Improving Equity and Excellence with Strategic School Scheduling

Professional Development Webinar

May 1, 2019
Sponsoring organizations of today’s webinar

Washington Office of Superintendent of Public Instruction (OSPI)

Washington Association of School Administrators (WASA)

Association of Washington School Principals (AWSP)
Welcome to today’s presenter, Nathan Levenson.

Nate Levenson
Managing Director, District Management Group

• Over the past decade, Nate has led efforts to improve equity and outcomes for all students in nearly 200 districts across 25 states
• Former Superintendent of Arlington Public Schools (MA)
• Former School Board Chair of Boxford Public Schools (MA)
• Former CEO, North American Industries

Author of:
• “Making School Scheduling More Strategic”
• A Better Way to Budget: Building Support for Bold, Student-Centered Change in Public Schools
• “Improving and Expanding Social, Emotional, and Behavioral Supports: 10 Best Practices”
DMGroup’s Mission

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

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

Why Scheduling Matters, A Lot

Elementary Best Practices
Secondary Best Practices
Improving the Scheduling Process
Learn More
Q & A
Seven interconnected best practices help all students who are struggling to achieve at high levels in a cost-effective manner.

DMGroup Framework for Supporting Struggling Students*

- Rigorous general education curriculum and highly skilled staff
- Coordinated and sustained focus on early literacy
- Extra instructional time to master content
- Targeted interventions
- Social, emotional, & behavioral (SEB) supports
- Content strong teachers
- Data to track progress and inform improvement

*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.
Schedules can be a barrier to teaching and learning best practices.

Without efficient schedules, it can appear impossible to achieve priorities without adding additional time or additional staff.
Explicitly teaching social-emotional learning is a key part of supporting students’ ability to access core content, but when?

Incorporating Explicit and Integrated Instruction

Direct SEB Instruction
- SEL Content
- Academic Content
- ✓ Easily lends itself to a full curriculum
- ✓ Fits well in K-8 grades
- ✓ Important for high-needs students

Integration into Regular Content
- Integrated Content
- ✓ Allows teachers to exercise creativity
- ✓ Fits well with subject-based model of high school

Source: Education First, Social Emotional Learning: Why Students Need It. What Districts are Doing About It.
Scheduling also impacts budgets.

**Best Practice: Efficient Scheduling to Maximize Time**

**Typical Practice**

- 8:50 AM: 2nd grade
- 9:00 AM: 1st grade
- 9:30 AM: 3rd grade
- 10:00 AM: 4th grade
- 10:30 AM: 5th grade
- 11:00 AM: 1st grade
- 11:30 AM: 3rd grade
- 12:00 PM: 4th grade
- 12:30 PM: 5th grade
- 1:00 PM: 1st grade
- 1:30 PM: 3rd grade
- 2:00 PM: 4th grade
- 2:30 PM: 5th grade

Unused time throughout the day

**Best Practice**

- 8:46 AM: 5th grade
- 9:00 AM: 4th grade
- 9:45 AM: 3rd grade
- 10:00 AM: 2nd grade
- 10:30 AM: 1st grade
- 11:00 AM: 3rd grade
- 11:15 AM: 4th grade
- 11:30 AM: 5th grade
- 12:00 PM: 2nd grade
- 12:15 PM: 1st grade
- 12:30 PM: 3rd grade
- 12:45 PM: 4th grade
- 1:00 PM: 5th grade
- 1:15 PM: 1st grade
- 1:30 PM: 3rd grade
- 1:45 PM: 4th grade
- 2:00 PM: 5th grade
- 2:15 PM: 1st grade

**Extended block of time to serve another school**

Schedule specials back-to-back, creating opportunity for a specials teacher to travel to another school or provide more services, like covering recess.

unused time is minimized
Course and elective offerings should be determined by student need and school priorities, not by history. Scheduling is an equity issue.
Better scheduling can lead to better achievement!

Percent of Students Developing, Proficient and Distinguished (Levels 2, 3 & 4) on the Georgia Milestones Assessment System.

- 2016 (3rd grade): 49%
- 2017 (4th grade): 56%
- 2018 (5th grade): 64%
“I love my schedule”
Agenda

Why Scheduling Matters, A Lot

Elementary Best Practices

Secondary Best Practices
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Q & A
Making the most of student time will require providing more detailed guidance of the use of time.

Evolution of master scheduling

**Historic**

- Teachers manage their own schedules
- 8:00 am: Lunch, Recess, Art
- 2:30 pm: Lunch, Recess, Art

**Current**

- Major blocks of time are managed
- 8:00 am: ELA/Reading (90 min), Lunch, Recess, Art
- 2:30 pm: Lunch, Recess, Math (60 min), Art

**Evolving**

- More important activities are managed with the blocks
- Lunch, Recess, Whole class Math instruction, Student Math practice, Phonics, Word work, Guided reading, Independent work, Art
DMGroup’s analysis showed that students received a different number of minutes of instruction, depending on which school they attended.

