



Mathematics Programs and Services

Making Math Count!

Research-based strategies and solutions that improve mathematics teaching, advance professional learning communities, and increase academic achievement

Contact Us Today!

www.partnerwithlegacy.com



LEGACY PATHWAYS

Innovative Educational Solutions for Schools and Businesses

Dear Educator,

As children grow they need confidence in their abilities and skills to reason mathematically. First off, they and their teachers must understand that mathematics is a language and that they live in a world where understanding of how to communicate in that language is essential. More important, they must be able to reason effectively in a complex mathematical world. In the real world, our students make mathematical decisions every day such as: What games to purchase? How to decipher information in a social media driven environment? How to earn money? How much to save and donate?

Answering questions like these requires solid mathematical thinking and problem-solving, both of which are reflected in the new Common Core Standards and are needed in college and the workplace.

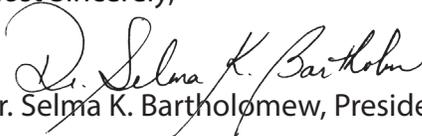
If our students are to reach higher levels of mathematical thinking and problem-solving, then our leaders and policy makers must make a real commitment to helping teachers understand that mathematics is a language. They must also commit resources to improving the content and pedagogical content knowledge of mathematics teachers.

Legacy Pathways has proven results in improving mathematics teaching and learning. We offer school improvement services that are tiered and focused on developing new professional practices for both leaders and teachers, these include:

- Strategic planning to help leaders develop district-and school-based mathematics action plans
- P12 Portal to help manage vision, mission, and curriculum initiatives
- Customized mathematics coaching support for teachers
- Comprehensive professional development
- Student Net to support online and portfolio-based instruction
- Technology-based curriculum solutions

We take seriously our commitment to working with schools and districts. We value our partners and know that together we can innovate teaching, learning, and leadership. Thank you for taking the time to review our mathematics brochure. We look forward to helping your further your goals and objectives.

Most Sincerely,



Dr. Selma K. Bartholomew, President

Legacy Pathways Mathematics Programs and Services

The statistic is alarming: More than 30 percent of students in their first year of college are forced to take remedial mathematics because they are not fully prepared to meet the expectations of college-level courses.

Legacy Pathways partners with districts and schools to help build capacity in mathematics and works strategically to help close the achievement gap in mathematics. We provide comprehensive programs and services to support teachers, instructional leaders, teacher leaders, and coaches as they work to address the new Common Core Learning Standards, reach college and career readiness goals, increase student engagement, raise academic rigor, establish relationships, and bring relevance to mathematics teaching and learning. Legacy Pathways' Program Leaders are experienced educators who utilize research, best practices, and data to guide mathematics programs and services.

Legacy Pathways—Closing the Achievement Gap in Mathematics!



Mathematics
Strategic Action
Plan

P12 Portal to
Monitor and
Revise Practices

Structured
Curriculum in
Action

Alignment with
Common Core
Standards

Department
Structure and
Support

Content and
Pedagogical
Content

Cohesive Unit
and Lesson
Planning

Algebra
Cornerstone for
All Learners



Improved Mathematics Performance and Outcomes

Legacy Pathways'

Mathematic Solutions with Proven Results!

- Strategic planning
- P12 School Improvement Framework
- Coaching and job-embedded supports
- Curriculum in Action
- Math Institutes and hands-on workshops for teachers
- Training and certification in Mathematics Leadership for assistant principals, lead teachers, and school coaches responsible for supporting mathematics

Make an appointment today to learn more about Legacy Pathways' mathematics programs and services.



Dr. Selma K. Bartholomew
President

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For additional information visit us on line at
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Contact

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SCHOOL DEMOGRAPHICS

Enrollment:
700

Grades Served:
9 – 12



SMART GOALS

SCHOOL OVERVIEW

Acorn Community High School is located in Brooklyn, New York, and serves more than students. Acorn is a public high school committed to ensuring that students are equipped with the content and skills necessary to meet the demand of college and career readiness.

