



Best Practices for Cost Effectively Raising Achievements for Struggling Students

NOVEMBER 15, 2016



DISTRICT
MANAGEMENT
COUNCIL

Agenda

About DMC

Best Practices overview

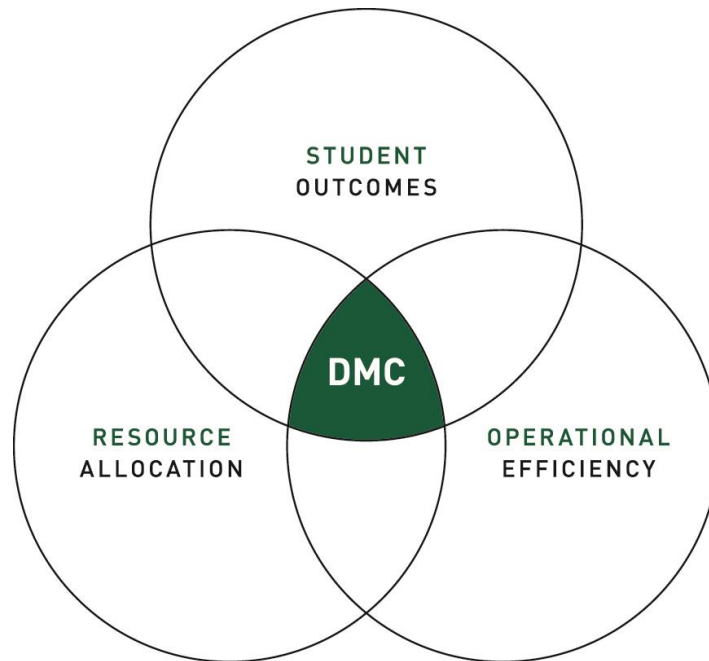
Cost implications of the best practices

Learn more

The District Management Council (DMC)'s mission is to achieve systemic improvement in public education.

DMC's Mission

DMC was founded in 2004 to help school districts address their most pressing and important challenges.



DMC membership and client services are underpinned by three key aims: raise student achievement, improve operational efficiency, and allocate resources more effectively.

DMC helps districts improve and sustain results in some of their biggest challenge areas by leveraging powerful technology tools.

DMC Solutions

View: Master school schedule

Grade	1				2				3				4				5							
Classroom	KA	KB	KC	KD	1A	1B	1C	1D	2A	2B	2C	2D	3A	3B	3C	3D	4A	4B	4C	4D	5A	5B	5C	5D
9:00 AM	Morning meeting				Morning meeting				Morning meeting				Morning meeting				Morning meeting							
9:15 AM	ELA				ELA				Science / Social Studies				Intervention / Enrichment				Science / Social Studies							
9:30 AM	ELA				ELA				Math				Specials				Intervention / Enrichment							
9:45 AM	Lunch				Lunch				ELA				Specials				Math							
10:00 AM	Lunch				Lunch				ELA				Specials				Math							
10:15 AM	Lunch				Lunch				ELA				Specials				Math							
10:30 AM	Lunch				Lunch				ELA				Specials				Math							
10:45 AM	Lunch				Lunch				ELA				Specials				Math							
11:00 AM	Lunch				Lunch				ELA				Specials				Math							
11:15 AM	Lunch				Lunch				ELA				Specials				Math							
11:30 AM	Recess				Recess				Lunch				Lunch				Recess							
11:45 AM	Recess				Recess				Lunch				Lunch				Recess							
12:00 PM	Recess				Recess				Lunch				Lunch				Recess							
12:15 PM	Math				Intervention / Enrichment				Recess				Recess				Lunch							
12:30 PM	Math				Intervention / Enrichment				Recess				Recess				Lunch							
12:45 PM	Math				Intervention / Enrichment				Recess				Recess				Lunch							
1:00 PM	Intervention / Enrichment				Specials				Math				ELA				Science / Social Studies							
1:15 PM	Intervention / Enrichment				Specials				Math				ELA				Science / Social Studies							
1:30 PM	Specials				Science / Social Studies				Intervention / Enrichment				ELA				ELA							
1:45 PM	Specials				Science / Social Studies				Intervention / Enrichment				ELA				ELA							
2:00 PM	Specials				Science / Social Studies				Intervention / Enrichment				ELA				ELA							
2:15 PM	Science / Social Studies				Math				Specials				Science / Social Studies				Intervention / Enrichment							
2:30 PM	Science / Social Studies				Math				Specials				Science / Social Studies				Intervention / Enrichment							
2:45 PM	Science / Social Studies				Math				Specials				Science / Social Studies				Intervention / Enrichment							

Elementary and Secondary Scheduling

- Scheduling tools that cost-effectively create schedules that promote teaching and learning best practices

Improving Special Education

- Improved effectiveness and cost-effectiveness for special education and other interventions (RTI)

Shifting Resources to Support Strategic Priorities

- More precise general education staffing, aligning federal funds and searching for opportunities to free up resources

Academic Return on Investment

- Knowing what works, for which students at what cost
- Program reviews

Strategic Planning

- Strategic plan development
- School and district accountability
- Central office redesign

Other

- Weighted student funding
- Human capital



About DMC

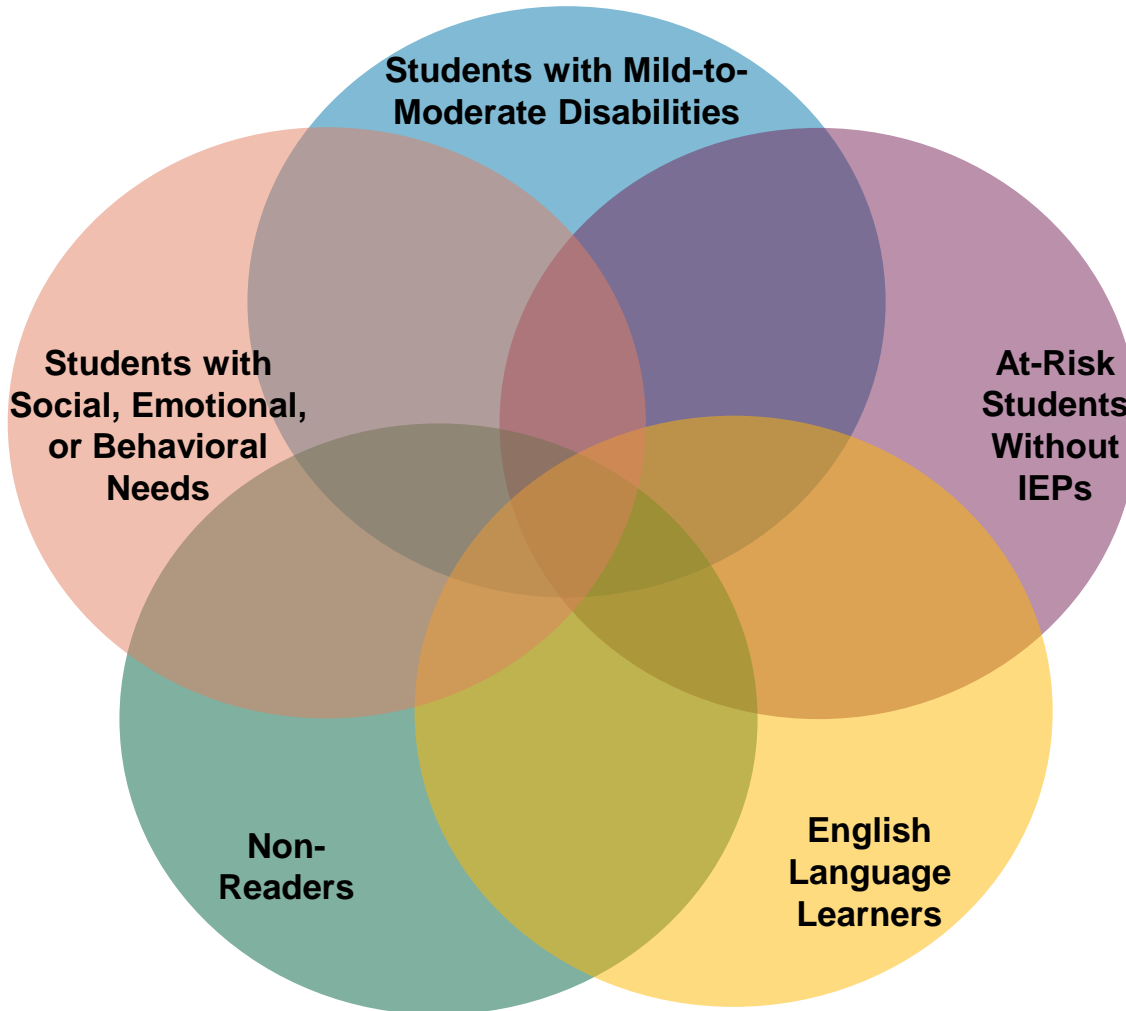
Best Practices overview

Cost implications of the best practices

Learn more

DMC's definition of "struggling students" is intentionally broad.

