

BE A SCIENTIST!

BE A SCIENTIST! IS A BROAD IMPLEMENTATION PROJECT IN WHICH UNDERGRADUATE ENGINEERING STUDENTS TEACH SCIENCE TO UNDERSERVED FAMILIES WITH CHILDREN GRADES 1-5.

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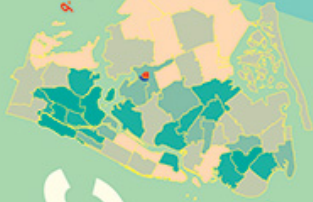
ATTENDANCE
 41% OF THE FAMILIES
 ATTENDED ALL THE SESSIONS

"IT ALLOWED FOR
 QUALITY TIME
 WITH MY FAMILY."



THE KEY CHARACTERISTICS OF A FAMILY SCIENCE
 COURSE ARE: HANDS-ON, LOW COST, & EASY TO DO
 AT HOME

NYC



9. NY HILL OF SCIENCE -
 RENEWABLE ENERGY -
 WATER

DELIVERABLES
 - 45 FAMILY SCIENCE WORKSHOPS IN LOS ANGELES
 & NEW YORK CITY
 - 2700 PARTICIPANTS (PIDS & FAMILIES)
 - 90 UNDERGRADUATE ENGINEERING STUDENTS
 - CURRICULA FOR 20 FUTURE PHYSICS-BASED
 WORKSHOPS



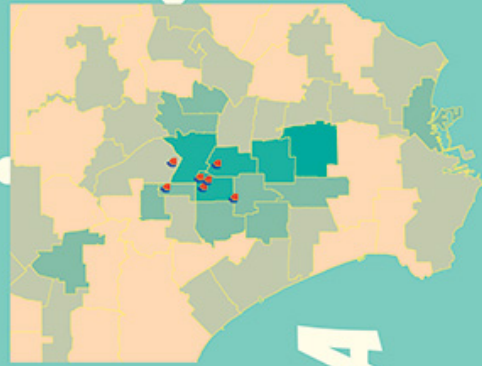
UNDERGRADUATE ENGINEERING STUDENTS

UNDERGRADUATE ENGINEERING STUDENTS' EXPERIENCE
 - CREATED A TOTAL OF 28 LESSON PLANS, ADDRESSING 8 TOPICS: ENERGY, TRANSPORTATION
 ENGINEERING, SPACE TRAVEL, PHYSICS OF SWIMMING, PHYSICS OF AMUSEMENT PARKS, &
 AIRPLANE DESIGN
 - MOST FELT INTIMIDATED & OVERWHELMED ON THEIR FIRST SESSIONS
 - COORDINATION BETWEEN INSTRUCTORS & TRANSLATORS WAS CHALLENGING
 - LEARNING TO MANAGE PAPERWORK DURING THE FIRST SESSIONS

IMPACT ON UNDERGRADUATE ENGINEERING STUDENTS
 - DESIGN ENGINEERING LESSON PLANS
 - ACQUIRE TIME MANAGEMENT SKILLS
 - DEVELOP SCIENCE COMMUNICATION SKILLS
 - REALIZE THAT THEY CAN BE BOTH ENGINEERS & TEACHERS
 - LEARN TO BE LEADERS



1. NORWOOD: SPACE
2. 32ND STREET: FLUID DYNAMICS
3. VERNON AVENUE: NANOTECHNOLOGY
4. FRANK DEL OLMO: BIOMECHANICS OF DINOSAURS
5. PLACENCIA: AERODYNAMICS
6. STRENGTH CHARLES: UNDERWATER ENGINEERING
7. QUINCY JONES: USC RACING TEAM
8. WESTERN AVE/NATIONAL HISTORY MUSEUM: BIOMECHANICS OF DINOSAURS



LA

↑ HIGH POVERTY
 ↓ LOW POVERTY

PARENTS' EXPERIENCE
 - PROCESSES OF LEARNING & RELEARNING
 - DEMONSTRATED ABILITIES TO EXPLORE & BE CURIOUS ABOUT SCIENCE EXPERIMENTS &
 ENGINEERING
 - INTERACTED WITH OTHER INVERSE FAMILIES
 - REALIZED HOW EASY IT IS TO MAKE SCIENCE EXPERIMENTS USING EVERYDAY OBJECTS &
 MATERIALS



FAMILIES WITH CHILDREN GRADES (1-5)

"IT REMINDED ME THAT
 SCIENCE PLAYS A BIG PART IN
 HOW WE LIVE OUR LIVES NOW
 & HOW WE WILL
 LIVE IN THE FUTURE."



CHILDREN'S EXPERIENCE
 - STARTED DOING OWN THEIR SCIENCE & ENGINEERING LEARNING
 THROUGH THE DESIGN INQUIRY PROCESS