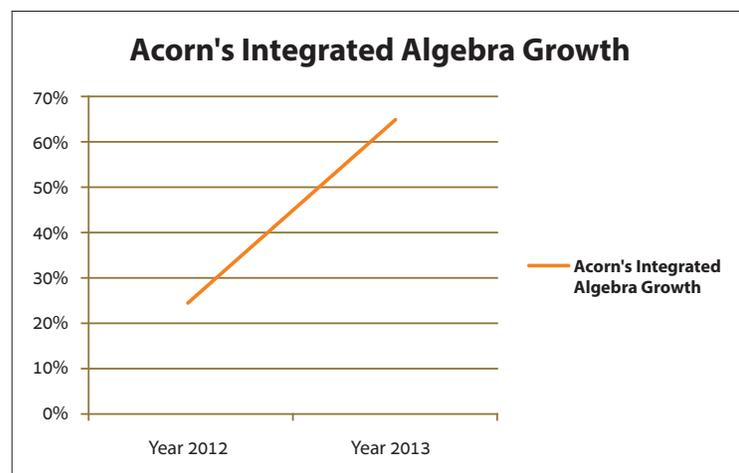
IMPLEMENTATION ACTIVITIES AND TARGETS

Legacy Pathways provided comprehensive mathematics support focused on building and sustaining structures for meeting and exceeding Common Core. We provide attention to developing math teams and helping them improve content and pedagogical content knowledge.. The process includes:

- ✓ Developing SMART goals
- ✓ Implementing P12 Portal to manage initiatives
- ✓ Ensuring and protecting department meeting structures
- ✓ Implementing a managed Curriculum in Action
- ✓ Implementing Legacy Lab for math learners
- ✓ Monitoring and revising systems
- ✓ Ensuring a realistic timeline to meet goals and expectations.

PROGRAM ACCOMPLISHMENTS AND FINDINGS

Legacy Pathways' commitment to improving mathematics learning within Acorn HS had proven results: In 2012, only 25% of students passed the Integrated Algebra Regents Exam. In 2013, the pass rate increased significantly to 65%.



Improving Mathematics Teaching and Learning

SHARED VISION AND PROFESSIONAL LEARNING COMMUNITY

- Developing a shared vision and understanding of mathematics teaching and learning
- Developing the essential skills and knowledge to form a working mathematics professional learning community
- Supervising mathematics instruction to create shifts in climate and culture

CURRICULUM MAPPING

- Unpacking the Common Core Standards and gap analysis to the NYS Standards
- Unpacking scope and sequence and aligning instructional and test-taking strategies
- Developing a standards-based curriculum map (i.e., how to plan a lesson; major units in Numbers Sense and Algebra)
- Differentiating Instruction and meeting the needs of diverse learners
- Implementing “I Can Statements” to check for student understanding

CONTENT AND PROBLEM SOLVING

- Understanding the language of mathematics
- Discovering problem-solving strategies and protocols for teaching rich word problems that reflect the expectations of the Common Core Standards
- Understanding the difference between teaching concepts, formulas, and skills

BRIDGING NUMBER SENSE TO ALGEBRA

- Unpacking the Order of Operations to bridge content learning gaps
- Identifying different approaches to solving equations
- Defining multidimensional approaches to teaching functions
- Graphing linear and non-linear equations

MATHEMATICS MANIPULATIVES AND INSTRUCTIONAL TECHNOLOGY

- Understanding the role of Manipulatives in teaching Number Sense and Algebra (i.e. Algebra Tiles, Counters, Calculators)
- Understanding and utilizing instructional technology to meet the needs of diverse learners

GEOMETRY AND MEASUREMENT

- Making connections between Algebra and Geometry
- Understanding the big ideas of measurement
- Making connections to real-world problems to build geometric understanding



LEGACY PATHWAYS' CORE VALUES AND GUIDING PRINCIPLES

INNOVATION – We consistently seek to discover new strategies and creative ideas to improve educational systems designed to support and sustain educational reform.

COLLABORATION – We work collaboratively with our clients. To be effective we engage in active listening and work as true partners in educational reform.

TRUST – We obtain success with a demonstrated commitment to providing high quality programs to our clients. By taking ownership of our work, communicating expected outcomes, and providing high quality service and product we build trust and sustainability.

DIVERSITY – We value the diverse needs of our clients and the students they serve. Everyone has a right to be taken seriously and must have a voice in the educational process.



For additional information visit us online at
www.partnerwithlegacy.com

Mathematics

Programs and Services



**Innovating
Mathematics Teaching and Learning**

P12 School Improvement Framework

Strategic Planning

Coaching

Curriculum

Professional Development

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