Howard County Public School System

Improving Outcomes for Students With and Without Disabilities

JAN. 22, 2015
The District Management Council (DMC)’s mission is to achieve systemic improvement in public education.

DMC’s Mission

The District Management Council was founded in 2004 to help address the most pressing and important challenges facing K-12 leaders.

DMC believes that strengthening the management capacity of school district leaders is essential for raising student achievement, improving operational efficiency, and allocating resources more effectively.
The special education and struggling students opportunities review had three goals.

Goals

1. To gain a deep understanding of the current status of services for struggling students with and without an IEP.

2. To compare current practices to best practices.

3. To provide a short list of high leverage recommendations to improve student outcomes that are cost effective and consistent with district values.
The study combined significant qualitative evidence and robust data analysis to identify the highest leverage opportunities.

Methodology

**Qualitative Evidence**
- Focus groups with:
  - Special education teachers and paraprofessionals
  - Special education administrators
  - General education teachers
  - General education administrators
  - Principals and assistant principals
  - Parents
- On-site classroom visits

**Data Analysis**
- Special education staff schedule sharing
- Parent survey
- Data analysis combining:
  - Student achievement
  - Student placements in out-of-district and substantially separate settings
  - IEP and 504 referrals
  - Staffing levels
  - Financial trends

**Key Findings**
The district has many strengths to be proud of within special education and the district as a whole.

Commendations

1. The district is committed to providing an inclusive education for students with disabilities.

2. The leadership in the district is “forward thinking” and the staff embrace a culture of continuous improvement.

3. The district has robust capacity and systems to collect and manage a variety of student and staff data.

4. The district is proactive in seeking opportunities to improve its budget practices and to expand its capacity to analyze financial data.

5. Students are identified for special education at a reasonable rate.
Students with disabilities in the district do not achieve at the same levels as in like communities.

### 2013-14 MSA Scores

#### Third Grade Reading

<table>
<thead>
<tr>
<th></th>
<th>All Students</th>
<th>Students With Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frederick</td>
<td>88%</td>
<td>69%</td>
</tr>
<tr>
<td>Howard</td>
<td>87%</td>
<td>63%</td>
</tr>
<tr>
<td>Anne Arundel</td>
<td>86%</td>
<td>58%</td>
</tr>
<tr>
<td>Harford</td>
<td>85%</td>
<td>55%</td>
</tr>
<tr>
<td>Carroll</td>
<td>85%</td>
<td>55%</td>
</tr>
<tr>
<td>Montgomery</td>
<td>80%</td>
<td>47%</td>
</tr>
<tr>
<td>Charles</td>
<td>74%</td>
<td>36%</td>
</tr>
</tbody>
</table>

#### Eighth Grade Math

<table>
<thead>
<tr>
<th></th>
<th>All Students</th>
<th>Students With Disabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Howard</td>
<td>73%</td>
<td>31%</td>
</tr>
<tr>
<td>Carroll</td>
<td>73%</td>
<td>22%</td>
</tr>
<tr>
<td>Harford</td>
<td>71%</td>
<td>18%</td>
</tr>
<tr>
<td>Montgomery</td>
<td>69%</td>
<td>16%</td>
</tr>
<tr>
<td>Charles</td>
<td>65%</td>
<td>16%</td>
</tr>
<tr>
<td>Frederick</td>
<td>64%</td>
<td>14%</td>
</tr>
<tr>
<td>Anne Arundel</td>
<td>61%</td>
<td>14%</td>
</tr>
</tbody>
</table>
Students with IEPs have experienced significantly greater decreases in performance than students overall during the shift to Common Core.
Six opportunities to improve outcomes for struggling students with and without disabilities were identified.

Opportunities

1. Consider providing more **time on task** for all students who struggle in order for them to master grade level content.

2. Ensure that students who struggle receive instruction from instructors with **subject-specific** training during core classes and interventions.

3. Consider shifting the **roles of paraprofessional staff** to emphasize providing nonacademic support, rather than content instruction, for students with mild to moderate disabilities.