Struggling Students Definition



Common Challenges

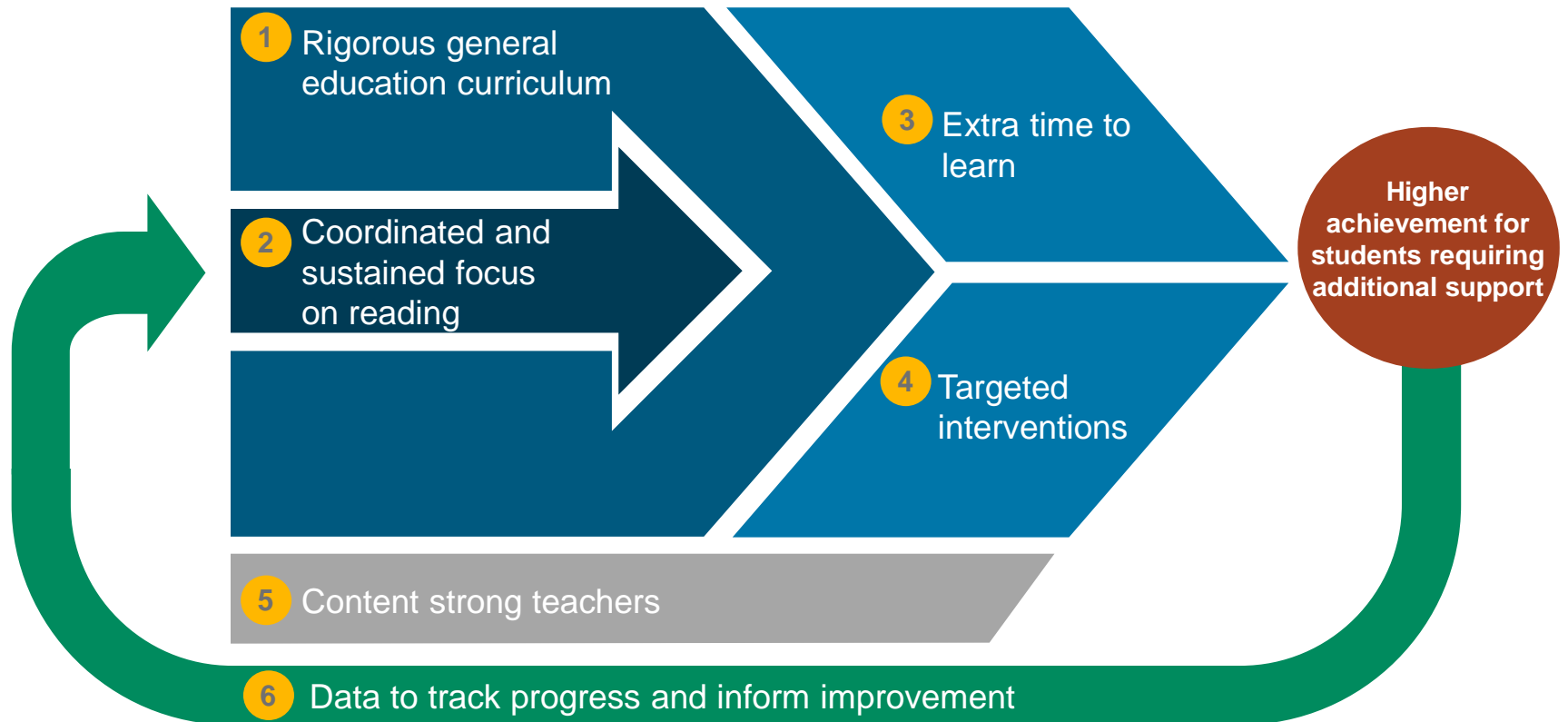
- Many struggle to read and comprehend
- Many have skill deficits from prior grades
- Many require multiple modes of instruction
- Many learn and process information more slowly than their peers

A similar approach for all can be effective and cost-effective.

Note: Students with ASD, severe disabilities, cognitive disabilities or virtually no fluency in English do have more specialized needs.

Six interconnected best practices can help students requiring additional support achieve at high levels in a cost-effective manner.

DMC Framework for Supporting Struggling Students*

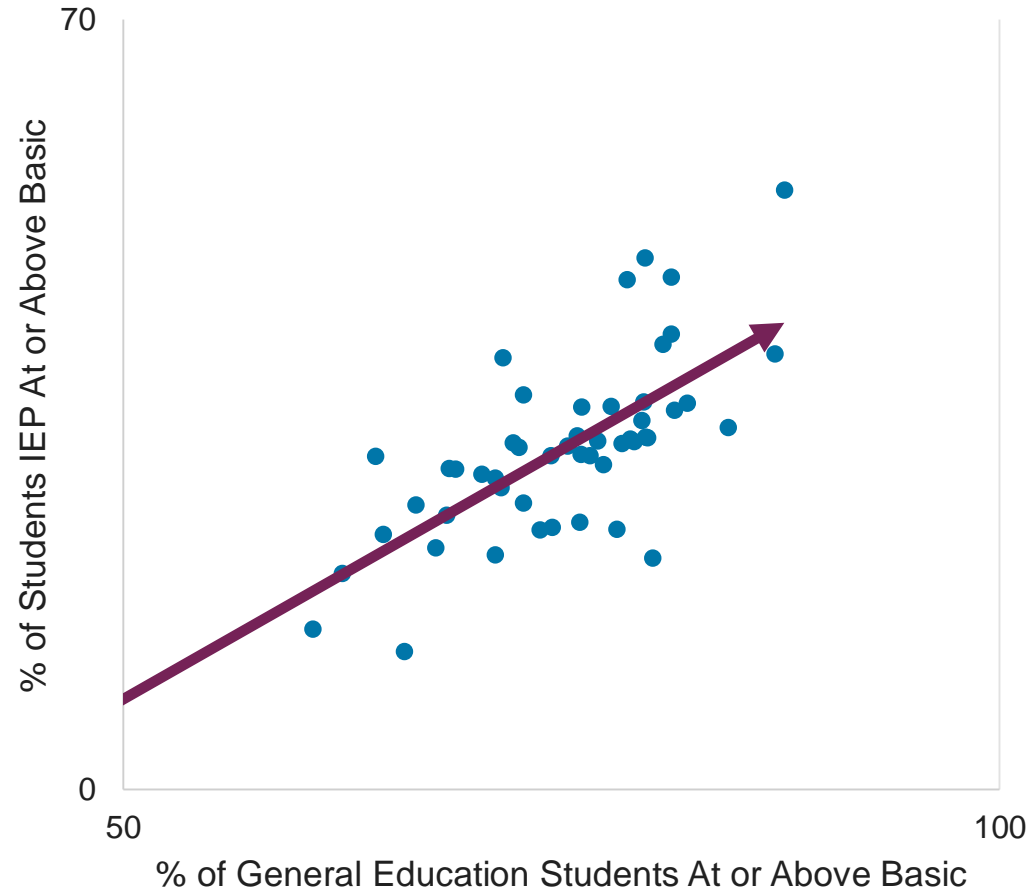


*Note: Struggling students is defined as students with IEPs for mild-to-moderate disabilities and students who struggle academically, however do not have an IEP.

A strong general education curriculum helps all students, including students with IEPs.

NAEP Grade 4 Reading Performance by State

% at Basic or Above, 2015

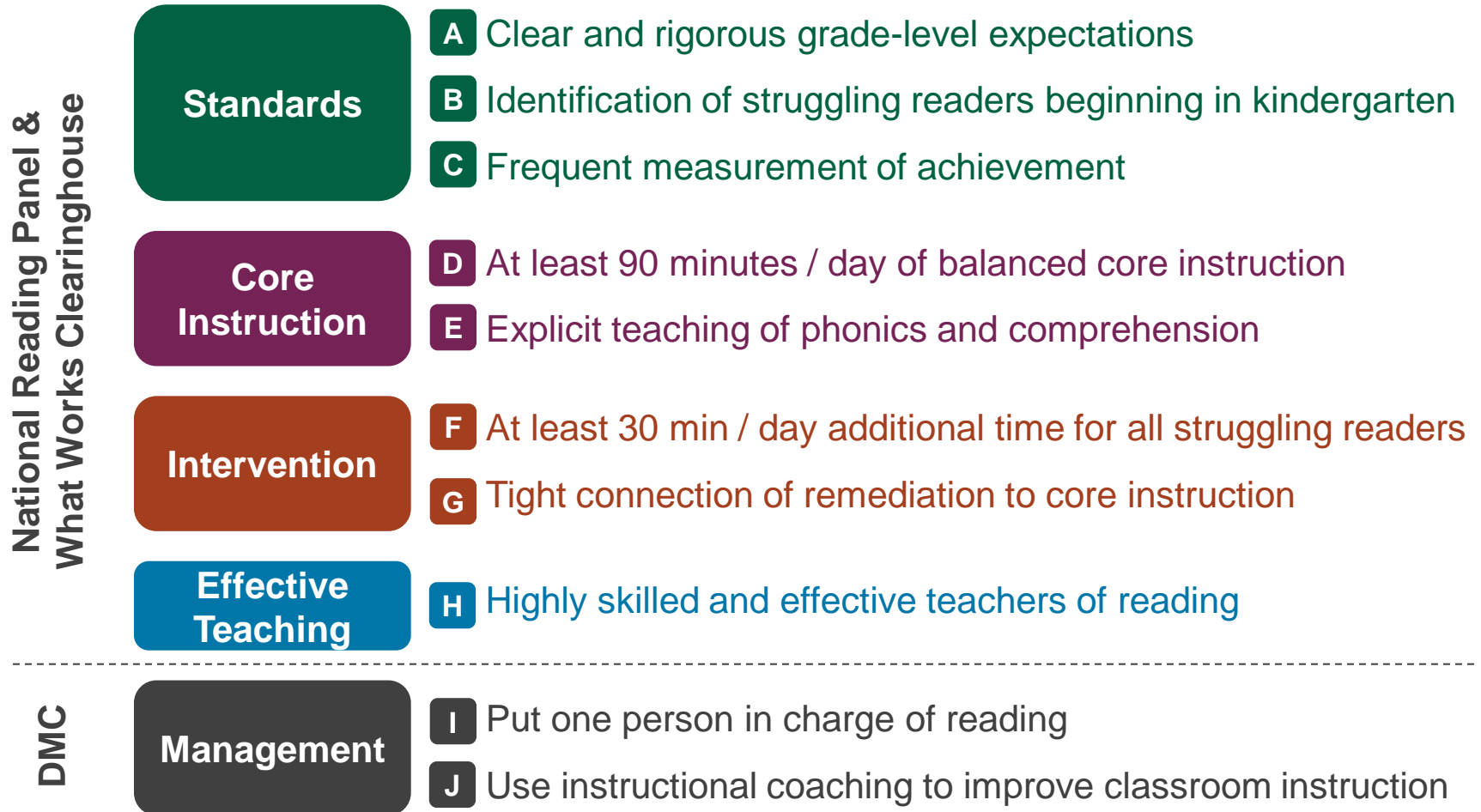


- Higher performance of general education students is related to higher performance of students with mild-to-moderate disabilities nationwide
- The same is true for school systems within a state