**Variation in Uses of Time at BCSC Elementary Schools by Subject**

A difference of 40 minutes per school day amounts to 90 fewer days of Reading instruction during the school year.
Small daily differences can become large gaps in instruction across a school year.

A difference of 10 minutes per school day amounts to 22 fewer days of reading instruction during the school year.
Setting a minimum for instructional minutes can ensure that students are receiving equitable time on core subjects across classrooms.

Classroom “A”
- **Literacy:** 90 minutes
- **Math:** 60 minutes
- **Science:** 45 minutes
- **Social Studies:** 45 minutes

Classroom “B”
- **Literacy:** 120 minutes
- **Math:** 45 minutes
- **Science:** 40 minutes
- **Social Studies:** 45 minutes

Regardless of classroom assignment, a student should experience similar instructional time.
A need for more support may sometimes result in less overall instruction.

Struggling students often receive less core reading and math than the typical student.
Create daily intervention and enrichment opportunities for students.

Classroom A Schedule

8:00am
Reading
Math
Lunch and recess
Art
Science / social studies

2:30pm

Classroom A with Intervention

8:00am
Reading
Math
Intervention
Lunch and recess
Art
Science / social studies

2:30pm

Add a daily Intervention block to provide a dedicated time for support services.
Ensure students receive their core instruction by creating guidelines for push in and pull out service opportunities.

**Classroom A with Intervention**

8:00am
- Reading

Math
- Intervention

Lunch and recess
- Art

Science / social studies

2:30pm

**Classroom A with Intervention and Service guidelines**

8:00am
- Reading

No pull out
- Math

No pull out

Intervention

Lunch and recess

Art

Science / social studies

2:30pm

Safeguard reading and math instruction from pull out services.
Staggering intervention throughout the day ensures expert staff are available to work with groups of students in each grade.

Staggered Intervention

- **Targeted support** to students **grouped by need** in each grade
- **Support provided by expert staff** to highest need students in each grade
Scheduling intervention at the same time across a grade allows interventionists to flexibly group students by need.

Example: Flexible Grouping

Across 4 classrooms, 5 students struggle with decoding

Interventionists can group all five students with common skill deficits
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Q & A
Too often we search for the right answer to the wrong question.
Research shows that there is not a single “silver bullet” middle or high school schedule structure.

Secondary Level Scheduling Research

- Period length only impacts student outcomes insofar as teachers’ effectively utilize the time.
- Block schedules have mixed results regarding impact on student achievement.
- There is no “right” number of courses for students to take at one time.

Research does indicate that there is a large, positive relationship between academic learning time* and student achievement.

*The precise period when an instructional activity is perfectly aligned with a student’s readiness and learning occurs.
In many schools, “extra help” happens during core instruction or instead of core instruction and is provided by less skilled staff.

**Secondary Intervention Strategy: Typical Approach**

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Non-Struggling Student Schedule</th>
<th>Struggling Math Student Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Math</td>
<td>Math</td>
</tr>
<tr>
<td>Period 2</td>
<td>English</td>
<td>English</td>
</tr>
<tr>
<td>Period 3</td>
<td>Elective</td>
<td>Elective</td>
</tr>
<tr>
<td>Period 4</td>
<td>Social Studies</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Period 5</td>
<td>Science</td>
<td>Science</td>
</tr>
<tr>
<td>Period 6</td>
<td>Spanish</td>
<td>Spanish</td>
</tr>
</tbody>
</table>

- Co-teaching
- Paraeducator support
- Lower level curriculum
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

<table>
<thead>
<tr>
<th>Non-Struggling Student Schedule</th>
<th>Struggling Math Student Schedule</th>
<th>A Best Practice Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Period 1</strong></td>
<td><strong>Period 1</strong></td>
<td><strong>Math</strong></td>
</tr>
<tr>
<td>Math</td>
<td>Math</td>
<td></td>
</tr>
<tr>
<td><strong>Period 2</strong></td>
<td><strong>Period 2</strong></td>
<td><strong>English</strong></td>
</tr>
<tr>
<td>English</td>
<td>English</td>
<td></td>
</tr>
<tr>
<td><strong>Period 3</strong></td>
<td><strong>Period 3</strong></td>
<td><strong>Elective</strong></td>
</tr>
<tr>
<td>Elective</td>
<td>Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Period 4</strong></td>
<td><strong>Period 4</strong></td>
<td><strong>Social Studies</strong></td>
</tr>
<tr>
<td>Social Studies</td>
<td>Social Studies</td>
<td></td>
</tr>
<tr>
<td><strong>Period 5</strong></td>
<td><strong>Period 5</strong></td>
<td><strong>Science</strong></td>
</tr>
<tr>
<td>Science</td>
<td>Science</td>
<td></td>
</tr>
<tr>
<td><strong>Period 6</strong></td>
<td><strong>Period 6</strong></td>
<td><strong>Extra Math Support</strong></td>
</tr>
<tr>
<td>Spanish</td>
<td>Spanish</td>
<td></td>
</tr>
</tbody>
</table>