4. Consider increasing the amount of time **related service providers** spend with students, while also closely managing group size through thoughtful scheduling.

5. Consider expanding the roles and responsibilities of school- and central office-based administrators to more closely **manage** how special education staff use their time.
Many struggling students get extra adults but not extra time.

Typical Intervention Strategy for Struggling Students

<table>
<thead>
<tr>
<th>Period 1</th>
<th>Non-Struggling Student Schedule</th>
<th>Struggling Math Student Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td></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
Paraprofessional support
Lower level curriculum

For many students “extra help” happens during core instruction or instead of core instruction.
Consider providing more time on task for all students who struggle in order for them to master grade level content.

**Best Practice Intervention Strategy for Struggling Students**

<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>Period 1: Math</td>
<td>Period 1: Math</td>
<td>Period 1: Math</td>
</tr>
<tr>
<td>Period 2: English</td>
<td>Period 2: English</td>
<td>Period 2: English</td>
</tr>
<tr>
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<td>Period 3: Elective</td>
<td>Period 3: Elective</td>
</tr>
<tr>
<td>Period 4: Social Studies</td>
<td>Period 4: Social Studies</td>
<td>Period 4: Social Studies</td>
</tr>
<tr>
<td>Period 5: Science</td>
<td>Period 5: Science</td>
<td>Period 5: Science</td>
</tr>
<tr>
<td>Period 6: Spanish</td>
<td>Period 6: Spanish</td>
<td>Period 6: Spanish</td>
</tr>
</tbody>
</table>

**Non-Struggling Schedule**

- Period 1: Math
- Period 2: English
- Period 3: Elective
- Period 4: Social Studies
- Period 5: Science
- Period 6: Spanish

**Struggling Math Schedule**

- Period 1: Math
- Period 2: English
- Period 3: Elective
- Period 4: Social Studies
- Period 5: Science
- Period 6: Spanish

**A Best Practice Schedule**

- Period 1: Math
- Period 2: English
- Period 3: Elective
- Period 4: Social Studies
- Period 5: Science
- Period 6: Extra Math Support

**Key Points**

- First presentation of content
- 100% current year material
- Learn from peer questions
- Pre-teach
- Reteach current year and prior year content
- Address missing foundational skills
- Unteach misconceptions
Extra time is a very inclusive practice.

Best Practice Schedule with Extra Time

A Best Practice Schedule

- Math
  - In general education classroom
  - With general education teacher
  - General education curriculum
- English
- Elective
- Social Studies
- Science
- Extra Math Support
  - In general education classroom
  - With general education teacher or dual certified teacher
  - Focuses on mastering grade level skills
Few struggling readers at the elementary level receive extra time to master this critical skill.

Instructional Setting, Inclusion Special Education Teachers

Elementary Level

- General Education Classroom: 42% Co-Teaching, 33% Not Co-Teaching
- Pull Out/Resource Room: 23% Not Co-Teaching
- Special Education Classroom: 0% Co-Teaching

Two teachers in one classroom but no extra time.

Often this extra support is during core instruction, not “in addition to” it.
At the secondary level, “collaboration” is the most common form of special education support, which does not provide extra time.

Instructional Setting, Inclusion Special Education Teachers

Secondary Level

- General Education Classroom
  - Co-Teaching: 72%
  - Not Co-Teaching: 9%

- Pull Out/Resource Room
  - Co-Teaching: 10%

- Special Education Classroom
  - Co-Teaching: 9%

Two adults but no extra time.
Ensure that students who struggle receive instruction from staff with subject-specific training during core classes and interventions.

Generalist vs. Content Strong Instructional Support

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

**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
At the elementary level, some students receive extra help from content strong staff, but others do not.

