



Discovery  
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SCIENCE  
TECHBOOK

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DEVELOPMENT

## SCHOOL SPOTLIGHT:

Park Ridge Elementary School (Broward County Schools, FL)

### Discovery Education STEM Program Gets Results

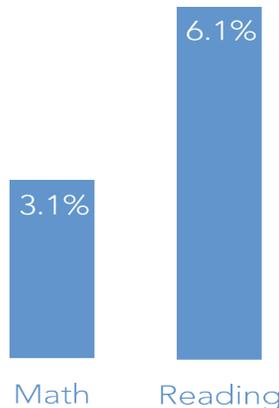
A shift in focus to STEM learning results in improved student testing scores and engagement at Broward County Schools, according to a recent report.

A two-year study of **Park Ridge Elementary School** in Broward County, FL showed marked improvement after education leaders implemented the STEM focus supported by two services from Discovery Education — Science Techbook, a digital science textbook, and STEMformation, a standards-based professional development program.

The gains at Park Ridge followed an initiative at six elementary schools in Broward County designed to improve student outcomes by focusing on STEM studies. Students at all six schools demonstrated improvement on state assessments, but Park Ridge’s students in particular saw significant gains in their reading and math scores. Researchers attributed some of that success to Discovery Education’s implementation at the school.

“The [STEMformation] program at Park Ridge ES, specifically, the integration of Discovery Education digital content and instructional practices into classroom instruction, has produced positive impacts on teaching and learning over the past two years,” according to a report by Metis Associates, a national research and consulting firm.

Student results were measured based on their performance on the Florida Standards Assessment (FSA) between 2016-2017. Park Ridge students showed a **6.1 percent increase in their reading scores, and a 3.1 percent increase in their math scores** during the course of the study.



**Students:** 530

**Race/Ethnicity:**

African-American (81%)

Hispanic (14%)

White (4%)

**FARMS\*:** 97.6%

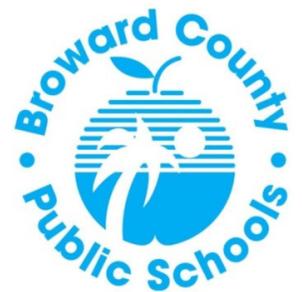
\*Percentage of students eligible for free and reduced-price meals

*“Techbook has opened their eyes to the wonder of how things truly work.”*

**Joseph Balchunas**

*Principal*

Park Ridge Elementary School  
Broward County Public Schools





*“I love it when students want to share things like how circuits work, or why hurricanes form, because you can see their eyes light up.”*

Students were also more engaged in their classrooms during the initiative. At Park Ridge, most students improved their daily attendance and cut in half the number behavior referrals, according to the report. More than 70 percent of surveyed students indicated that technology, science or STEM, and art and music “makes learning more fun.”

Teachers also had positive things to share about STEM studies aided by Discovery Education.

“Students persevere a lot more; they want to figure things out more. The material was helpful in exposing the younger grades to content that does not appear in their corresponding age appropriate text. Discovery provides students with exposure to experiences they may not have had,” wrote one teacher.

STEMformation is a three-year, research based professional development program from Discovery Education designed to build a sustainable culture of standards-based STEM teaching and learning. Educators are given a strong foundation for STEM instruction that is transferred to all educators in a school through a series of on-site learning labs, sustained by ongoing, customized job-embedded support.

All teachers attended ongoing, intensive professional development, including a five-day summer institute, and four days per month of coaching throughout the school year.

## School Overcomes Adversity in 2 Years

Three years ago, students at Park Ridgel were struggling. The school’s overall test scores were failing, attendance had plummeted, and the Deerfield Beach community was not engaged with the school.

Broward County Public Schools’ leadership wanted to help breathe new life into the challenged school, which had become one of the lowest performing schools in the state. They instituted a fresh start at Park Ridge, with all-new staff, and a Principal Autonomy Program that loosened regulations on how it operated.

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*“Discovery Education was a big part of this change, because they gave us the opportunity to design this program the way we wanted”*

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District leaders tapped award-winning principal **Joseph Balchunas** as Park Ridge’s new leader. Balchunas, who was named Florida’s Teacher of the Year in 2001, was empowered to make the changes at Park Ridge he thought would be most effective for students, including establishing the curriculum.

Two years later, a palpable change could be felt in the hallways at Park Ridge. Students were more attentive and responsive in class. Parents were more engaged with their children’s education. A buzz of positivity coursed through the classrooms.