**Non-Struggling Schedule** vs. **Struggling Math Schedule** vs. **A Best Practice Schedule**

- **Math**: First presentation of content
- **English**: 100% current year material
- **Elective**: Learn from peer questions
- **Social Studies**: Pre-teach
- **Science**: Reteach current year and prior year content
- **Spanish**: Address missing foundational skills
- **Extra Math Support**: Unteach misconceptions
- **Deliver Specially Designed Instruction**
These 7 best practices are common elements to effective secondary reading programs.

Secondary: A System for an Effective Reading Program

Standards
1. Clear and rigorous grade-level expectations
2. Universal screening for struggling readers
3. Frequent measurement of achievement

Core Instruction
4. Reading instruction separate from ELA (for struggling readers)

Intervention
5. At least 60 min / day additional time for all struggling readers**
6. Explicit teaching strategies for comprehension

Effective Teaching
7. Highly skilled and effective teachers of reading

*Read180 requires 90 minutes per day
Using current guidelines for class size and teaching load, it is possible to determine the FTE needs for each department, subject, and school.

Determining Staffing Needs* with Guidelines

1. Class size guideline: Target class size of 25

<table>
<thead>
<tr>
<th>Course</th>
<th>Current Enrollment</th>
<th>Target class size</th>
<th>Sections needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algebra</td>
<td>300</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>Algebra 1 honors</td>
<td>50</td>
<td>25</td>
<td>2</td>
</tr>
<tr>
<td>Algebra lab</td>
<td>50</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>Geometry</td>
<td>320</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>Geometry honors</td>
<td>80</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Statistics</td>
<td>15</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>AP calculus</td>
<td>32</td>
<td>25</td>
<td>2</td>
</tr>
</tbody>
</table>

Total: 37

2. Teaching load guideline: 5 sections per FTE

Determine the FTE needed

<table>
<thead>
<tr>
<th>Staffing Calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sections needed</td>
</tr>
<tr>
<td>Sections per FTE</td>
</tr>
<tr>
<td>Required FTE</td>
</tr>
</tbody>
</table>

*Any solution needs to be consistent with collective bargaining agreements.
Expert schedulers look for opportunities to maximize the impact of all staff even when only partial FTE are available for repurposing.

Strategies for Repurposing Partial FTE*

1. Provide intervention or new strategic offerings

Replace a reduced section of an existing course with an intervention section or a new elective aligned with the school’s strategic direction.

Core Example

- Algebra I
- Algebra I
- Algebra I
- Honors Algebra I
- Honors Algebra I
- Math Intervention + NEW

2. Consider part-time staff

Part-time positions can provide needed work/life flexibility to teachers.

Scheduling Example

<table>
<thead>
<tr>
<th>Time</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45 AM</td>
<td>5th grade</td>
</tr>
<tr>
<td>9:00 AM</td>
<td>4th grade</td>
</tr>
<tr>
<td>9:15 AM</td>
<td>3rd grade</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>2nd grade</td>
</tr>
<tr>
<td>9:45 AM</td>
<td>1st grade</td>
</tr>
<tr>
<td>10:00 AM</td>
<td>Empty</td>
</tr>
<tr>
<td>10:15 AM</td>
<td></td>
</tr>
<tr>
<td>10:30 AM</td>
<td></td>
</tr>
<tr>
<td>10:45 AM</td>
<td></td>
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<tr>
<td>11:00 AM</td>
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<tr>
<td>11:15 AM</td>
<td></td>
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<td>11:30 AM</td>
<td></td>
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<tr>
<td>11:45 AM</td>
<td></td>
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<tr>
<td>12:00 PM</td>
<td></td>
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<tr>
<td>12:15 PM</td>
<td></td>
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<tr>
<td>12:30 PM</td>
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<td>1:15 PM</td>
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<td>1:30 PM</td>
<td></td>
</tr>
<tr>
<td>1:45 PM</td>
<td></td>
</tr>
<tr>
<td>2:00 PM</td>
<td></td>
</tr>
<tr>
<td>2:15 PM</td>
<td></td>
</tr>
</tbody>
</table>

3. Consider shared staff

Sharing staff across secondary schools is the norm in some districts.