Source: US Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2015 Reading Assessment

10 interconnected best practices can ensure virtually all students read on grade level

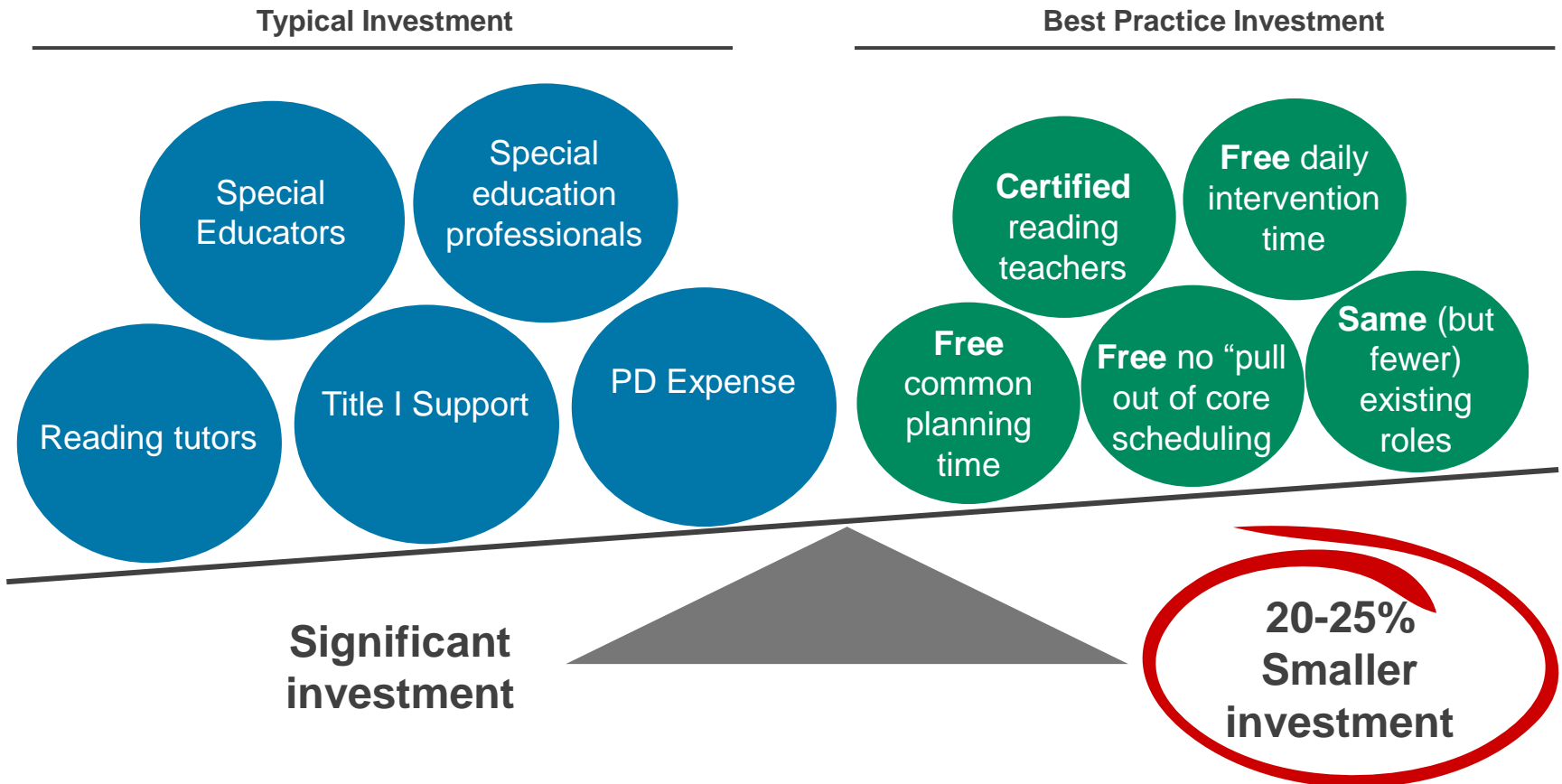
Elementary: A System for an Effective Reading Program



Source: National Reading Panel, What Works Clearinghouse, experience of school systems who have dramatically improved reading scores

Reading best practices often cost less than common practices.

Investment in elementary reading



Intervention must provide additional time for struggling readers with mild-to-moderate disabilities and for students without IEPs.

Elementary Intervention Strategy: Additional 30 Minutes Per Day

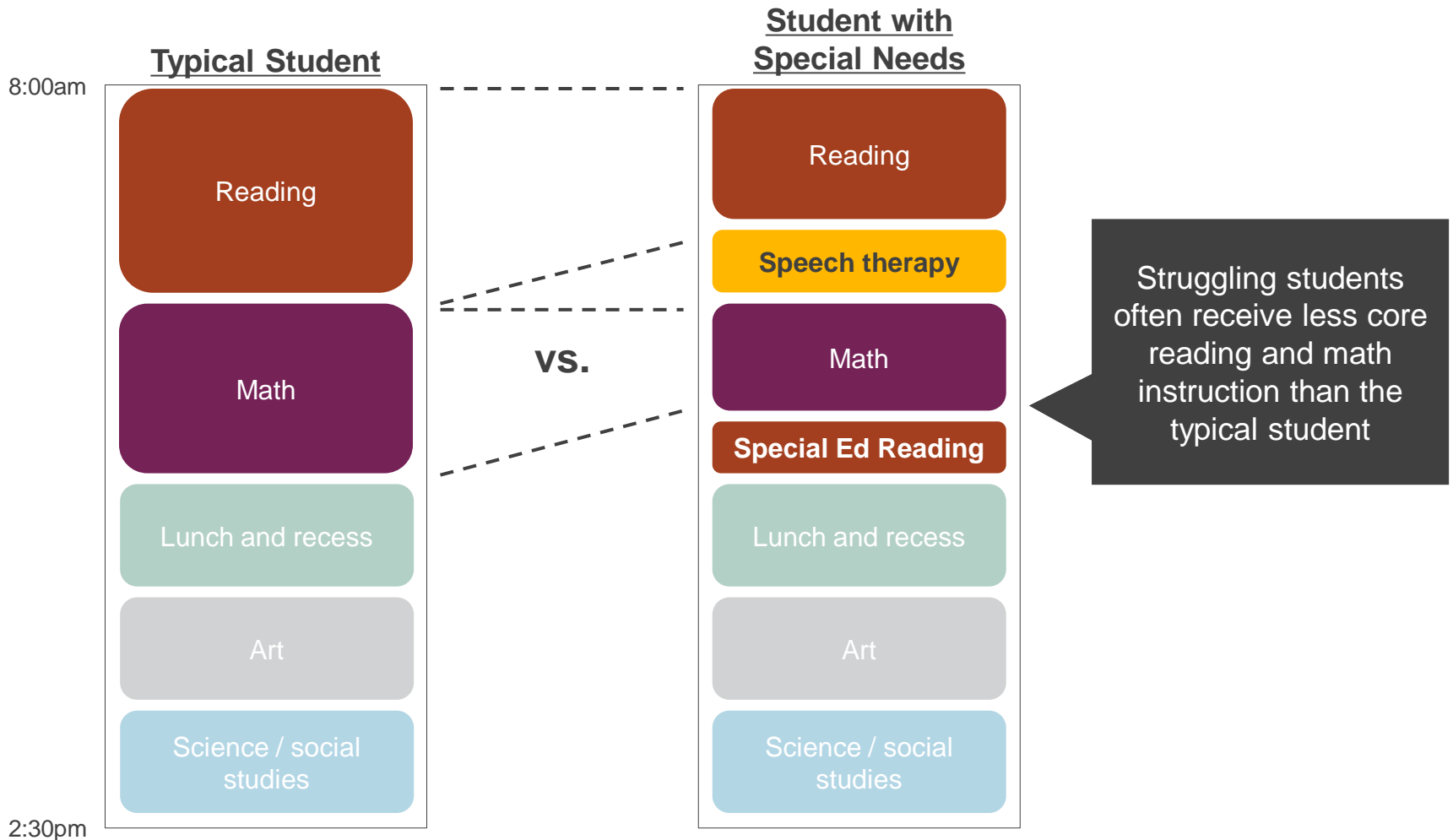
Cost-neutral intervention scheduling

	K	1	2	3	4	5
8:00		Writing	Intervention		Science	
8:30	Reading			Reading	Social Studies	Reading
9:00		Reading	Reading			
9:30	Writing			Intervention	Math	Writing
10:00			Writing	Writing		
10:30	Recess				Intervention	Science
11:00	Lunch	Math	Recess	Science	Specials	Social Studies
11:30	Intervention		Lunch	Social Studies	Recess	Specials
12:00		Recess		Specials	Lunch	Recess
12:30	Math	Lunch	Math	Recess		Lunch
1:00		Science		Lunch	Reading	Intervention
1:30	Science	Social Studies	Specials			
2:00	Social Studies	Specials	Science	Math		Math
2:30	Specials	Intervention	Social Studies		Writing	

- **Additional 30 minutes daily** of intervention instruction
- **No-cost intervention** is possible with strategic elementary scheduling

Logistical challenges in building schedules to include extra help may actually undermine a student's time to learn.

