

Issue Brief

RESOURCE ALLOCATION TO
IMPROVE STUDENT
ACHIEVEMENT

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Introduction

It is true that time is money, particularly in the case of resources allocated to raise student achievement. Approximately 85 percent of Saint Paul Public Schools' (SPPS) budget is spent on staff time, which means that time is the primary resource that schools can allocate and reallocate. This Office of Research and Development (R&D) Issue Brief, written in a climate of limited financial resources, addresses the alignment of those resources to student achievement. When faced with the difficult task of deciding how to allocate resources to strategies, programs, or interventions, the Resource and Achievement Matrix later in this brief is one way to compare the options and make informed decisions about them.

Background

Since the completion of the Coleman Report in the mid-1960s, there have been a plethora of studies conducted with the intent of shedding more light on the relationship between school resources and student performance. Perhaps of most importance to educational practitioners was the study completed in 1994 by Hedges, Laine and Greenwald, which concluded that the relationship between resource inputs and student outcomes was consistent, positive and further could be used to frame educational policy. Contemporary research in school finance goes further to suggest that resource allocation decisions can be improved when the outcome is clear and both the costs and benefits associated with reaching higher standards are understood and measured (Honan, J.P., et.al., 2004; Odden A., et.al.,1995; Odden, A., & Archibald, S., 2001; Odden, A., & Busch, C. 1998). These were startling conclusions for educators who typically shied away from putting a "price" on students and their educational achievement.

In the late 1990's financial constraints forced many urban districts to reconsider the way they operated, to determine how they could continue to educate students in the face of decreasing financial resources and increasing social and cultural challenges. The passage of the No Child Left Behind Act has also pushed educators to concentrate on the connection between student achievement and the allocation of resources. With the new legislation, educators are now expected to integrate the connection between achievement and resources into district operations. In short, successful student achievement can now be commonly seen and measured as a function of what districts and schools do with their resources, limited or otherwise.

A Clearer Connection: Budgets and Student Achievement in Saint Paul

In recent years, Saint Paul Public Schools (SPPS) has increasingly focused on the connection between resources and achievement, largely in conjunction with three trends that have affected schools' decision-making and available resources. These include:

1) Site-Based Decision-Making

In 1999, the district adopted a decentralized funding model, through "lump sums" distributed to schools with school-wide flexibility. The most important aspect of this transformation has been that the district no longer allocates most staff FTEs (Full-Time Equivalents) from the general educational fund to sites. Instead, sites are allocated lump sum amounts that can be used at the

school level within established state and federal regulations and guidelines. The result of the shift has been to give schools greater control over the use of financial resources within their buildings. Through experience and training, schools have built the capacity to allocate these resources in creative new ways to improve student outcomes.

Under this plan, Saint Paul Public Schools has:

- Provided schools with a common base allocation for elementary, junior high/middle and senior high schools
- Moved toward a per pupil allocation, by phasing out historical staffing ratios now included in site lump sum budgets
- Provided magnet schools with a base magnet allocation tied to meeting district-wide magnet school program goals
- More directly allocated categorical funds to sites, including compensatory education aid
- Developed plans for funding special education and English Language Learner (ELL) programs at the site level (Action Plan Essential Effort #6-C)

2) *Comprehensive School Reform*

Revising school structures to meet standards usually involves reallocating resources. As all schools in SPPS have either adopted or developed a Comprehensive School Reform model, they must reallocate resources to align with the structure of the model. For example, in the America's Choice Comprehensive School Reform Model, resources must be allocated to fund one primary literacy coach position, and one intermediate literacy coach position. Senior High School Small Learning Communities have budgetary requirements for professional development and counseling and support initiatives. Even at the district level, attempts to provide a Comprehensive School Reform model to schools through the Center of Academic Excellence required the district reallocation of resources previously separated into six departments.

3) *State Funding*

The district has faced five consecutive years of budget reductions (1999-2004) and faces more in 2005, due in large part to insufficient state funding. This has required creativity in both budgeting for, and implementation of, school and program-level strategies to sustain gains in student academic achievement.