Example

Teaching at School A on Tuesday mornings…

...and at School B on Tuesday afternoons

*Any solution needs to be consistent with collective bargaining agreements
Schools may create better schedules by examining the access to rigorous courses.

**Course Rigor Analysis Example**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Remedial</th>
<th>General</th>
<th>Honors</th>
<th>AP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies</td>
<td>7%</td>
<td>71%</td>
<td>4%</td>
<td>18%</td>
</tr>
<tr>
<td>English</td>
<td>1%</td>
<td>64%</td>
<td>20%</td>
<td>15%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2%</td>
<td>64%</td>
<td>17%</td>
<td>11%</td>
</tr>
<tr>
<td>Science</td>
<td>0%</td>
<td>77%</td>
<td>10%</td>
<td>33%</td>
</tr>
<tr>
<td>Mod World Lang</td>
<td>0%</td>
<td>65%</td>
<td>33%</td>
<td>2%</td>
</tr>
</tbody>
</table>

How often is this data reviewed and acted on in your district?
Low rigor courses seldom lead to grade-level mastery.
History and department preferences can greatly influence honor and AP enrollment.

Course Rigor Analysis Example

- **Social Studies**: 7% Remedial, 71% General, 18% Honors, 4% AP
- **English**: 1% Remedial, 64% General, 15% Honors, 4% AP
- **Mathematics**: 2% Remedial, 64% General, 17% Honors, 4% AP
- **Science**: 2% Remedial, 77% General, 10% Honors, 11% AP
- **Mod World Lang**: 0% Remedial, 65% General, 33% Honors, 2% AP
Providing rigorous courses to all students requires intentional enrollment and monitoring.

Best Practice: Monitoring Rigor and Enrollment

1. **Search** for all students who may be **ready** for honors and AP courses

2. **Don’t push** students into honors or AP if they are **not ready**

3. Make sure all regular education teachers are **teaching at grade level** with appropriate **scaffolding of previous grades’ content** to support mastery of grade level content

4. Identify **graduation pathways** that are **not traditionally addressed** by struggling students and determine what **additional supports** are needed for their access and support

5. Use specialists and paraeducators to **provide additional instruction**, rather than less rigorous instruction
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Q & A
You can schedule anything, not everything
Only if a school has declared its top instructional priorities, can great schedules be built.

Develop Clear Priorities

What is the strategic vision of your district?

What already works today?

Largest need?

Your Top Priorities

- K-2 must have ELA in the mornings
- No pull out from ELA
- Staff get common planning time everyday
- No pull out from Math
- SEL time is uninterrupted
- All students get specials everyday
- Interventionists don’t work in multiple schools

Staff Input

Family & Community

Staff get common planning time everyday

No pull out from Math

SEL time is uninterrupted

Interventionists don’t work in multiple schools

What already works today?

Largest need?

Your Top Priorities
Some schools have better master building schedules than others.

### Illustrative Example

<table>
<thead>
<tr>
<th>Desired schedule</th>
<th>School A</th>
<th>School B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common planning time every day</td>
<td>✓</td>
<td>❌ Too many sections per grade</td>
</tr>
<tr>
<td>Instructional coaches attend common planning time</td>
<td>✓</td>
<td>❌ Not enough coaches</td>
</tr>
<tr>
<td>Intervention block each day</td>
<td>✓</td>
<td>❌ School day too short</td>
</tr>
<tr>
<td>Flexible grouping across grades every day for ELL, special education and reading</td>
<td>✓</td>
<td>❌ Need more staff</td>
</tr>
<tr>
<td>100% utilization of specialists (art, music, PE, etc.)</td>
<td>✓</td>
<td>❌ Not possible</td>
</tr>
<tr>
<td>No pull-out during reading or math</td>
<td>✓</td>
<td>❌ Lunch schedule doesn’t allow</td>
</tr>
<tr>
<td>Uninterrupted reading block</td>
<td>✓</td>
<td>❌ Only possible in some grades</td>
</tr>
</tbody>
</table>

Same schools, just a different scheduler
It is important to both find and utilize expertise in scheduling.

Utilizing Scheduling Expertise

- Being an effective school scheduler is a skill that not everyone has
- There’s no course offered or training provided for school scheduling
- Staff are already expected to be skilled in many areas
- It’s important to look for scheduling expertise, both inside and outside of the building
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Additional resources are available.

Access to Online Resources and DMGroup Thought Leadership

Case Study:
Raising Achievement and Addressing Equity at Bibb County School District (GA)

Spotlight Article:
Improving Special Education: Best Practices for Cost Effectively Raising Achievement

School Administrator:
Making School Scheduling More Strategic

To access additional resources, visit www.dmgroupK12.com
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