Elementary Pullout Schedule: When More Becomes Less



Scheduling is how schools operationalize these strategies, and even medium sized districts require 200+ schedules at the elementary level.

Number of Schedules Created

5,000 Student District

“I’m so excited we hired a new AP so I don’t have to build the schedule anymore”

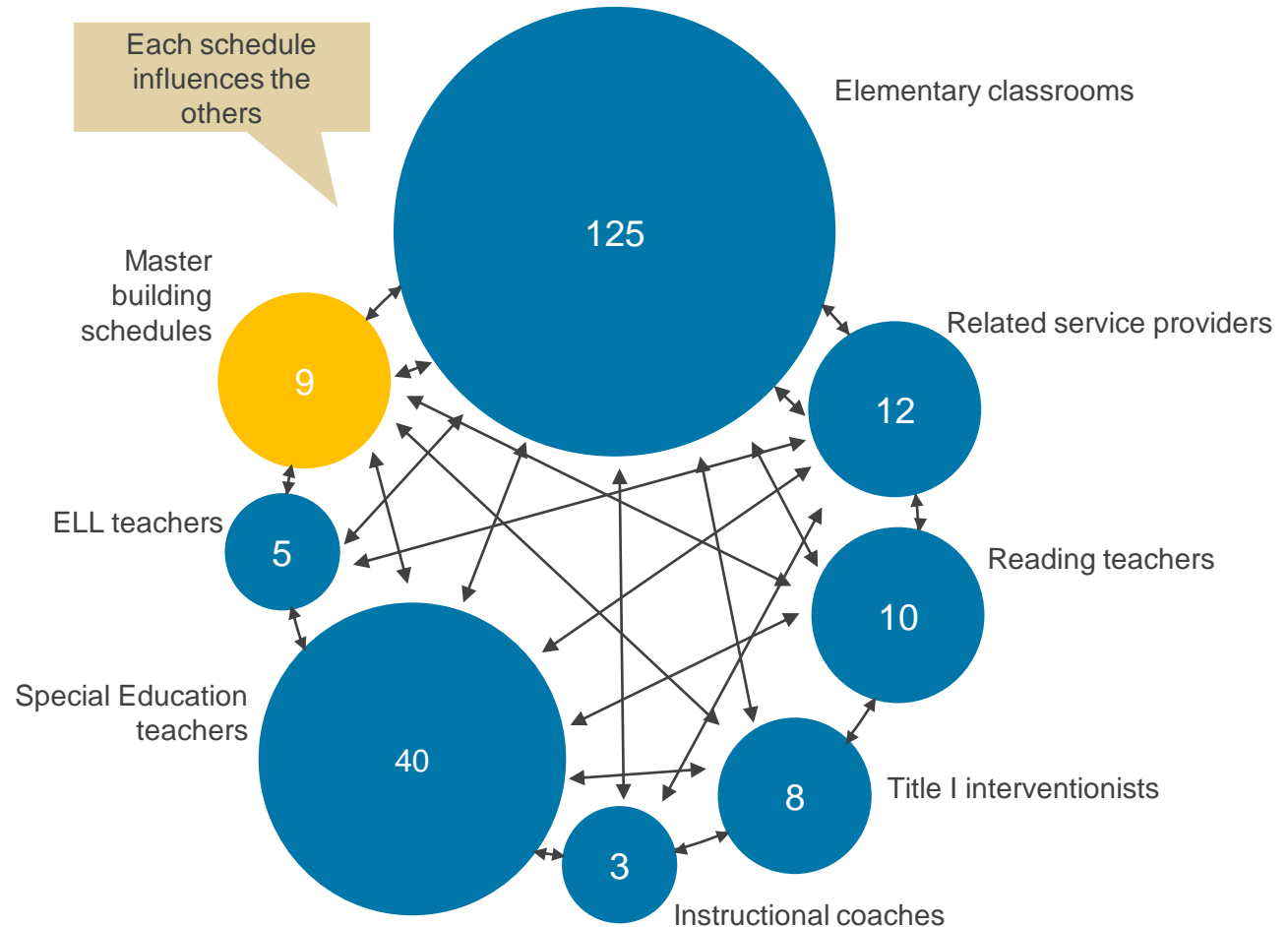
– AP

“Scheduling is the bane of my existence”

– Speech Therapist

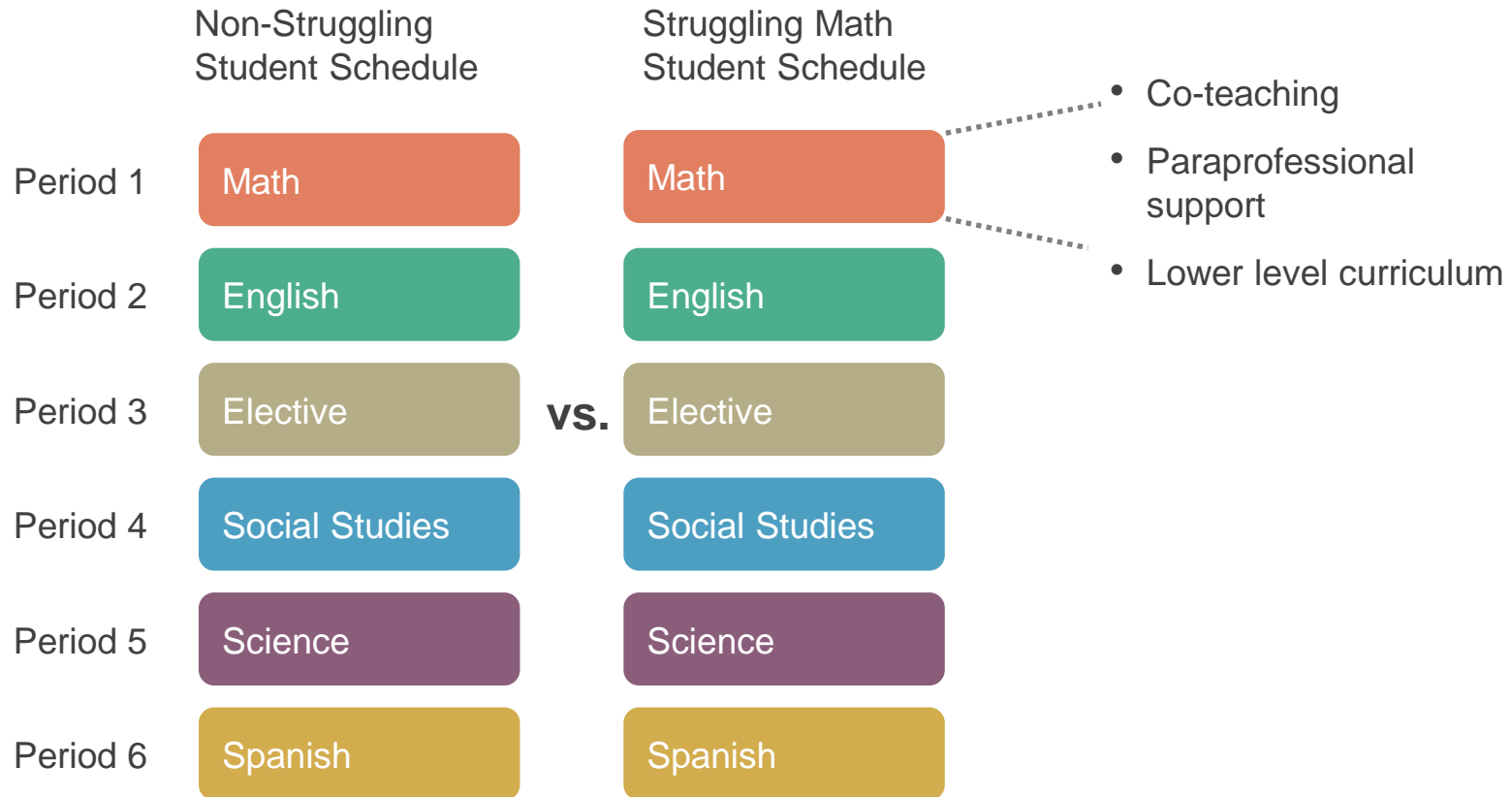
“I know we should do Read 180 for 90 minutes, but that would be impossible to schedule”

