

Afterschool Mathematics Support Program

**Preliminary Report to the
Legislature**



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November 2008

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Afterschool Mathematics Support Program

Preliminary Report to the Legislature

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Table of Contents

Executive Summary	1
I. Introduction	2
II. Afterschool Mathematics Support Grant Process	3
III. Evaluation Plan/Outcomes	4
IV. Recommendations and Next Steps	5

Executive Summary

Second Substitute House Bill (SSHB) 1906 (2007 Session) created the Afterschool Mathematics Support Program. The Office of Superintendent of Public Instruction (OSPI) is required to:

- Study the effects of intentional, skilled mathematics support included as part of an existing afterschool program.
- Provide grants to selected, community-based, nonprofit organizations that provide afterschool programs and include support for students to learn mathematics.

The grant applicants must demonstrate the capacity to provide assistance in mathematics learning in the following ways:

- Identify the mathematics content and instructional skills of the staff or volunteers assisting students.
- Identify the learning strategies to be used.
- Articulate the plan for connection with school mathematics teachers to coordinate student assistance.
- Articulate the plan for assessing student and program success.

In addition, priority is to be given to middle school and junior high students.

The Legislature also directed OSPI to evaluate program outcomes and report to the Governor and the education committees of the Legislature on the outcomes of the grants and make recommendations related to program continuation, modifications, issues related to program sustainability, and possible program expansion.

This report summarizes the status of this program from July 2007 through June 2008. Key points include:

- Afterschool Math grants were awarded to five existing community nonprofit afterschool programs in the amount of \$74,000 each.
- A minimum of 50 students in need of assistance are to be served in each program.
- Each program uses a different approach to instruction which allows OSPI to evaluate the effects the program has on increasing math skills for struggling students.
- The contract for evaluation services for the Afterschool Mathematics Support Program was awarded to the Center for Research and Data Analysis at Educational Service District (ESD) 113.

I. Introduction

Afterschool programs provide additional time for students struggling to gain much needed math skills. Quality afterschool programs provide engaging learning activities in a safe and supportive environment. Generally, programs that focus on middle school students are usually more recreation and sports focused. This is a time when many students experience a marked decrease in school engagement—grades falter and self-esteem, interest in school, and confidence in academic abilities decline. Afterschool programs help bridge the achievement gap by providing academic support that many parents are unable to provide to their children. Quality afterschool programs partner with local school districts and help students continue to build skills necessary for success in today's economy. The Afterschool Math Support Program is an example of such partnerships and provides students additional math intervention assistance.

A recommendation in the Washington Learns 2007 report is that the state should work with local community organizations and partnerships on student activities to reinforce mathematics and science concepts and skills.

Legislation was passed that created SSHB 1906 which states:

- Study the effects of intentional, skilled mathematics support included as part of an existing afterschool program.
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II. Afterschool Mathematics Support Grant Process

From September 2007 to October 2007, OSPI staff developed grant criteria for the Afterschool Mathematics Support Program. This also included an informal search on what intentional best practices in math interventions were currently being offered in community-based afterschool programs. OSPI found that the majority of the programs offered homework help, but few links to the school day in math interventions.

In November 2007, a request for proposals was released through the OSPI iGrants system inviting nonprofits to respond to application requests with the following information:

1. Identification of the mathematics content and instructional skill of the staff or volunteers assisting students.
2. An outline description of the learning strategies to be used.
3. A plan that clearly identified:
 - The connection with school math teachers to coordinate student assistance.
 - How applicants would assess student and program success.

OSPI received a total of 11 grant applications from community-based nonprofit organizations requesting \$783,203 for the first year. Funding to OSPI for the complete project for both the 2008 and 2009 fiscal periods totals \$400,000.

A team of seven qualified people met to review the grant applications. After reading the proposals, the team discussed each application and then independently rated the proposals. Application scores were tallied and, as a final step, reviewers' comments were read by OSPI staff.

Upon initial review of the scoring results, most of the applicants had the majority of their funding allocated toward the infrastructure of the agencies—namely, director's salaries, overhead, and rent. Given the direction by the state Legislature that grants awarded were to go to existing afterschool organizations, OSPI felt that these costs were not appropriate expenditures and should already have been covered by the agency requesting funding. As a result, the decision was then made to ask for additional information from the top five highest scoring applicants. Each applicant was advised that the mathematics program budget would be \$74,000 with the intent to fund the new math activities.

After review of additional applicant's information, the Afterschool Mathematics Support Programs were awarded in December 2007 to the top five rated proposals upon the completion of the additional requested information. Each award was for \$74,000, and each project must commit to a minimum of 50 students during the 18-month program.

Descriptions of Afterschool Mathematics Grants Awarded:

Boys and Girls Club of King County

Location: Washington and Madrona Middle Schools, Seattle School District

Days/Hours: Monday, Tuesday, and Thursday from 5 p.m.–6:30 p.m.

Description: Math Mentoring utilizes three components: Focus on EALRs, High Yield Learning Activities, and the Washington State Mathematical Communications Model. Weekly skill quizzes and student and parent surveys are used to evaluate student progress and program success.

Seattle Communities in Schools

Location: Meany Middle School, Seattle Public Schools

Days/Hours: Twice weekly for 1.75 hours

Description: Uses America’s Choice Mathematics Navigator curriculum to provide learning time for math, intentional and individualized support, and one-on-one instruction so that students can make academic improvements in mathematics.

Lakewood Communities in Schools

Location: Woodbrook Middle School, Clover Park School District

Days/Hours: Monday–Thursday for one hour a day

Description: Struggling math students have opportunities to improve their comprehension of math concepts and abilities and a place to boost self-esteem regarding academics. The program previews and pre-teaches the next week’s lessons, which enables these students the extra time and practice they need to be “leaders” in their regular math class.

Refugee Woman’s Alliance

Location: Seattle Public School Bilingual Orientation Center

Days/Hours: Monday–Thursday for two hours a day

Description: Integrates math professionals into Refugee Women’s Alliance’s youth development program to meet the goal of improving refugee and immigrant math knowledge.

Washington Alliance for Better Schools

Location: Meeker, Meridian, and Mill Creek Middle Schools, Kent School District

Days/Hours: Monday–Thursday for two hours a day

Description: The design includes four math components: College Preparatory Math Skill Builder, Hotmath Homework Help, Math Whizz Tutoring, and Family Math Nights.

III. Evaluation Plan/Outcomes

In order to collect information on program effectiveness and outcomes, OSPI has contracted with The Center for Research and Data Analysis at ESD 113 for the

amount of \$17,500. This independent program evaluation is critical for OSPI to examine and make recommendations regarding the Afterschool Mathematics Support Program regarding outcomes, continuation, modification, sustainability, and potential expansion.

The current Afterschool Mathematics Support Program has been operating at full capacity for approximately five months. Based on the local program internal assessments as reported to OSPI, the following results were achieved:

- Seventy-five percent of students who maintained at least 50 percent attendance in the program demonstrated academic improvement.
- Students gained fundamental math reasoning skills that directly benefit their test-taking strategies and their daily lives.
- Seventy-six percent of students taking part in pre- and post-navigator assessments made moderate gains.
- The majority of students attending describe the programs as helpful.

IV. Recommendations and Next Steps

The Afterschool Mathematics Supports Program has been fully implemented as authorized in SSHB 1906. Five grantees have been identified and are making progress in meeting the program objectives and desired outcomes. OSPI recommends continued funding to support the current grantees and to support ongoing evaluation activities to demonstrate the effectiveness of the program.