## MEM ORANDUM

TO: Arlington School Board
FROM: Mathematics Advisory Committee
DATE: $\quad$ March 15, 2023
SUBJECT: Recommendations to Help Our Struggling M ath Students

COM M ITTEE CHAIR: Rachel Whirley
COM M ITTEE M EM BERS: M arian Klymkowsky, Todd Truitt, Emily Cunningham, Reginald Goeke, M ike Steenhoek, Yun Kang, Greg Eastman
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## INTRODUCTION

during
parents have had to adjust strategies to combat learning loss and move forward. Because of the disparate impact of distance learning and reduced class times, students have still not fully recovered. The share of students failing their

M ath Inventory ${ }^{1}$ a cumulative learning deficit, widening the achievement gap. credit, all students that scored Proficient Math Inventory
school year.

Like most school districts, APS relies heavily on its Tier 1, or core classroom, instruction for most students to both remedy learning loss and advance new learning. With an ever-widening gap between proficient and struggling students, it is becoming increasingly difficult for one classroom teacher to accommodate the learning needs of all students within their classrooms. APS does use Tier 2 instruction, which provides students with tailored instruction in a small group setting provided by teachers, Interventionists, Coaches², or classroom aides, depending on availability and Tier 3 instruction, which provides both tailored, research-based small group instruction as well as additional time with M athematics Interventionists currently funded through the ESSER-III Grant. However, the demand for such resources far exceeds current staffing availability (see Appendix A for current M athematics Coach and Interventionist allocations). As of March 2023, 3,547 students in Kindergarten through $8^{\text {th }}$ grade are at a "Below Basic" level; all of themneed Tier III intervention. County-wide, we only have six interventionists to split between them.

In addition to these much needed staff resources, core instruction is critical for all APS students to continue to grow in mathematics. Currently, teachers of mathematics in Arlington are not required to engage in any professional development with the M athematics Office. While the state of Virginia requires that teachers complete a certain number of required professional development hours, they do not require

# RECOMM ENDATION \#1: Hire 34 Math Interventionists to be distributed across all grade levels and provide 8.5 additional FTE to allow for a full-time M athematics Coach at every elementary school and the ACC/ Arlington-Tech and HB Woodlawn Programs. 

## Rationale for Recommendation:

This past year, as part of the ESSER-III Grant, Arlington received funding for 6 M athematics Interventionists through SY2023-24. While welcome, this staffing pales in comparison to the current need and expires at the end of the 2023-24 school year. With those funds sunsetting in 2024, APS needs to plan to meet the need for interventionists within its budget. Presently, there are over 3,500 students in grades K-8 in Ar
. Without these additional resources, these already

## Strategic Plan Alignment:

S-SS-2: Deliver curriculum through innovative and relevant instruction that is differentiated to meet the diverse needs of each student.
S-EW-1: Recruit, retain, and advance high-quality employees.
S-OE-1: M anage available resources equitably.
S-OE-2: Provide high-performance learning and working environments that support Universal Design for Learning standards.
S-OE-4: Use long-term and systematic processes to ensure academics and operations are financially sustainable.
S-P-1: Provide training and resources for staff and families to create meaningful partnerships that support student success and well-being.

## Committee Vote: 8/8 Approve

## RECOM M ENDATION \#2: Require mathematics professional learning as part of the mandatory professional development required for teachers of mathematics.

## Rationale for Recommendation:

Currently, Arlington mathematics teachers are not required to engage with the $M$ athematics Office in professional learning. In APS, all teachers are required to take 180 hours of professional learning every five years, however no teachers, including those who teach mathematics for part of their classes (like elementary teachers) or those who are fully devoted to mathematics, are required to take any mathematics professional development.

* Indicates a Title I School. The Title I program provides financial assistance through state educational agencies to local educational agencies and public schools with high numbers or percentages of poor children to help ensure that all children meet challenging state academic content and student academic achievement standards.
** Indicates school with a projected enrollment exceeding 650 students.
All Title I Schools and Schools with expected enrollments exceeding 650 students were allocated a 1.0 FTE M ath Coach for 2022-2023. This added the equivalent of 5 Full-Time M ath Coaches at the elementary level.

| MIDDLE SCHOOL | Budget <br> Allocation <br> for Math <br> Coaches | Staffing (with <br> Principal <br> reallocation) | Budget <br> Allocation for <br> Math <br> Interventionists | Math <br> Interventionist <br> Staffing (ESSER <br> Funding) |
| :--- | :---: | :--- | :--- | :--- |
| HAMM | 1.0 | 1.0 | 0 | 0 |
| GUNSTON | 1.0 | 1.0 | 0 | 0.5 |
| JEFFERSON | 1.0 | 1.0 | 0 | 0.5 |
| KENMORE | 1.0 | 1.0 | 0 | 0.5 |
| SWANSON | 1.0 | 1.0 | 0 | 0 |
| WILLAMSBURG | Budget <br> Allocation <br> for Math <br> Coaches | Staffing (with <br> Principal <br> reallocation) | Budget <br> Allocation for <br> Math <br> Interventionists | Interventionist <br> Staffing (ESSER <br> Funding) |
| HIGH SCHOOL | 1.0 | 1.0 | 0 | 0 |
| WAKEFIELD | 1.0 | 1.0 | 0 | 0 |
| W-L | 1.0 | 1.0 | 0 | 0 |
| YORKTOWN | Budget <br> Allocation <br> for Math <br> Coaches | Current Staffing <br> (with Principal <br> reallocation) | Budget <br> Allocation for <br> Math <br> Interventionists | Math <br> Interventionist <br> Staffing (ESSER <br> Funding) |
| PROGRAMS | 0.5 | 0.5 | 0 | 0 |
| ACC/ ARLINGTON | 0.5 | 0.5 |  | 0 |
| TECH |  |  | 0 | 0 |
| HB-WOODLAWN | 0.5 |  | 0 |  |

Staffing Allocations for High School M ath Coaches are new in 2022-2023.

## APPENDIX C

## School Breakdown for Requested M athematics Coach and Interventionist FTEs

Estimated Cost per M athematics Coaches (salary +benefits): \$104,705.88
Estimated Cost per M athematics Interventionist (salary +benefits): \$105,000

Estimated Cost of Entire Request for M athematics Coaches:
104,705.88
$\times 8.5$
$\$ 889,999.98$

Estimated Cost of Entire Request for M athematics Interventionists:
$105,000.00$

| $\times 34$ |
| ---: |
| $\$ 3,570,000.00$ |

Total Cost for M athematics Coaches and Interventionists:
889,999.98
$\begin{array}{r}+3,570,000.00 \\ \hline \$ 4,459,999.98\end{array}$