– Special Education Director



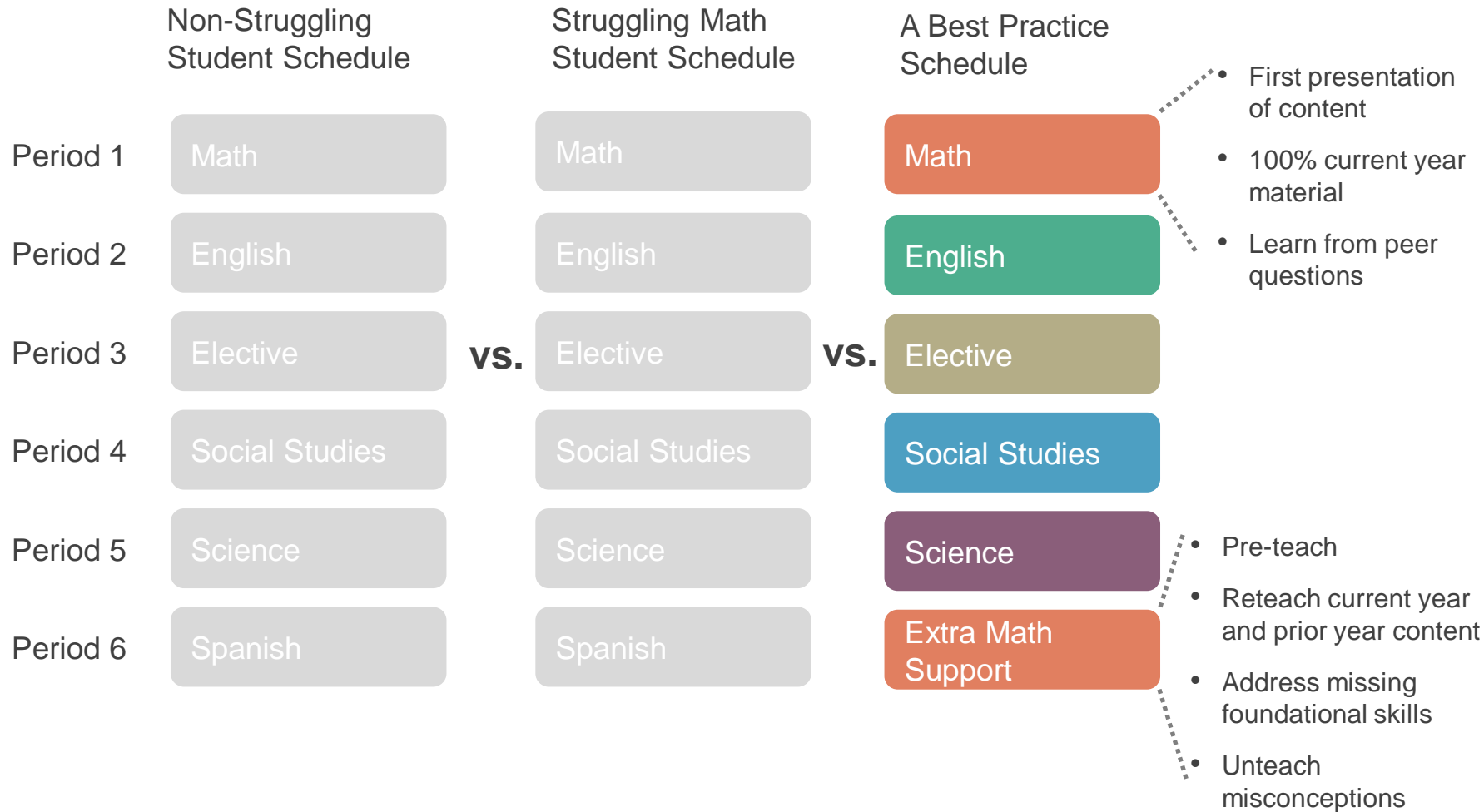
In many secondary schools, “extra help” happens during core instruction or instead of core instruction.

Secondary Intervention Strategy: Typical Approach



Best practice for secondary intervention is a “double time” model that involves providing “extra help” in addition to core instruction.

Secondary Intervention Strategy: Best Practice Approach



Turn & Talk Activity

“Do schedules control you, or do you control the schedules”

- **How do schedules in your district help support these cost-effective strategies? How might they hinder cost-effective strategies?**

Deep content knowledge by teachers helps students unlearn misconceptions and master needed skills.

Instructional Support for Struggling Students

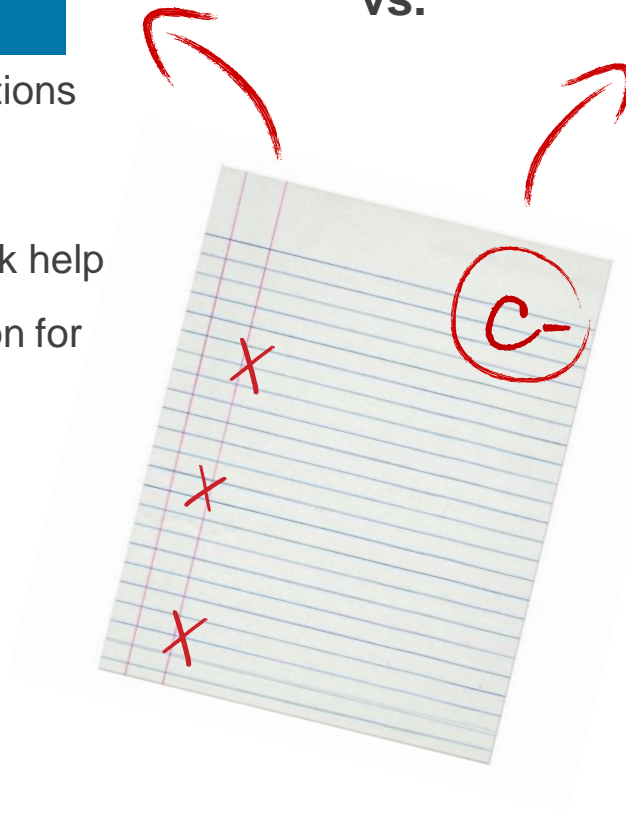
Generalist Support

- Review test questions and show correct answer
- Provide homework help
- Quiz in preparation for future tests

vs.

Content Strong Support

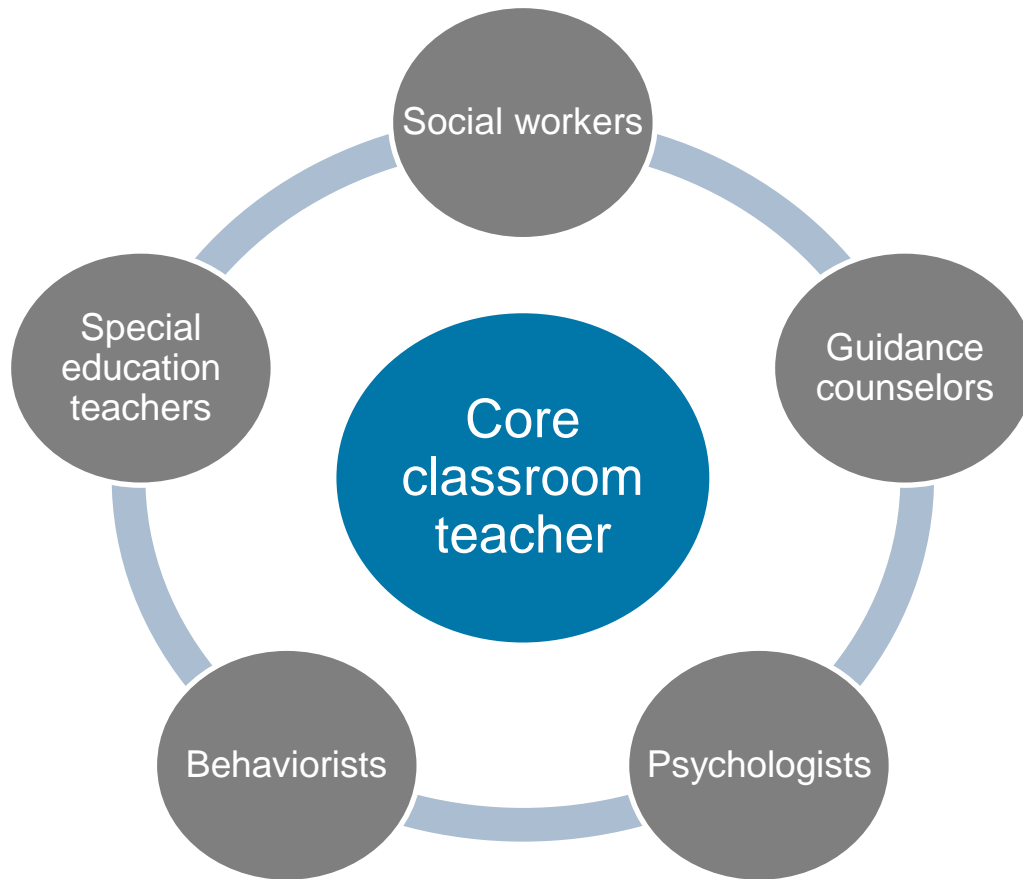
- Associate each incorrect answer with underlying concept
- Infer misunderstandings from incorrect answers
- Teach prior, fundamental skills
- Teach correct material using 2 or 3 different approaches



*Note: Struggling students is defined as students with IEPs for mild-to-moderate disabilities and students who struggle academically, however do not have an IEP.

Meeting the social, emotional, and behavioral needs of students requires a group effort and many disciplines.

Coordinated Social, Emotional, and Behavioral Supports



- All the different roles and players need to work from a common playbook.
- Assign clear roles and responsibilities, based not just on role or title but on individual strengths, training and aptitude.

Effectively managing challenging behaviors requires much skill but not always many adults.

Many adults

- Staff in each classroom or with one child
- Reactive- respond after an outburst
- Helps prevent learning disruptions of other students
- Helps student get through the day and through school



Many paraprofessionals required

Highly skilled experts

- Staff assigned flexibly to many students
- Focus on prevention of outbursts
- Helps prevent learning disruptions of other students and student with behaviors
- Helps students prepare for life after graduation