By the end of the 2016-2017 school year, Park Ridge's student scores broke a years-long streak of failing grades to reach an overall grade of C. And it's just the beginning, said Balchunas.

"This was huge for us, but we still have big goals for this school," he said. "We know that we can't stand on ceremony. We still have to focus."

## Planting the Seeds for Powerful Change

Instrumental to the success at Park Ridge was establishing trust with students and the community. But it took a full year for school leaders to lay down the roots of change.

"In the first year, our focus was on rebuilding the heart of education in the community, building relationships, and re-engaging with the community," Balchunas said. "They needed to learn that they could trust us, and we needed to give them the confidence to achieve, struggle, and try."

When students opened the school's doors at the start of that year, they saw the results of a labor of love by Balchunas and his staff. They had changed what learning looked like at Park Ridge.

Some changes were subtle, like new, inspirational art for the walls and furnishings in classrooms. Some were sweeping, such as new teachers, and new devices providing new avenues for teaching and learning. Park Ridge educators also began training with **Discovery Education Professional Development** and incorporating **Science Techbook** in classrooms to support literacy — one of the key challenges facing the school.

"Discovery Education was a big part of this change, because they gave us the opportunity to design this the way we wanted to do it," said Balchunas. "And they gave us the two best coaches — Betsy and Karen. They're a part of our family now."

When professional development coaches **Betsy McMahan** and **Karen Seddon** entered the school, they'd be greeted with, "Discovery is in the

house!" The pair worked as a cohesive unit with teachers, co-planning, co-teaching, reflecting on lessons, mentoring teachers and offering PD to all the teachers, with an emphasis on grades 3-5.

"From the very beginning, we established our roles as sideline coaches, working alongside the 'head coaches' — teachers — to incorporate Science Techbook into their instruction," said Seddon.

Techbook's text-to-speech function proved to be an especially powerful tool for Park Ridge's struggling readers, allowing them to interact with text in a meaningful way, instead of reading being a consistent hurdle. Techbook also provided multimodal learning experiences, with videos and lessons that helped to ground the concepts students read about as they saw the phenomena in motion.

"Techbook has opened their eyes to the wonder of how things truly work. It integrates everything together at a high level. And they aren't just reading — they're engaging with the content," he said. "I love it when students want to share things like how circuits work, or why hurricanes form, because you can see their eyes light up."

Discovery Education was being used as a mechanism to revitalize the school, along with enhanced curriculum, a STEM focus, family engagement and literacy. But none of that could have been achieved without strong support from the community and the district, said Balchunas.

The school hosted learning and community nights to help re-engage with parents, making them feel welcome at the school, and be a part of the ongoing transformation.

Balchunas and his staff had restructured everything, and they were hopeful they could make a difference, but they knew they first had to build the capacity for future achievements. It's what made the results of that year so bittersweet.



## Sprouts Develop in Year Two

Despite the momentum generated by Balchunas and staff in the first year, the testing results were difficult to face. Students' grades had improved, but they still amounted to an F. It was an emotional moment for the community, but they knew this would be an uphill climb.

"Now we knew we could do it," said Balchunas. "These are the most amazing kids in the world, and they're so deserving of a first-class education in a safe environment, that's focused on them as well as their scores. So we came in this past fall ready to work."

With the overhaul of the building completed in the previous summer, Balchunas and his staff had more time over the following summer to hone the essentials of teaching. During those months, they invested more than 1,200 hours on professional development activities with Discovery Education staff.

Teachers focused on expanding their STEM program, how to support an emphasis on engineering and environmental sciences, along with inquiry-based science exploration, and made plans to integrate coding and robotics more in the classroom. They also expanded a student mentoring program built around **Stephen R. Covey's** "7 Habits of Highly Successful People," reinforcing leadership skills, how to be proactive, and how to set goals.

By the time year two started, Balchunas knew he had the right team, and the right programs to achieve success. The students were also in a better place to discover a love for learning.

"Moving into year two, we knew we had them. The programs were in place, and the civic leaders were on board. We came in to crush it this year, and we did it!" he said.

Now that they've raised student test scores and shown the community that change can be achieved, the coming school year is filled with challenge and excitement for Balchunas and his teachers.

The goal for year three is creating sustainability, said McMahon. They will work with teachers on building capacity to continue growing the school's science and STEM programs organically.

"The theme this year, I think, is 'out of the minors and into the majors,'" Balchunas said.

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*"People are going to be watching us, expecting us to win, and knowing that now we can win. So we have to deliver. And our kids deserve for us to come back stronger, and truly ready to win."*

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