What is the College-Ready Math Initiative?

College Spark Washington, an education foundation, is investing significant funding over seven years in the College-Ready Math Initiative to help low-income students graduate from high school with strong math skills and avoid remediation in college. The Initiative includes a variety of evidence-based strategies and programs designed to help students improve their scores on the 11th grade Smarter Balanced Assessment, which measures achievement relative to the Common Core State Standards, and provide students an opportunity to develop the math knowledge and skills they need to succeed in college without the loss of time and expense of remedial courses. The focus for this grant is on school districts with high percentages of students living in poverty (50%) as measured by participation in the Free and Reduced Lunch program, though schools with 40-49% low-income students may be considered.

The Need

A significant number of Washington's high school graduates are required to take remedial math in college. This remediation increases the time it takes students to move toward a college degree, requires students to use valuable financial aid on course work for which they can earn no college-level credits, and dramatically reduces the chance that a student will earn a degree: fewer than half of the students who take remedial math go on to graduate from college.

In 2015, students will begin taking the 11th grade Smarter Balanced Assessment; experts predicted that 70% of students will score below the college-ready level on the math section of this test.

The Programs

- **School-Year Academic Youth Development (SY-AYD)** is a program designed to improve student achievement in STEM courses by helping learners develop a growth mindset and become more engaged and motivated, and develop skills for productive persistence—particularly in mathematics. In Washington, School-Year Academic Youth Development (SY-AYD) will typically be delivered during 8th, 9th, **or** 10th grade advisory (often referred to as Career Guidance Washington, formerly known as Navigation 101 statewide).

- **Intensified Algebra (IA)** is an algebra program for students who are 1-3 years behind in math that combines a number of strategies and resources, including those to develop a growth mindset, as well as those that support efficient review and repair of misconceptions, and powerful tools to organize effective learning, with Algebra I course content for eligible students (grades 8, 9 or 10) use the Agile Mind curriculum. Intensified Algebra is aligned with the Common Core State Standards for Mathematics and designed to improve students' scores on the Smarter Balanced Assessment.

- **Educator's Course in Academic Youth Development (E-AYD)** is a professional development experience designed for educators interested in learning about the research and strategies that are most critical to student learning and achievement. Participants explore ideas and strategies that have the power to transform students' attitudes and behaviors, teachers' attitudes and practices, and education systems. E-AYD courses are required for math teachers of students enrolled in AYD and encouraged for other interested educators. Training can be onsite at school.

Through the College-Ready Math Initiative, 60 schools will receive four-year grants to implement School-Year Academic Youth Development (SY-AYD), or Intensified Algebra (IA), or both over seven years. All grant-funded schools will participate in the Educator's Course in Academic Youth Development (E-AYD) as a part of their implementation.

In this first round of grant applications, twenty-five (25) schools will receive four-year grants to implement School-Year Academic Youth Development (SY-AYD), Intensified Algebra (IA), or both, as well as the Educator's Course (E-AYD). The first cohort of schools will be selected by January 2015 and these selected schools will begin implementing these programs fall of 2015. Grant funding will fully cover the cost of the School-Year Academic Youth Development and/or Intensified Algebra programs, curriculum, summer training, and professional development plus $5,000 each year for the first two (of four) years of the grant for related program costs such as technology, program coordination, data collection, and travel costs associated with training. Additional schools will be able to join the initiative after the first two years of the first phase of this grant.

In addition two other programs are a part of the College Spark College-Ready Math Initiative, but are not included in this grant application: (For more information go to http://www.collegespark.org/.)