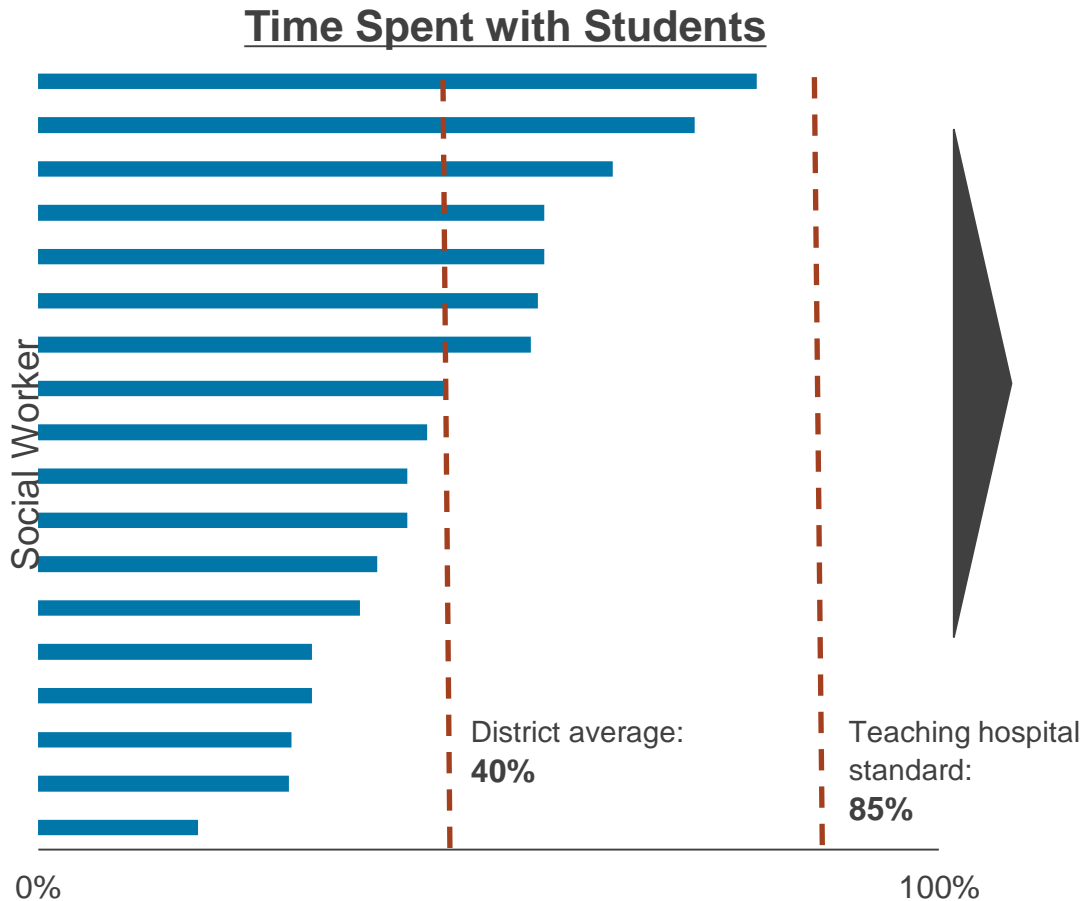


A few behaviorists and some paraprofessionals required

Districts can expand the reach of these valued staff by closely managing and streamlining the time they spend in meeting and doing paperwork.

Streamlining Meetings and Paperwork

SEB SUPPORTS



- Psychologists, social workers, counselors, and behaviorists are asked to do many, many things.
- Expand the reach of these valued staff by closely managing and streamlining the time they spend in meeting and doing paperwork

Source: DMC

About DMC

Best Practices overview

Cost implications of the best practices

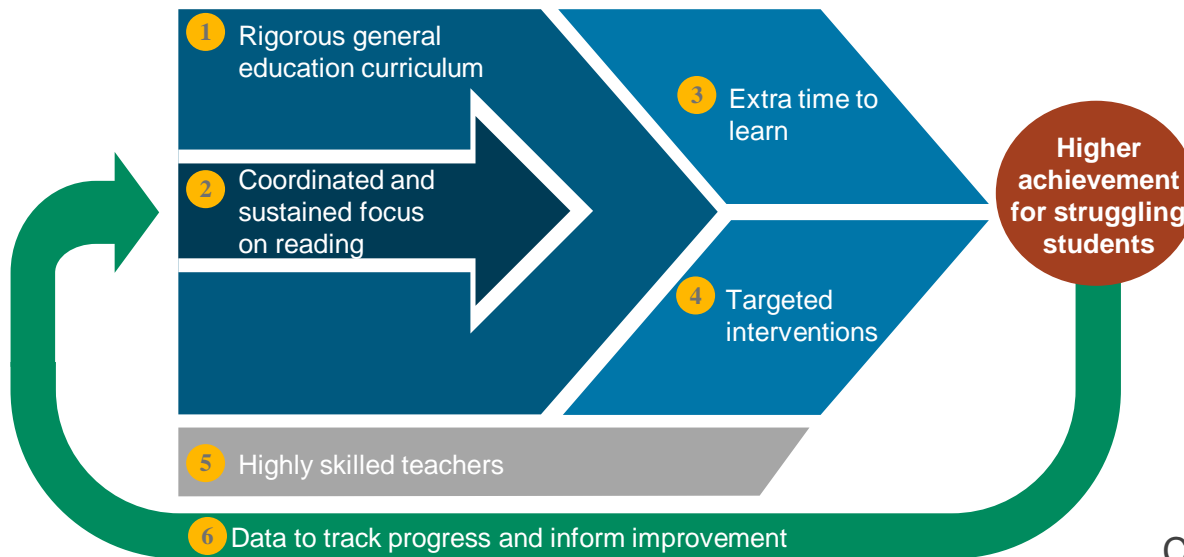
Learn more

Most of the best practices for raising achievement for struggling students cost less than many common practices.

DMC Framework for Supporting Struggling Students

SPECIAL EDUCATION

Examples: Cost per Student



Elementary

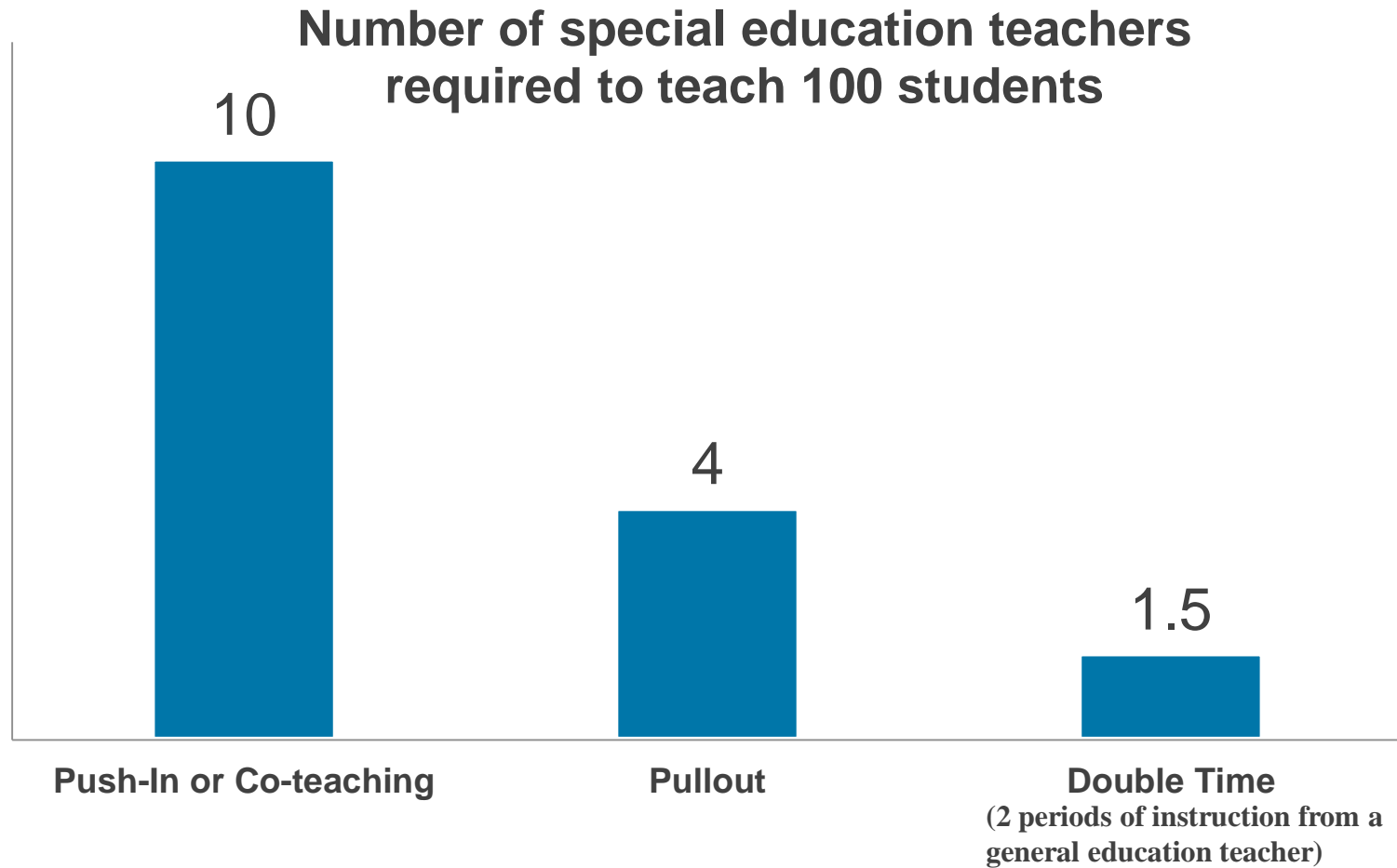
Reading Recovery	\$6,250
Resource Room	\$3,750
Best Practice	\$2,100

Secondary

Co-Teaching	\$5,000
Math Best Practice	\$1,000

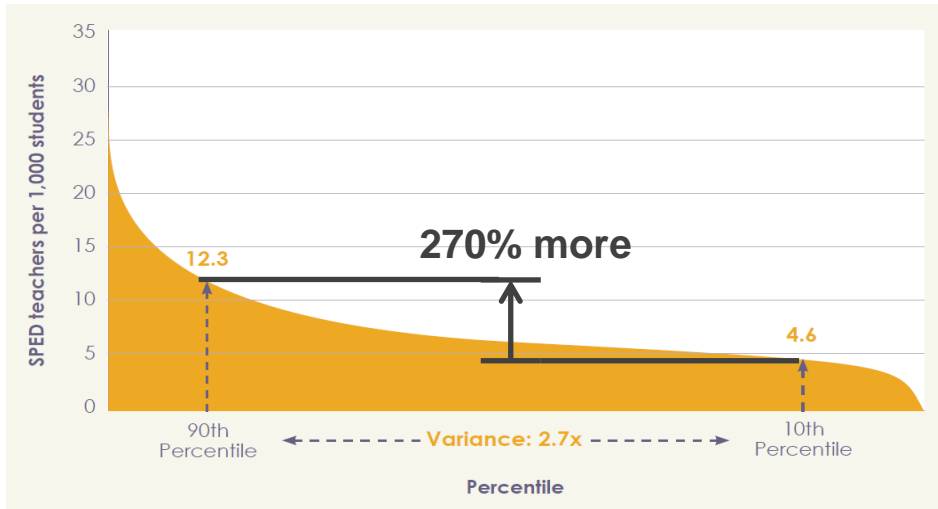
Some service delivery models lead to equal or higher achievement using far fewer resources.