Promising Practices Project (PPP)

Evidence of the connection between budgets and achievement in Saint Paul was shown in the recent Promising Practices Project

(<http://scip.spps.org/PPP>) study of high growth elementary schools. The study found that those schools have adopted—and seen student success as a result of—resource reallocation strategies in the following areas:

- Extend Instruction in Key Subjects during the School Day
- Differentiate Instruction Based on Student Needs
- Pull In Rather than Pull Out, with a staff teaming model
- Extend the School Day and Year
- Speak the Same Language and Move in the Same Direction, through focused staff development
- Involve Parents in Raising Student Achievement and Enhance Instruction with Volunteers, by extending learning to “free time”

Resource and Achievement (Cost-effectiveness) Matrix

On the following page, you will find a tool for schools to use when faced with making difficult programmatic decisions in the face of budget constraints, particularly when funding levels remain uncertain. The *Resource and Achievement Matrix* can assist in examining the cost-effectiveness of a given strategy, program or intervention to accomplish School Continuous Improvement Plan (SCIP) achievement goals. The matrix should be used once you have developed a list of strategies that you would like to compare. It can help to guide a discussion of what strategies provide the greatest return in student achievement for the amount of resources put into them. This information can inform decisions about changes in how your school allocates resources.

When faced with the difficult decision of choosing one strategy, program or intervention over another, first, select a specific SCIP achievement goal. Then look at a list of strategies and ask two questions of each of them:

1. What is the likelihood that the strategy will impact a specific SCIP **achievement** goal? (High, Average, Low)
2. What level of **resources** (dollars and time) does this strategy require? (High, Average, Low)

Place each strategy on the *Resource and Achievement Matrix*, at the intersection of the level of resources and likelihood of student achievement impact, as defined by the SCIP goal. For an example, see *Appendix*. Then use the results to compare likelihood of student achievement impact given the level resources the strategy requires. The higher the likelihood of increased student achievement and the lower the required resources, the higher the chance that your resources are ideally allocated.

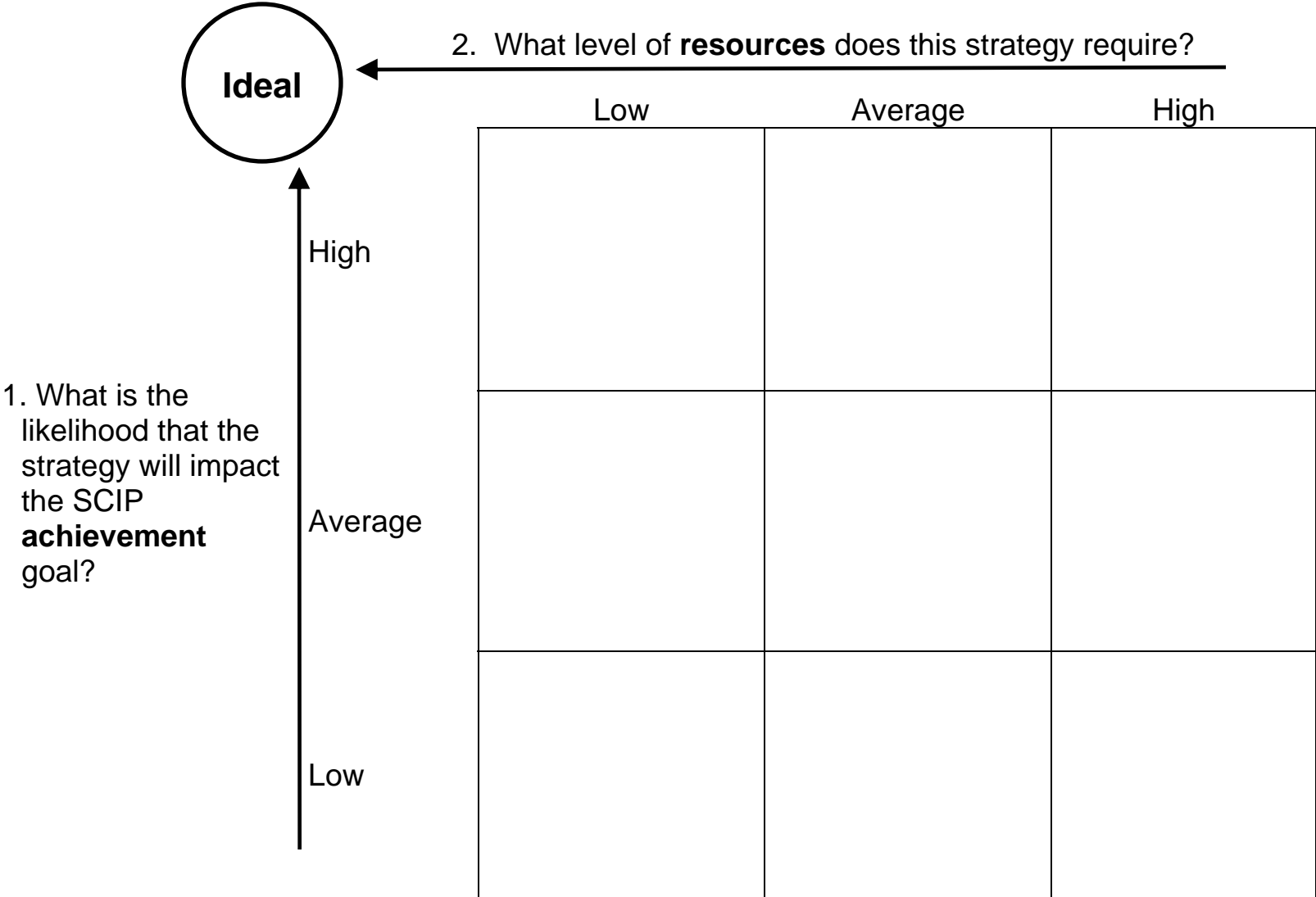
The following scenarios provide ideas on how to take action based on the *Resource and Achievement Matrix* results.

