







Renzulli Learning Empowers Gifted Youngsters with

21st Century Skills

Judge Charles Vallone School (P.S. 85), Queens, New York

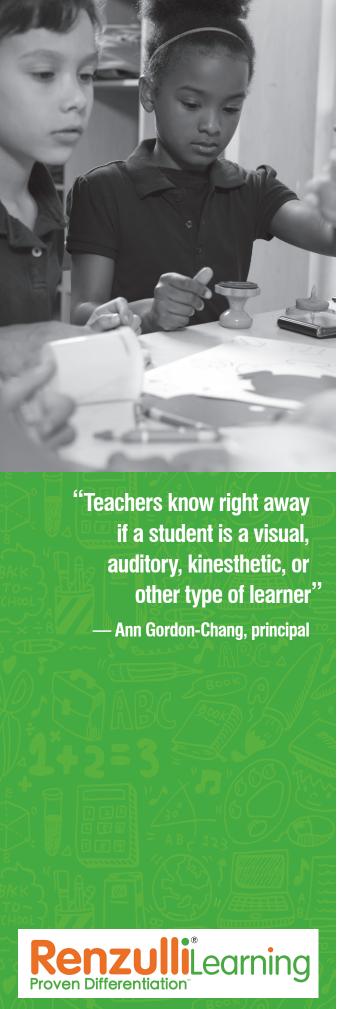
STATS:

Grades:PreK-5
Enrollment:
Languages represented:40
Student Ethnicity:
White
Hispanic
Asian 24%
African American 4%
Native American
Multi-racial
Poverty rate
English language learners 14%
Special Education

Summary:

In the fall of 2009, Judge Charles Vallone Elementary School (P.S. 85) in Queens, New York, became home to the Science, Technology, Enrichment and Math (S.T.E.M.) Academy, a borough-wide gifted and talented program. With a mission to instill confidence in students and arm them with the skills for success in the 21st century, the S.T.E.M. Academy crafted a program integrating technology, project-based learning, authentic assessment, and a student-centered approach to instruction for high engagement and accelerated growth.

Central to a student-centered learning environment is differentiated instruction, which enables students to follow their individual interests and aptitudes and to move at their own pace. After attending Renzulli Learning's summer Confratute (institute plus conference) — which focuses on gifted and talented education — at the University of Connecticut, P.S. 85 principal Ann Gordon-Chang determined that the Renzulli Learning System would be an excellent tool to help teachers meet the diverse needs of the school's gifted student population as well as those in its general and special education programs. Renzulli Learning's key components — a profiler that determines each student's learning styles and interests and its



comprehensive bank of pre-screened, standards-aligned digital and hard-copy resources — ensure customized instruction for each student and save teachers hours of preparation time.

Two years after instituting the Renzulli Learning System, Gordon-Chang says it has proved central to helping students learn and grow. Additionally, teachers credit Renzulli Learning with transforming the learning environment, turning students from passive to active learners and teaching them to be selfguided, confident individuals and critical thinkers.

Challenges:

- ▶ Ensure ongoing engagement of high-performing students
- Prepare students for success in the digital century
- Facilitate a high level of parental involvement

The Science, Technology, Enrichment and Math (S.T.E.M.) Academy at the Judge Charles Vallone Elementary School in Queens, New York, sets a uniquely high bar for quality of instruction and student engagement. Only students who have scored in the 97th percentile or higher on the state Department of Education's gifted and talented test are accepted into the academy, and instruction is personalized, fast-paced, "real-world," and focused on higher-order thinking.

Founded in 2009, the S.T.E.M. Academy accepts qualified, high-performing students from all five of the city's boroughs, offering them an intense, customized program tailored specifically to their needs.

"Critical and analytical thinking are crucial to engaging highfunctioning students," says principal Ann Gordon-Chang, who decided to institute the Renzulli Learning System as the program's central element after attending Confratute at the University of Connecticut prior to the Academy's launch.