SPECIAL EDUCATION



Without any clear formula for special education staffing, districts across the country staff at very different levels for similar needs.

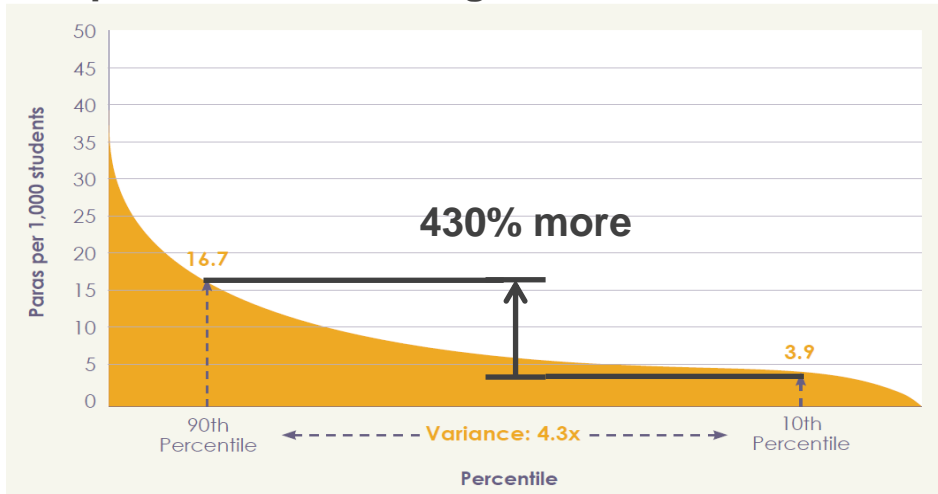
Special Education Teacher Staffing Nationwide



Additional Findings

- Similar variation occurs when data is controlled for like districts
- Districts with more special education teachers typically have more paraprofessionals as well
- More staff didn't mean better outcomes

Paraprofessional Staffing Nationwide

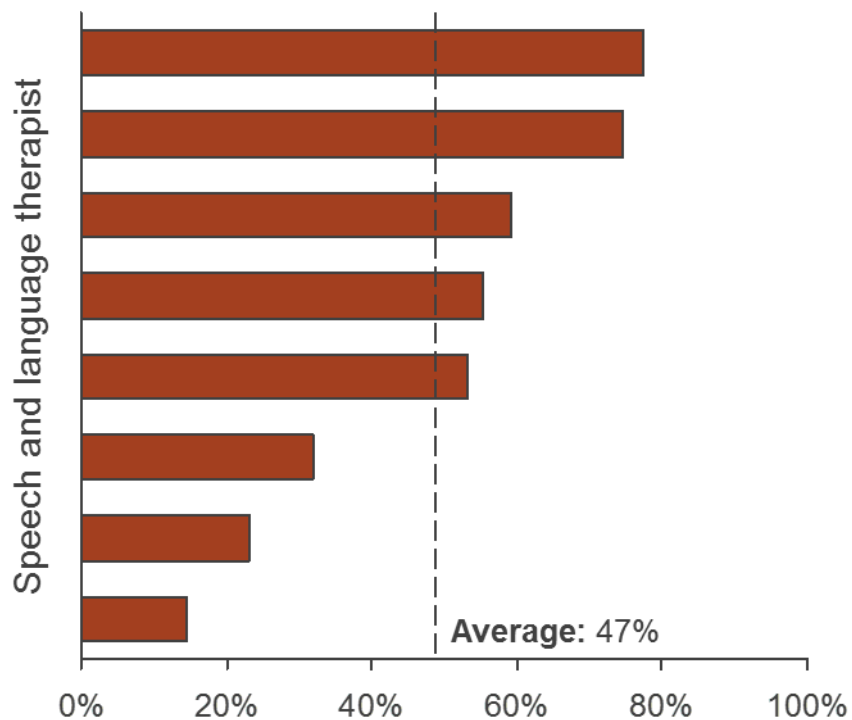


Setting staffing guidelines for two metrics can cost effectively provide transparency, without reducing service or student achievement.

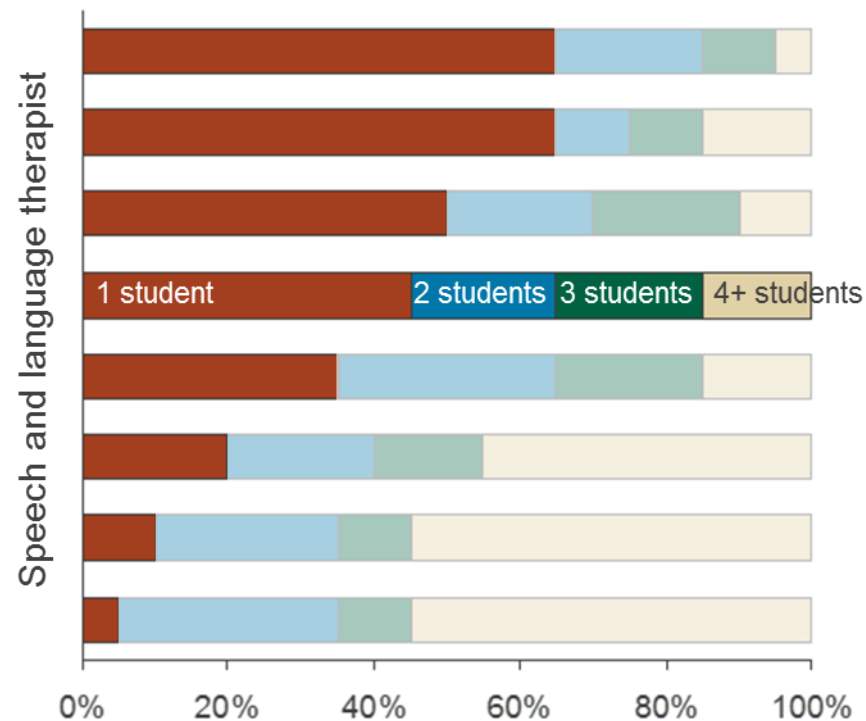
Staffing Guidelines

SPECIAL EDUCATION

Time Spent with Students



Typical Group Size




General education class sizes are set after long deliberation, but other “class sizes” such as Tier 2 reading often receive less attention.

Reading Teacher FTE Required for 200 Students Requiring Tier 2 Intervention

SPECIAL EDUCATION

Groups taught per Day

		5	6	7	8	9
Average student group size	3	13.3	11.1	9.5	8.3	7.4
	4	10.0	8.3	7.1	6.3	5.6
	5	8.0	6.7	5.7	5.0	4.4
	6	6.7	5.6	4.8	4.2	3.7

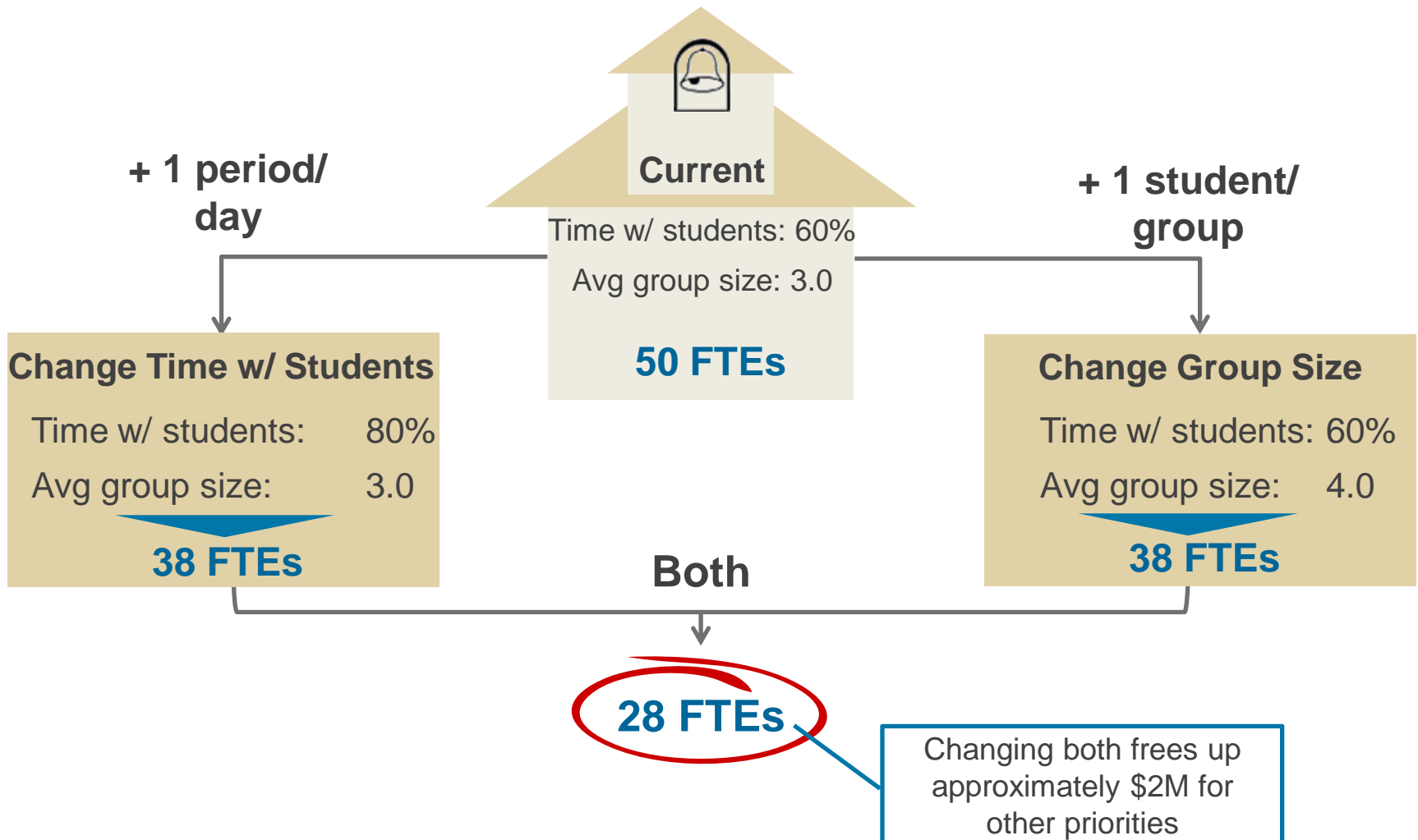


**Twice as many students served
with the same staff**

Even small changes to these inputs can lead to major changes in staff required, freeing up positions for other priorities.