Support Providers, Elementary Level

- Typical support providers at the elementary level include:
  - Reading teachers
  - Special education teachers
  - Paraprofessionals

<table>
<thead>
<tr>
<th>Academic topic</th>
<th>% time spent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>24%</td>
</tr>
<tr>
<td>Math</td>
<td>23%</td>
</tr>
<tr>
<td>Writing</td>
<td>12%</td>
</tr>
<tr>
<td>Social Studies</td>
<td>8%</td>
</tr>
<tr>
<td>Science</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Total academic instruction</strong></td>
<td><strong>75%</strong></td>
</tr>
</tbody>
</table>

No general education paraprofessionals were included in this study.
At the secondary level, most extra help does not come from content strong staff.

### Topic of Support, Secondary Level

#### Special Education Teachers

- **Academic**: 83%
- **Non-Academic**: 17%

#### Inclusion Paraprofessionals

- **Academic**: 74%
- **Non-Academic**: 26%

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**Academic Topic**

<table>
<thead>
<tr>
<th>Academic topic</th>
<th>MS</th>
<th>HS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>33%</td>
<td>22%</td>
</tr>
<tr>
<td>Writing</td>
<td>30%</td>
<td>12%</td>
</tr>
<tr>
<td>Reading</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>Science</td>
<td>6%</td>
<td>15%</td>
</tr>
<tr>
<td>Social Studies</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Total academic instruction</strong></td>
<td><strong>92%</strong></td>
<td><strong>74%</strong></td>
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**Academic Topic**

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<td>Social Studies</td>
<td>26%</td>
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</tr>
<tr>
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<td>25%</td>
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</tr>
<tr>
<td>Math</td>
<td>16%</td>
<td>13%</td>
</tr>
<tr>
<td>Reading</td>
<td>10%</td>
<td>12%</td>
</tr>
<tr>
<td>Writing</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total academic instruction</strong></td>
<td><strong>82%</strong></td>
<td><strong>66%</strong></td>
</tr>
</tbody>
</table>

No general education paraprofessionals were included in this study.
Current district practices are very common but are not aligned with best practices for raising achievement of struggling students.

**National Special Education Context**

**Special Education Teachers and Paraprofessionals per 1,000 Students**

- Special education teachers:
  - SY01: 65
  - SY02: 65
  - SY03: 62
  - SY04: 66
  - SY05: 66
  - SY06: 65
  - SY07: 62
  - SY08: 62
  - SY09: 62

- Paraprofessionals:
  - SY01: 52
  - SY02: 52
  - SY03: 52
  - SY04: 52
  - SY05: 52
  - SY06: 52
  - SY07: 52
  - SY08: 52
  - SY09: 52


**Selected Review of Teacher Prep Programs**

- **Elementary Teachers’ Schools:** Teach National Reading Panel (or similar program)?
  - Reading: 25%
    - Yes: 75%
    - No: 25%

- **Special Education Teachers’ (Undergraduate) Schools:** Cover math instruction in depth?
  - Math: 24%
    - Yes: 76%
    - No: 24%

- **Special Education Teachers’ (Graduate) Schools:** Cover math instruction in depth?
  - Math: 100%
    - Yes: 100%
    - No: 0%

Consider shifting the roles of paraprofessional staff to emphasize providing non-academic support, rather than content instruction.

Special Education Paraprofessional Staffing Levels

More paraprofessionals...
- The district relies on paraprofessionals at a rate 1.6x that of similar districts
- The district could shift to staffing levels of like communities to free up resources for highly skilled reading and math specialists

Despite...
- Having fewer students with IEPs
- This analysis does not include the large numbers of general education paraprofessionals
Consider increasing the amount of time related service providers spend with students, while managing group size through thoughtful scheduling.

Speech and Language Therapists, Activity Data

- HCPSS relies on SLPs at a rate 1.5x that of similar districts
- Increasing the time SLPs and other related service providers spend serving students to 75% could free up resources to invest in highly skilled reading and math specialists
- Similar patterns were found for OTs and PTs
Consider expanding the roles of school- and central office-based administrators to manage how special education staff use their time.

Special Education Inclusion Teachers

% of Time Spent with Students

Avg: 54%

- There is considerable inequity in how special education staff use their time
- Students could benefit from more instructional time with teachers
Q + A
If you have any comments or questions about the contents of this document, please contact The District Management Council:

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