Home to the Neag Center for Gifted Education and Talent Development, the University of Connecticut has hosted the Confratute event 34 years, bringing together school leaders, teachers, researchers, and parents to explore how best to meet the needs of gifted youth.

Differentiated learning facilitates growth

Gordon-Chang was impressed with Renzulli Learning, a differentiation product that uses a profiler to identify each student's interest areas, learning styles, and expression styles. With this information, teachers can proactively assign instructional activities tailored to match each individual student's needs. "Teachers know right away if a student is a visual, auditory, kinesthetic, or other type of learner," says Gordon-Chang.

Third-grade S.T.E.M. Academy teacher Carmina D'Angelo, who has taught her current students since they were in second grade, says that Renzulli Learning's vast bank of pre-screened resources has been a "godsend," saving her hours of hunting for appropriate online destinations students can use for research.

"Renzulli Learning helps encourage inquiry-based, exploratory experiences for students," says D'Angelo. "They can pose questions and then safely and easily search websites to find the answers themselves."

For a unit on Brazil, for instance, students can explore natural resources by going into Renzulli Learning and typing in a word — such as "cocoa" or "coffee" — to find out what kind of plant it comes from, where it's grown, how it's processed, and so forth. Searches return both primary and secondary resources, so students can hear what experts and other professionals have to say on topics, as well.

Among the other dynamic lessons D'Angelo integrates into her curriculum is a Monthly Hero unit. In it, students research figures from ancient times, such as Aristotle; modern-era influencers, such as architect Frank Lloyd Wright; musicians; and artists like sculptor Isamu Noguchi, whose works celebrate discovery and diversity.

Renzulli Learning resources also support S.T.E.M. Academy's cross-curricular approach to learning, letting kids make the connections between math, art, social studies, and other areas through visuals, such as tessellations.

Technology promotes 21st century skills

As an "innovation zone" pilot site for the New York Department of Education, P.S. 85 also integrates a range of technologies into the curriculum to ensure students are prepared for success in school and the digital workplace. Interactive white boards, tablet computers, notebook computers, and a fully equipped technology lab offer students opportunities for 21st century project-based learning

Parent and community connections key

At P.S. 85, all students, not just those enrolled in the S.T.E.M. Academy, benefit from a high level of parental involvement. Funds and resources raised by the parent association help all students with technology and special programs, such as the after-school painting, photography, and drum clubs that are open and free to all.

Parent involvement in their students' academic progress is also given a boost by Renzulli Learning's instructional management system. This system keeps parents in the loop by letting them log in to the system and see the assignments and projects on which their children are working.



"It's like a journey we take together every day."

Carmina D'Angelo, third grade S.T.E.M. Academy teacher



P.S. 85 also supports a range of partnerships to provide students with more opportunities for project-based learning experiences. For instance, a partnership with the Noguchi Museum helps children develop perspectives on art and create their own masterpieces, and the Learning Through an Expanded Art Program (LEAP) — a New York City-based non-profit artist-in-residence partnership — provides students with experiences in dance, music, puppet and mask making, painting, art appreciation, drawing, and visual arts.

Results

The numerous project-based learning experiences and complex problem-solving opportunities made possible through Renzulli Learning and the many partnerships and programs offered by P.S. 85 have had a deep influence on students.

Over a two-year span, D'Angelo has seen the difference. "The kids have gone from passive to active learners who know they can solve problems on their own. Exposure to the Internet, technology, and a range of cultural influences has made them confident and aware."

D'Angelo cites the example of a second grade student who created his own website to display a PowerPoint presentation, puppet show, diorama poster, and other projects he'd made at school. "When you think about it, it's incredible a second grader did that!" she says.

She is grateful for Renzulli Learning and the excitement she feels at seeing such young children take ownership of their own learning and discover their power to solve problems. "It's like a journey we take together every day."