

Case Study: FD Moon Summer STEAM Academy

Introduction

The Planning Department at the City of Oklahoma City knew change needed to come to the Culbertson's East Highland neighborhood on the City's northeast side. Many homes were deteriorating or shuttered. Sidewalks were in disrepair and city parks mostly unused. Public safety was a serious concern.

City planners and neighborhood stakeholders began engaging the usual arsenal of tactics that can help turn a neighborhood around. Using Community Development Block Grant funds, they worked on plans for new sidewalks, affordable housing, and improvements to parks. However, they knew that above all, the best way to strengthen this neighborhood was to strengthen the school. At the heart of the community is Moon Academy, a Pre-K through 6th grade elementary school at 13th Street and Martin Luther King Boulevard.

Challenges

Children attending Moon Academy face unenviable challenges in attaining a good education.

- The school was designated with a School Improvement Grant, but little progress was noticed.
- The State Department of Education ranked Moon as an "F" school for the 2012-13 school year. Enrollment declined and the faculty felt isolated and devalued.
- Misaligned school district populations: with boundaries in disarray, Moon students were not in a walkable situation from home to school.
- Safety: Public safety issues and a lack of sidewalks also hinder walkability of students in the area.

The City of Oklahoma City approached the Oklahoma Afterschool Network to provide planning, community engagement and implementation of a summer academy to begin in June of 2014 and an afterschool program for the 2014/2015 school year.

Planning and Stakeholder Development

Throughout the fall of 2013 and spring of 2014, the Oklahoma Afterschool Network staff worked to engage the community



The Students

The Moon Summer STEAM Academy took place for four weeks during the summer of 2014.

The Partners

A partnership between the City of Oklahoma City and the Oklahoma City Public Schools, the Academy provided an aggressive reading intervention and STEAM enrichment activities for elementary students in one of OKCPS' lowest performing schools.

The Results

Outcome measurements for the Academy reveal significant improvement in reading and math scores.



What the community said

The Northeast Community Survey was conducted to gain input and engagement from the community.

- 58% rated local government as a “weakness or somewhat of a weakness”
- 49% rated law enforcement as a “weakness or somewhat of a weakness”
- 61% rated parks and recreation as a “weakness or somewhat of a weakness”

Opinions about education revealed low confidence as well.

- 67% believe the quality of education in NE OKC is NOT equal to those in other areas of OKC

However, a bright spot is that parents displayed a much higher confidence in the local school than that of non-parents.

Additionally, adults in this community clearly indicate that they want to be engaged in the schools as a volunteer.

stakeholders surrounding Moon Elementary.

A Moon Educator Advisory Committee was established and met on a regular basis to begin developing plans and content for the summer academy.

A Stakeholders Committee was also established that met monthly to discuss plans, partnerships and community input. The committee included representatives of the Arts Council of Oklahoma City, OU Health Sciences Center, Neighborhood Alliance, Sandridge Energy, Mount Triumph Church, City of Oklahoma City Strong Neighborhoods Initiative, Boeing, Moon PTA, Oklahoma Department of Health, Teach for America, the Culbertson Neighborhood Association, two members of the OKCPS Board of Education, and a Councilor from the City Council of Oklahoma City.

Implementation

Through input from stakeholders, the needs assessment, an educator survey and the Moon educator’s advisory group, it was determined that a reading intervention with STEAM enrichment activities needed to be priorities. The students at Moon were falling behind grade level in subjects such as reading and math. However, all parties knew that the Summer program also had to be fun and engaging in order to keep the students interested and attending.