- Senior Year Transition Courses
- Equity in High Level Math

Eligibility Requirements

For **School-Year Academic Youth Development (SY-AYD)** each school applying must meet the following eligibility criteria:

- An existing advisory program with dedicated advisory class time, including 30 minutes or more twice a week for delivering SY-AYD to a single grade. (Other models of homeroom or core/elective class dedicated time for college/career readiness guidance may be considered.) Minimum instruction time for SY-AYD is 30 hours per year.
- Program participation that will include all students in the targeted grade-level, with a recommendation of no more than 25 students in each advisory or class where AYD is taught.
- A SY-AYD leadership team consisting of district leader, building administrator, building leader (counselor, department chair, or lead teacher).
- A technology-enabled classroom that includes a single classroom computer, projector, internet connection, and periodic access to a computer lab or classroom set of computers (or Chromebooks). Agile Mind's minimum technology requirements can be found at http://www.agilemind.com/support/technical-requirements/.
- A commitment (including allocation of staff time) to participate in annual professional development, including:
    - 1-3 meetings of school leaders (2 day leadership training in spring 2015, including E-AYD),
    - 2.5 days of summer training for those who will teach SY-AYD (starting summer 2015),
    - 1 day of Educator AYD training for teachers and leaders, including all math faculty not teaching SY-AYD one time during the first two years of the grant (not annual),
    - 3 days of on-site professional development/consulting during the school year.
- At least one hour per week of professional collaboration time dedicated to School Year-Academic Youth Development.
- Schools with a population of at least 50% FRL eligible students will receive priority consideration; schools with 40-49% FRL may be considered. High schools can use feeder middle school FRL data to establish eligibility.

Eligibility Requirements

For **Intensified Algebra (IA)** each school applying must meet the following eligibility criteria:

- Dedicate 80 minutes daily class time (one double-block class) to IA instruction with a recommendation of no more than 25 students enrolled in each IA course.
- An IA leadership team consisting of a district leader, building administrator, and building coordinator/lead math teacher.
- A technology-enabled classroom that includes a single classroom computer, projector, internet connection, and at least twice-monthly student access to a classroom set of computers, laptops, or iPads, and 60-90 minutes a week of online access (some outside of class). If you have concerns about providing this level of access to IA students, please contact Denise Hobbs at Dhobbs@agilemind.com to learn about how other high poverty schools have addressed this issue.
- A commitment (including allocation of staff time) to participate in annual professional development, including:
    - 1-3meetings of school leaders (2 day leadership training in spring 2015, including E-AYD),
    - 2.5 days of summer training for those who will teach Intensified Algebra (starting summer 2015),
    - 3 days of on-site professional development/consulting during the school year
    - At least one hour per week of professional collaboration time dedicated to Intensified Algebra
- Though not required, schools may also receive grant funds for a one-day Educator-AYD (growth mindset) training for teachers at IA schools who are not directly teaching IA. This training can be provided on location at your school or district.
- At least two participating math teachers per site (or per consortium)
- To participate in Intensified Algebra class, students must be 1-3 years below readiness for Algebra 1.
- Schools with a population of at least 50% FRL eligible students will receive priority consideration; schools with 40-49% FRL may be considered. High schools can use feeder middle school FRL data to establish eligibility.

Selection Priorities for School Districts:

- Programs must be well aligned with the school's strategic plan for implementation of the Common Core State Standards and the Smarter Balanced Assessment System, and student achievement in mathematics
- Schools with highest FRL populations may be prioritized over others
- Geographic diversity (state-wide and urban, rural, suburban)
- Openness to providing additional information, site visits/interviews prior to award selection, if warranted
- Districts with multiple schools/feeder schools implementing AYD or IA (AYD for 8th grade students following by IA for targeted 9th grade students, for example)
- Schools with experienced math teachers who have been focusing on implementing the Common Core State Standards and formative assessment within their instruction and aims to foster a classroom culture of a growth mindset with students

Eligibility for Additional Funds and Grant Opportunities

School's selected to participate in the AYD and Intensified Algebra components of the College Spark Math Initiative will be eligible to receive additional grant funding for two additional programs:

- Equity in Higher Level Math: High schools that are selected to receive SY-AYD and/or IA grant funds may also receive additional funds to increase low-income student access to and success in higher level math courses such as AP by working with Equal Opportunity schools (eoschools.org) or by engaging in other strategies focused on increasing access to and success in higher-level math courses.
- Senior Year Transition Courses: School-Year Academic Youth Development (SY-AYD) and Intensified Algebra (IA) schools will also have priority in receiving grant funding to implement senior year math and English Language Arts transition courses. Senior Year Transition courses are being developed by high school teachers and faculty and will target students who earn a 2 on the Smarter Balanced Assessment. Students who pass these courses will be eligible to enroll in college-level math and ELA courses at all of Washington's community colleges and many four year colleges without additional placement testing such as Accuplacer or Compass.