- **Low Level of Resources/High Likelihood of Achievement Impact.** If a strategy requires few resources and has a high likelihood of increasing student achievement, think about expanding that program, or even sharing it with other schools.
- **Average Level of Resources/Average Likelihood of Achievement Impact.** If a strategy requires average resources and has average likelihood, you may want to think about looking for ways to make it a more valuable and viable program. Revisit the strategy to increase its likelihood of impact and/or decrease the amount of resources required.
- **High Level of Resources/Low Likelihood of Achievement Impact.** If a strategy requires a high level of resources, and has a lower likelihood of increasing student achievement, look at cutting or significantly restructuring that strategy before you consider discontinuing other programs.

Resource and Achievement Matrix

Place your school’s strategies, programs, and interventions on the following grid to compare their likelihood to improve student achievement, as defined by a selected SCIP goal, given the resources required. The higher the likelihood of increasing student achievement and the lower the required resources, the better the chance that your resources are ideally allocated.

SCIP Achievement Goal: _____



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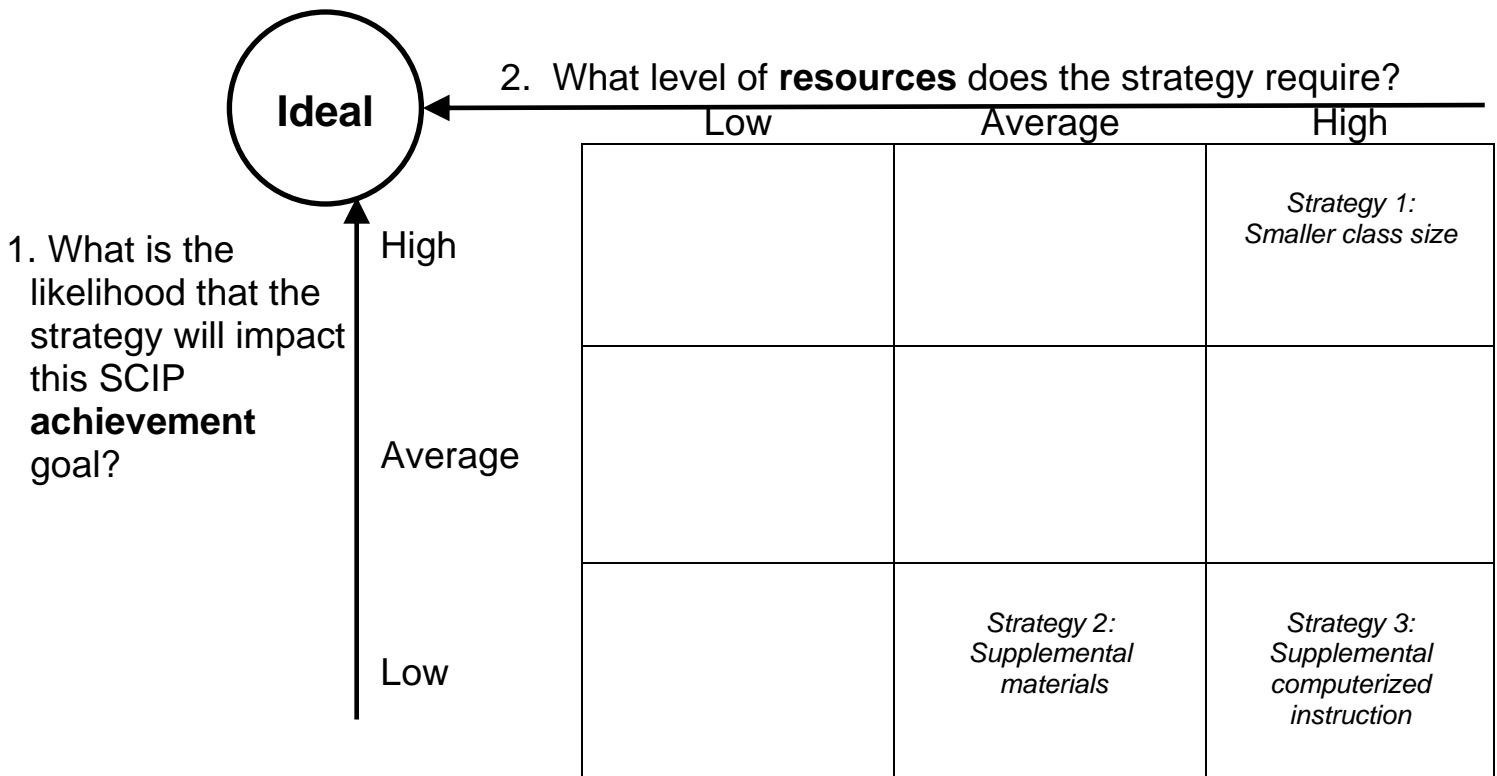
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APPENDIX

Resource and Achievement Matrix--EXAMPLE

