

## **Algebra for All Initiative: Middle & High School Programs**

### **Cohort 1: 2016**

#### Overview and Registration Survey for School Leaders

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#### **Why Algebra for All?**

The *Algebra for All* Initiative, one of the eight Equity and Excellence initiatives being launched in 2015-16, spans grades 5-10 and is designed to improve student readiness for Algebra 1 and high school math instruction. Research has established that students who successfully pass Algebra by no later than the end of 9<sup>th</sup> grade are more likely to graduate from high school and go on to and graduate from college, and the *Algebra for All* Initiative will support teachers to be successful in teaching coursework that is essential for algebra success. The *Algebra for All* Middle and High School Programs will provide teachers and school leaders with ongoing research-based professional learning for two years to strengthen their capacity to improve the mathematics programs of their schools and support student readiness for success in Common Core mathematics in middle school, Algebra 1, and beyond. Professional learning opportunities for teachers will be designed to deepen and sharpen their content knowledge and pedagogical repertoire, and to engage them in conversations around grade-specific mathematics with a focus on the significant topics in each grade and making them more accessible to students.

#### **What do schools receive?**

All schools participating in either the Middle School Program or High School Program will be provided with the following program components, all focused on supporting schools to meet the needs of all students:

- **Professional Learning Series – Teachers:** All participating mathematics teachers of Grades 6, 7, 8, and Algebra 1 will have the opportunity to engage in 20 days of professional learning (ten during the summer of 2016, five during the 2016-17 school year, and five during the 2017-18 school year), which will include grade-specific training and sessions. These sessions will focus on instructional strategies and content that is most relevant to algebra readiness and success for all students, as outlined by authors of the Common Core standards.
  - *Note that teachers that teach multiple grades will choose **one** grade to focus on.*
- **Mathematics Leadership Series – School Leaders:** School leaders will have the opportunity to attend various professional learning opportunities throughout the year related to issues of mathematics education and leadership. These sessions will also support school leaders in planning related to the school commitments, outlined below, which may lead to scheduling and programming adjustments starting in 2017-18.
- **Online Community:** Schools will be provided access to an online community in which *Algebra for All* schools can share resources and best practices, discuss successes and challenges, and connect with one another to arrange for school visits.
- **Membership in NCTM:** Participating teachers will receive full memberships to the National Council of Teachers of Mathematics, including subscriptions to the monthly professional journal at the appropriate grade level:
  - Middle School teachers will receive *NCTM: Mathematics Teaching in the Middle School*.
  - High School teachers will receive *NCTM: Mathematics Teacher*.
- **Per Session & Per Diem:** The *Algebra for All* Initiative will provide teachers with per session for any designated *Algebra for All* sessions that take place outside of regular hours, including all sessions that take place over the summer. Per diem will be supplied to schools to cover all teachers that attend designated *Algebra for All* sessions throughout the year.

#### **What does my school need to do?**

The *Algebra for All* Initiative has the potential to positively impact the mathematics experience of students across the city in a lasting and very meaningful way. With an overarching goal of ensuring the success of *all students* in Algebra 1 by the end of 9<sup>th</sup> grade, the success of the initiative will rely on schools to support effective mathematics instruction, provide the time and space for teachers to plan and students to learn, and engage families in conversation about the mathematics that students are learning.

With that in mind, schools that are interested in participating in the *Algebra for All* Initiative will be asked to plan for and make some changes to their mathematics programs starting in the 2017-18 school year. Guidance and support will be provided to schools during the 2016-17 school year to assist with being successful in upholding certain school-level commitments, outlined below, and making any necessary adjustments to the mathematics program.

- **MS: School-Level Commitments for the *Algebra for All* Middle School Program**

Middle Schools interested in participating in the *Algebra for All* Initiative Program will be asked to commit to supporting students with ***staying on track*** by planning for or continuing the following actions:

- Begin the planning process to ensure that all students in grades 6-8 receive *at least 300 minutes per week* of mathematics instruction, starting in the 2017-18 school year.
- For middle schools without access to an Algebra 1 program for 8<sup>th</sup> graders, begin the planning process to ensure that, by the 2017-18 school year, incoming 8<sup>th</sup> graders *for whom Algebra 1 may be appropriate* have access to an Algebra 1 program (on or offsite).
  - *Guidance on developing or finding a Grade 8 Algebra 1 program is forthcoming.*
- Provide or continue to provide all mathematics teachers with *at least one common planning period each week* to plan and implement effective mathematics instruction, and encourage various opportunities for mathematics teachers to learn from one another (e.g. intervisitations).
- Begin or continue dialogue with parents and families about mathematics and college and career readiness.
- School leader(s) participate in Mathematics Leadership Sessions during the school year.
  - *Mathematics Leadership Session calendar for 2016-17 forthcoming.*

- **HS: School-Level Commitments for the *Algebra for All* High School Program**

High Schools interested in participating in the *Algebra for All* Initiative Program will be asked to commit to supporting students with ***completing Algebra 1 by the end of 9<sup>th</sup> grade*** by planning for or continuing the following actions:

- Begin the planning process to ensure that all students in Algebra 1 receive *at least 300 minutes per week* of mathematics instruction, starting in the 2017-18 school year.
- For high schools that offer a two-year Algebra 1 program, begin the planning process to ensure that, by the 2017-18 school year, all incoming 9<sup>th</sup> graders that have not yet completed Algebra 1 have the opportunity to complete Algebra 1 in one year (including taking and passing the Regents exam), and that any additional supports necessary for students to be successful are provided during their 9<sup>th</sup> grade year.
  - *Guidance on scheduling and programming considerations are forthcoming.*
- Provide or continue to provide all mathematics teachers with *at least one common planning period each week* to plan and implement effective mathematics instruction, and encourage various opportunities for mathematics teachers to learn from one another (e.g. intervisitations).
- Begin or continue dialogue with parents and families about mathematics and college and career readiness.
- School leader(s) participate in Mathematics Leadership Sessions during the school year.
  - *Mathematics Leadership Session calendar for 2016-17 forthcoming.*

Please note that schools serving grades 6-12 are certainly encouraged to participate in both Middle School and High School Programs, but may elect to participate in only one.

### **Which teachers can be involved?**

School leaders can send any mathematics teacher(s) who want to participate in *Algebra for All*. Schools are invited and encouraged to register *as many teachers* as can be supported to each miss *five school days per year* during the 2016-17 and 2017-18 school years to attend professional learning sessions (per diem will be paid for each teacher on each day, and every effort will be made not to have more than one grade level out on any given day).

- *In an effort to promote greater impact, committing a team of at least three teachers – and preferably at least one per grade level for middle schools – is strongly encouraged.*

After completing a Registration Survey for your school (see “How do I get my school and teachers involved?” below), each teacher designated as participating on the survey will receive an individual email with information about the *Algebra for All* summer professional learning program and link to register for the summer sessions (dates below).

- **All participating teachers should:**
    - Teach mathematics at grade 6, 7, and/or 8 (including grade 8 Algebra 1) in Middle School or Algebra 1 in High School (including teachers that teach Algebra 1 in the 10<sup>th</sup> grade) during the 2016-17 school year; can include teachers of ESL and teachers who work primarily with students with disabilities who are also teaching or supporting mathematics.
    - Demonstrate a willingness to improve practice and collaborate with colleagues.
    - Be stimulated by the challenge of teaching mathematics to all students, including struggling learners, students with disabilities, and English language learners.
    - Attend **ten** full-day sessions this summer (per session will be paid, taking place at a Manhattan location):
      - **Grade 6:**
        - Monday, July 25, through Friday, July 29
        - Monday, August 1, through Friday, August 5
      - **Grade 7:**
        - Monday, July 25, through Friday, July 29
        - Monday, August 1, through Friday, August 5
      - **Grade 8\*:**
        - Monday, August 1, through Friday, August 5
        - Monday, August 8, through Friday, August 12
      - **Algebra 1 (including Grade 8 Algebra 1\* and High School Algebra 1 teachers):**
        - Monday, August 8, through Friday, August 12
        - Monday, August 15, through Friday, August 19
- \* Teachers that teach both Grade 8 *and* Grade 8 Algebra 1, and elect Algebra 1 as their focus, will be invited to additionally attend the Grade 8 week from August 1 through August 5 (although not required).
- Attend **five** full-day sessions during the 2016-17 and 2017-18 school years, which will take place on regular school days (per diem will be paid to the school).
    - *Professional Learning calendar for 2016-17 forthcoming; to the extent possible, grade-specific sessions will be scheduled to minimize the number of teachers out on any given day.*
  - Have the recommendation and support from his/her Principal to be an *Algebra for All* teacher.

### What happens after Algebra 1?

Providing students with the support and learning experiences that they need to be successful in Algebra 1 before they enter 10<sup>th</sup> grade can help provide them with access to a wider range of options for more advanced mathematics courses, including Geometry and Algebra 2, as well as Advanced Placement courses such as Calculus and Statistics. For more information about providing access to high-level coursework for students, please reach out to [AP for All](#).

### How do I get my school and teachers involved?

- Complete the online Registration Survey [HERE](#) by Friday, May 27.
  - *Note that the survey requires a school leader to enter all teachers' names that will be participating, as well as each teacher's preferred/focus grade level (each teacher should choose **one** grade, even if they teach at more than one grade level).*
- Once registered, teachers will be contacted individually to formally register for the summer, including choosing which sessions are most aligned to their needs and interests.
  - *In the meantime, please ensure participating teachers save the dates above in their calendars.*
- A final calendar of events and dates for participating teachers in your school will be produced and provided to the school once the summer professional learning schedules have been finalized.

### How do I get more information?

Please feel free to email your questions to the *Algebra for All* team at [AlgebraforAll@schools.nyc.gov](mailto:AlgebraforAll@schools.nyc.gov).

***We look forward to working with you and your school to ensure mathematical success for every student!***