School Board Action Report

"Every student achieving, everyone accountable"

DATE: **April 8, 2009**

FROM: **Dr. Maria Goodloe-Johnson, Superintendent**

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STRATEGIC THEME/ FOCUS AREA: **Improving Academic Achievement: PreK-12 Mathematics**

TITLE AND BRIEF DESCRIPTION

Adoption of Recommended High School Mathematics Materials

For Introduction: April 8, 2009
For Action: April 22, 2009

TIMELINE FOR IMPLEMENTATION/EVALUATION

- Staff involvement (Mathematics staff): September, 2008 – present
- Materials Adoption Committee involvement (see attached for list of committee members): November, 2008 – March, 2009
- Instructional Materials Committee involvement (process, committee selection, criteria, review of recommendation): November, 2008 – March, 2009
- March 25: School Board Work Session
- April 8: Introduction to School Board
- April 22: Adoption Vote
- Implementation by September, 2009, including scheduled professional learning sessions for teachers, administrators, and support staff between May, 2009 and September, 2009
- Ongoing professional learning during 2009-2010 school year
- Annual evaluation by Mathematics Program Manager and Assessment staff

RECOMMENDED MOTION

"I move that the Seattle School Board approve the High School Mathematics Materials Committee recommendations for the adoption of Algebra, Geometry, Advanced Algebra, Pre-Calculus, Calculus, and Statistics materials as shown in Attachment A."

ISSUE

This board action is prompted by the strategic plan, which requires an aligned curriculum and materials for mathematics and science. Elementary and middle school mathematics materials have already been adopted; approving high school materials will complete the K – 12 materials for mathematics. In order to purchase materials and provide quality professional learning for

high school mathematics teachers related to the new materials, board action at this time is required.

If action were not taken, materials could not be purchased, leaving high schools with a shortage of mathematics books, and/or with outdated books that are in poor condition. Failure to adopt high school mathematics materials would place the remainder of the mathematics alignment plan and work at risk, and would limit the math department's impact on teacher practice and student achievement in mathematics. Failure to take action would also jeopardize the success of future materials adoptions in other subject areas.

BEST PRACTICES

The strategic plan, based on best practices, data, and audits, requires aligning PreK-12 Mathematics materials. Washington State has approved new K – 12 mathematics standards, which state that a strong mathematics program should incorporate a balance of conceptual understanding, procedural proficiency, and problem solving and processes. The new standards provide the basis for a strong alignment of materials across the district, which will allow for best practices such as aligned, embedded professional learning for mathematics teachers, administrators, and support staff, common assessments, and examination of student work and achievement data to improve instruction.

RESEARCH AND DATA SOURCES

The strategic plan states that by 2013, more than 80% of Seattle 10th graders will meet or exceed standards on the WASL (or new state test in mathematics). In 2008, 50% of 10th graders in our district met standards on the WASL. In some high schools, the passage rate was under 30%. The passage rates for students from groups traditionally left out of mathematics education opportunities were:

African-American:	20%
Latino	31%
Native American	44%
Low-income	27%
English Language Learners	14%
Special Education	13%

Another component of the strategic plan is developing our students' readiness for college. Students who enroll in Math 1 or Algebra or above as ninth graders are much more likely to complete the minimum mathematics requirements for college, and more likely to learn the mathematics content tested on the WASL or future state exams. During the first semester of this school year, 76% of our ninth graders were enrolled in Math 1 or Algebra or above, meaning that nearly ¼ of our students are entering high school in remedial mathematics courses. For students from the groups listed above, enrollment in Math 1 or Algebra is lower:

African-American	68%
Latino	66%
Native American	57%
Low-income	69%
English Language Learners	51%
Special Education	33%

Ninth graders are more likely to fail mathematics than any other course; passing all six freshman courses is a key element in dropout prevention and college readiness development. For the first semester of the 2009-2010 school year, 71% of the ninth graders enrolled in Math 1/Algebra or above earned an A, B, or C in their mathematics course, meaning that nearly 30% of our students failed their first semester of mathematics. Once again, the disaggregated data of ninth graders earning an A,B, or C grade in Math 1 or Algebra or above shows an even greater issue facing our district regarding students the groups listed below:

African-American	54%
Latino	52%
Native American	59%
Low-income	58%
English Language Learners	52%
Special Education	52%

Aligning math materials is a first, but necessary step in ensuring that every student in Seattle Schools has the opportunity for a quality mathematics education that prepares him/her for college and for work. This will set the stage for aligned professional learning for teachers, administrators, and support staff, common assessments, common assessments, and examination of student work and achievement data to improve instruction. Direct student support and intervention, particularly before and during the critical ninth grade year, through tutoring, acceleration programs, family engagement, and college readiness programs will also be key to developing the type of mathematics learning required by our strategic plan, future workforce requirements, and a commitment that a strong mathematics education is the right of every student in our district.

POLICY IMPLICATION

This board action follows Policy C.21.00.

FISCAL IMPACT/REVENUE SOURCE

Fiscal impact is estimated at approximately $1.2 million of books, materials, and professional learning, funded out of the general fund. These funds are already allocated in the Mathematics budget for 2008-2009. Funds for ongoing professional learning will be budgeted through the Mathematics department.

Expenditure: ☑ One-time ☐ Annual

COMMUNITY ENGAGEMENT PROCESS

Three community members – all parents - were selected for the committees (two for the Core committee; one for the Advanced committee). The community applications were screened by representatives from Family Engagement and PTSA. Public review was held during the month of February. More than 600 students in five high schools reviewed the materials during the last week of February. Community engagement regarding the proposed materials and impact on high school course selection took place in March, and will continue in the fall.

CONCLUSION/RECOMMENDATION

It is recommended that the Seattle School Board approve the recommendations of the High School Mathematics Materials Adoption Committees (see attached list).

ATTACHMENTS

- **High School Mathematics Materials Adoption Committee Recommendations**
- **PowerPoint presented to School Board on March 25, 2009**
- **High School Mathematics Materials Adoption Committee Members**
- **Summaries of Core and Advanced Committee Recommendations**