In their 2005-06 SCIP, the principal and site council of Kahlo Middle School have established the academic goal of closing the mathematics achievement gap between girls and boys in their school. Now they are faced with the following dilemma: they must choose two of the three current instructional strategies that they have been using to increase mathematics achievement (smaller class size, supplemental materials, and supplemental computerized instruction). Further, their assessment data suggest that girls are more likely to struggle in computation and boys are more likely to struggle in number sense. They decide to use the **Resource and Achievement Matrix** to help make their decision. Their completed matrix looks like this:

SCIP Achievement Goal: To close the mathematics achievement gap between girls and boys.



The principal and site council of Kahlo Middle School find that:

- Smaller class size (strategy 1) requires a high level of resources and has a high likelihood of increasing student achievement.
- Supplemental materials (strategy 2) require an average level of resources and have a low likelihood of increasing student achievement.
- Supplemental computerized instruction (strategy 3) requires a high level of resources and has a low likelihood of increasing student achievement.

After some discussion and examining other data (i.e., research reports, interviews with teachers and other principals who have faced similar challenges), the school leaders decide that they will not only retain strategy one (smaller class size) but utilize that as the primary intervention to address the goal. This means that they will decrease the other efforts to focus resources on the strategy with the highest impact (since it also requires more resources). They also decide to monitor the effects of their decisions closely with the intent of revisiting the decision at the midterm.