, H.; Murdick, N. (2011). "Error pattern analysis of elementary school-aged students with Limited English Proficiency." *Investigations in Mathematics Learning*, 4(1), pp. 50-67.



Minnesota 2020 is a progressive, non-partisan think tank, focused on what really matters.

2324 University Avenue West, Suite 204, Saint Paul, MN 55114 www.mn2020.org