Goals for this Initiative

- Provide funding and other supports to enable schools to implement strong Academic Youth Development and Intensified Algebra programs that help students develop the skills they need to succeed academically; measured by improvements in the following areas (which have been demonstrated by students at other Academic Youth Development/Intensified Algebra schools)
    - Improvements in growth mindset/non-cognitive factors
    - Decreases in suspensions/expulsions, increases in attendance, and decreases in failed grades (early warning indicators)
    - Increases in GPA
    - Increases in students passing Algebra I, as well as success in Geometry, Algebra II and higher during high school
    - Higher Smarter Balanced Assessment scores than would have otherwise been earned by students in participating schools (most likely via comparison, since baseline data will be unavailable)
- Establish a cohort of strong AYD/IA schools that can serve as models for other schools considering implementing these programs (on their own or during one of the subsequent rounds of funding).
- Provide building leaders with the information regarding implementation and impact to enable them to address implementation challenges early on and describe the benefits to students that occur as a result of program implementation, over time.
- Through participation in Academic Youth Development programs, equip educators with the knowledge and skills to make research on non-cognitive factors of malleability of intelligence, effective effort, self-regulation, and productive persistence a part of school culture and of daily practice.

Program Evaluation

Those selected for College Ready Math Initiative grants to implement Academic Youth Development and/or Intensified Algebra will become members of an active learning community of schools statewide working to remove mathematics as a barrier to student success and college

readiness. A carefully constructed evaluation design will provide actionable and relevant findings that will be communicated to schools regularly to support program implementation. Schools will receive data specific to their site, as well as data aggregated across all participating schools. These data can be shared locally with district leaders, school boards, and the community as evidence of the school's commitment to student success. Aggregate data will be shared with education leaders, policy makers, and researchers across the state - and nation - to build broad support for the selected college readiness strategies.

The evaluation design will collect data to answer questions important to participating school leaders and teachers, including:

1. To what extent is the program being implemented as intended?
2. What are the factors that are supporting or inhibiting successful implementation of the program?
3. To what extent is the professional development supporting implementation?
4. To what extent do teachers and students perceive the program as useful and relevant to them?
5. To what extent is the program positively impacting students?

To answer these questions, participating schools will be asked to submit a variety of data through surveys and interviews of administrators, teachers, students, and parents, as well as providing access to school-based data such as transcripts. Other student-level data such as attendance records and state assessment scores will be accessed through CEDARS. Additional data about program usage for those implementing School Year Academic Youth Development (SY-AYD) or Intensified Algebra (IA) will be collected passively from the Agile Mind digital platform. Schools will be asked to assist in the acquisition of relevant parental permissions for the release of this data. It is estimated that the total amount of time for data collection and submission at each school will not exceed 80 hours per year. Stipends will be awarded to schools to offset their costs for fulfilling their commitments to the evaluation plan. School leaders will be convened 1-3 times per year for facilitated discussion on the evaluation findings, collaboration among other districts to share successes and problem-solve, and to plan mid-course adjustments to improve implementation and increase impacts. These convenings are included in (not in addition to) the leadership meetings described in the Eligibility Requirements and Assurances Sections of this document.

The BERC Group, Washington STEM, and the Charles A. Dana Center at the University of Texas at Austin will be working collaboratively to support all evaluation activities. Together they commit to minimizing the burden of data collection, while maximizing the benefit of the analyses to support learning and decisions at the school level. OSPI has a data sharing agreement with BERC group, allowing data to be accessed through CEDARS to improve efficiencies.