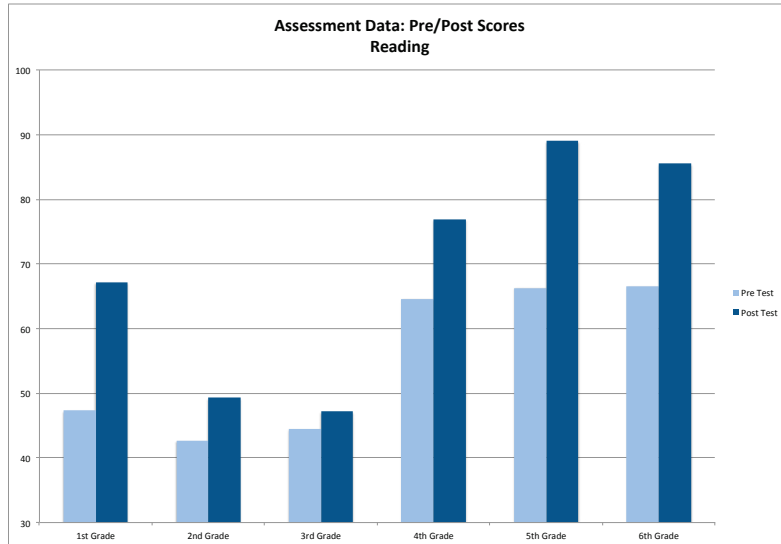


Photo by David McDaniel, The Oklahoman

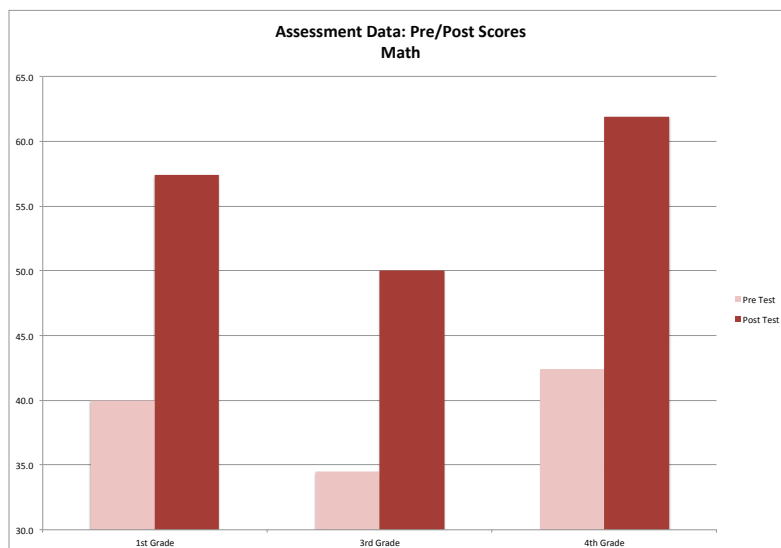
OKAN called upon the best providers in Oklahoma City to provide STEAM enrichment that included hands-on learning, field trips and high quality instructors to shape the program. Enrichment providers included Building Minds, Abrakadoodle, Oklahoma Children’s Theatre, Bring Back the Music, Mad Science, Arts Council of OKC, Kirkpatrick Foundation, and the OU Health Sciences Center. Along the way, teachers and programs were encouraged to integrate elements into their presentations and activities that could reinforce reading skills.

Outcomes

Strong outcomes for reading were realized at each grade level. Overall, students had the opportunity to attend 16 instructional days, 3 days of field trips and 1 day for the final celebration. Attendance was fairly consistent over the 4 weeks. A total of 72 children were enrolled. Curriculum: Oklahoma City Public Schools Intercession Reading and Math Packets. Testing: Oklahoma School Testing Program, Priority Academic Student Skills/ Oklahoma Academic Standards (PASS/OAS)



Reading	Pre Test	Post Test
1st Grade	47.3	67.2
2nd Grade	42.7	49.3
3rd Grade	44.5	47.2
4th Grade	64.6	76.9
5th Grade	66.3	89.0
6th Grade	66.5	85.5



Math	Pre Test	Post Test
1st Grade	40.0	57.4
3rd Grade	34.5	50.0
4th Grade	42.4	61.9

(Testing formulated by Edusoft Software)

The 2014 Moon STEAM Academy represents a new vision for summer school in Oklahoma City. Often seen as remedial in nature, summer school is not typically viewed by students- or parents- as a fun way to spend the summer. However, through the leadership of the Strong Neighborhoods Initiative at the City of Oklahoma City and the collaborative work of numerous parents, teachers and community stakeholders, summer school was re-envisioned for students in NE Oklahoma City.

The Need for Expanded Learning

Everyday in Oklahoma, 180,559 kids (29%) are completely on their own afterschool. Unfortunately, we know all too well the impact on our kids. Students who do not have adult supervision are more likely to have lower grades and test scores, higher levels of juvenile



Photo by David McDaniel, The Oklahoman

crime and a higher likelihood to drop out of school. Additionally, Oklahoma is one of only 14 states that does not budget for out-of-school time programs.

Quality out-of-school time programs provide a critical link between kids and their future careers. Afterschool programs are a way to increase STEM learning for Oklahoma students by offering extended opportunities that engage students in hands-on experiential settings.

National, state and corporate competitiveness requires a skilled workforce and innovative ideas. For Oklahoma to succeed in an increasingly global economy, our workforce needs to possess the skills that today's high-tech and knowledge-based jobs demand.

Oklahoma will demand a total of 75,390 STEM jobs by 2018. This represents a 15% increase since 2008.

- 89% of this jobs will require postsecondary education and training by 2018.
- 45% of STEM jobs in Oklahoma will be in Computer Occupations by 2018.

The Georgetown University Center on Education and the Workforce

There is strong need for out-of-school time programs for the children served at Moon Academy. Investing in afterschool and summer STEM programs at Moon Academy will help redefine every student's path to success while strengthening their connection to their neighborhood and their community.

Oklahoma Afterschool Network

The Oklahoma Afterschool Network (OKAN) works to ensure that all children and youth in Oklahoma have access to safe, enriching learning opportunities during their out-of-school time.

Founded in 2002, OKAN's work is guided by a Board of Directors comprised of individuals representing public and private organizations who share our mission.

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