Impact of Staff Schedules

SPECIAL EDUCATION



Staffing guidelines are both precise and nuanced.

Potential Guidelines

SPECIAL EDUCATION

1. Time with students

What benchmark will the district use for the amount of time special education staff will spend with students?

- A** Select an internal benchmark (based on current levels of direct service among staff)
- 50th percentile of current practice (15 hrs.)
 - 80th percentile of current practice (22 hrs.)
 - Maximum of current practice (27 hrs.)

OR

- B** Select an external benchmark (based on national norms)
- National average for elementary general education teachers (direct service of 85% or 28 hours per week)
 - National median for speech therapists (direct service of 75% or 28.8 hours per week)

2. Typical Group Size

How should students be grouped based on their differing areas of need?

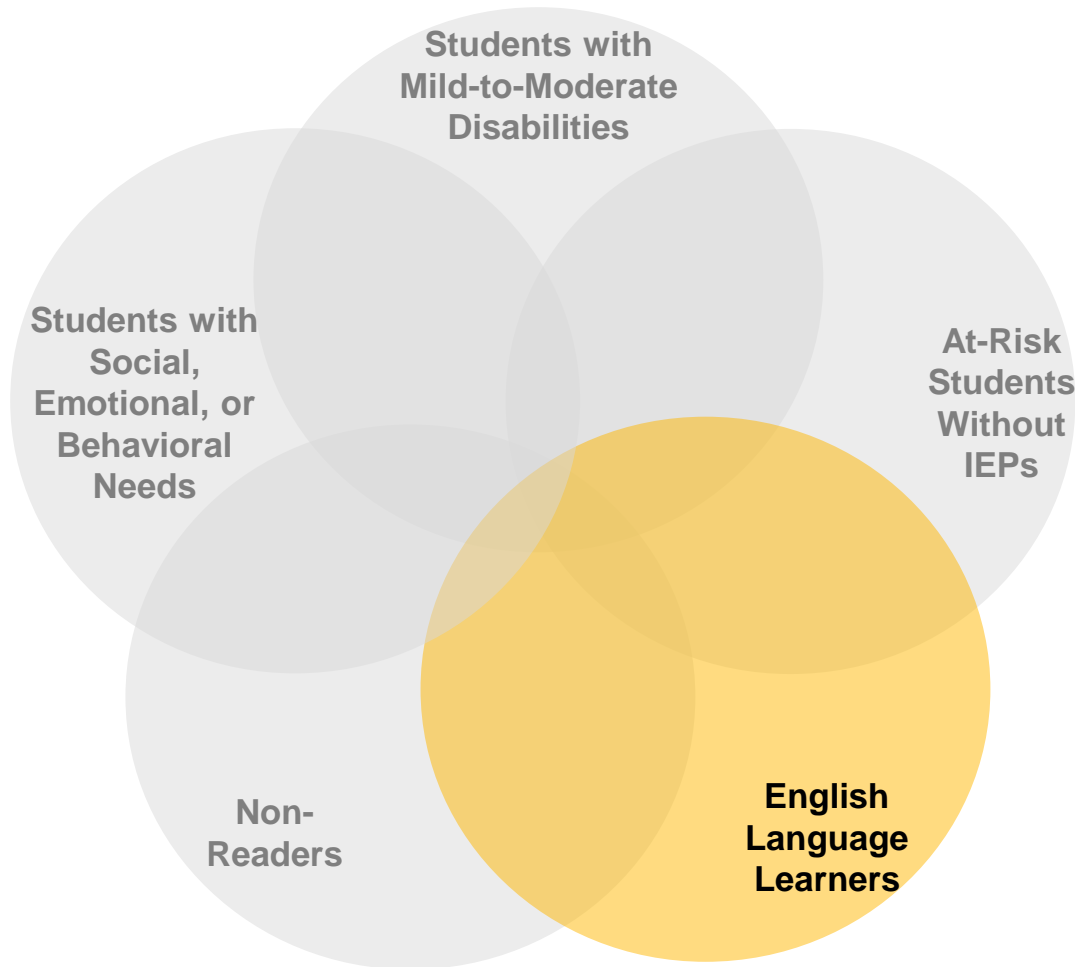
Set target group sizes for:

- Reading: _____ students/group
- Math: _____ students/group
- Study skills: _____ students/group

Staffing guidelines are very specific and detailed, and seldom based on caseload.

Supporting most English language learners is similar to supporting other struggling students.

English Language Learners



Best Practice

- 1 Ensure **access to the general education classroom**
- 2 Frequent **screening** should occur
- 3 Provide intensive **small-group reading interventions**
- 4 Provide **extensive and varied vocabulary instruction**, particularly academic English, and explicitly **provide background content**
- 5 Provide exposure to native speaking peers through **mixed ability grouping**

Note: Students who are newcomers and/or have limited formal education (SIFE) do have more specialized needs.

Some nuanced differences in ELL best practices also exist.

Recommended ELL Modifications

Best Practice	ELL Modification
Vocabulary development	Academic vocabulary, especially
Explicit teaching of comprehension	Also explicitly providing background content
Small group intervention	Mixed ability grouping
90 minutes a day of literacy	Embed literacy (academic vocabulary and writing instruction in all core subjects)

Teaching struggling students, both ELL and native speakers, asks much of classroom teachers.

Classroom Teacher Role

Easier on Staff

Classroom

Special Program
Teacher

Native speakers

ELL

Teachers can specialize
by type of student

Best Practice

Classroom

Intervention

Mixed Students

Mixed
Students

Teachers must master skills to
serve a wide range of students

- District wide lesson planning
- Coaching support
- Some clustering, with limits
- Newcomer programs

After partnering with more than 100 districts across the country, a few lessons were learned (the hard way!)

Lessons Learned

- 1 Start by knowing how time is currently being used to serve struggling students
- 2 Implementing best practices requires a skilled scheduler
- 3 Frequent engagement and communication with parents, teachers and principals is critical to avoid misunderstandings
- 4 Special education alone can't lead this effort

About DMC

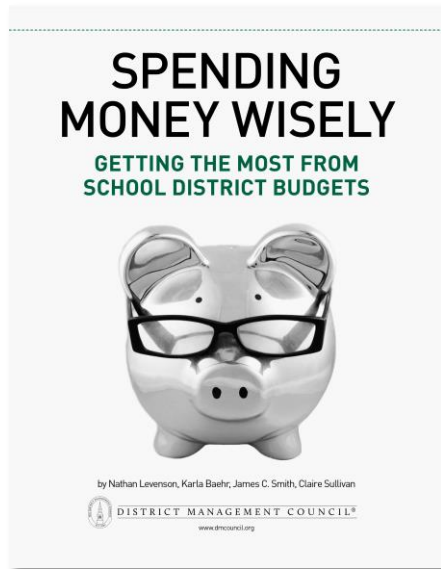
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Additional resources are available.

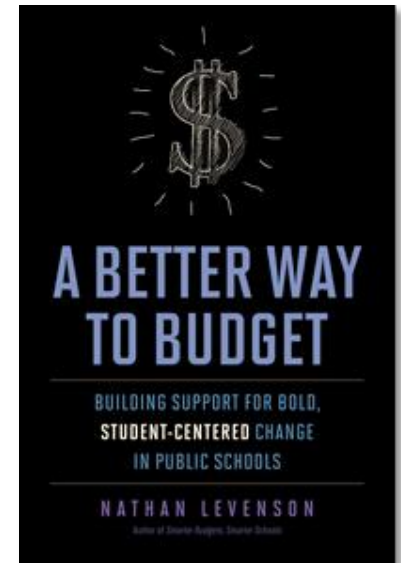
Access to Online Resources and DMC Thought Leadership



Spending Money Wisely
The top ten opportunities for resource realignment in public schools



The District Management Journal
DMC's signature semi-annual publication providing insightful best practices research and articles



A Better Way to Budget
by Nathan Levenson
Available on Amazon and via Harvard Education Press

What's Next?

- **Learn More about DMC best practices and services**
 - Request a call
 - Receive case studies and/or literature
- **Join us at an upcoming Conference**
 - Superintendent's Strategy Summit, January 11-13, 2017, New York City
- **Become a member of DMC. Benefits include:**
 - Access to DMC research and publications
 - Registrations to professional development conferences
 - The chance to network with like-minded peers



**Innovating with
Impact: Moving
from Bold Ideas
to Sustainable
Results**

Q&A



If you have any comments or questions about the contents of this document, please contact **Nathan Levenson, President,**
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