

NJIT

New Jersey Institute
of Technology

40 Glorious Years!

Join us on a visual tour of CPCP's
past, present & future

1979 - 2019

NEW JERSEY INSTITUTE OF TECHNOLOGY

40
YEARS
**Center for
Pre-College
Programs**

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*Inspiring Young Minds for College Access and Success in Science,
Technology, Engineering and Mathematics (STEM) for 40 Years.*

Inspiring Young Minds for College Access and Success in Science, Technology, Engineering and Mathematics



FEMME (Females in
Engineering: Methods,
Motivation and
Encouragement)
1981- present

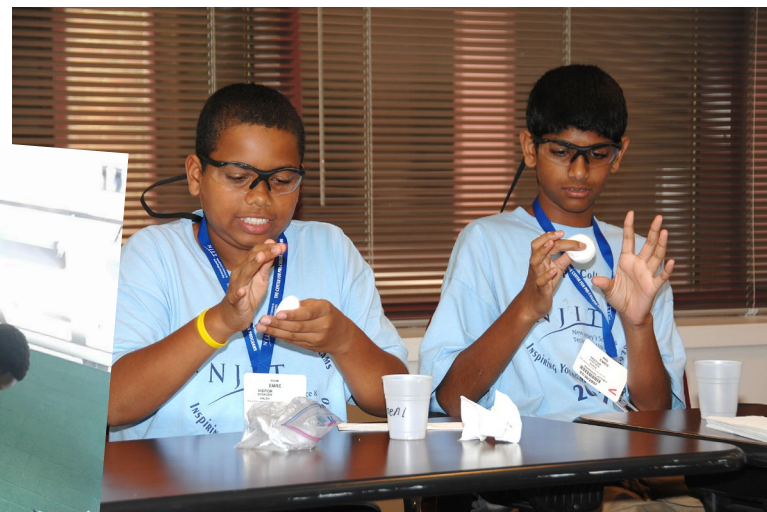


UBELLs "crafting" the future

Our Programming has supported STEM Education before there was “STEM”



Launching rockets
on the Green



Sticky stuff in EMBHSSC

Aeronautical engineers-in-
training design and build hot air
balloons

Pillars of Our Programming

Early College Prep

Talent Search

Upward Bound

UBELLS Upward Bound for English Language
Learners

College Bound

Academy & Options

Professional Development

Special Programs

Family Engagement

Wide Range of Experiences

- Hands-on Workshops - Professionals & Students
- Development of Curriculum and Assessment
- Academic Year and Summer Opportunities
- College Tours
- Cultural and STEM-related Field Trips
- Student Competitions
- Conferences for Students and Adults
- Family Education

Early College Prep – Summer Camp



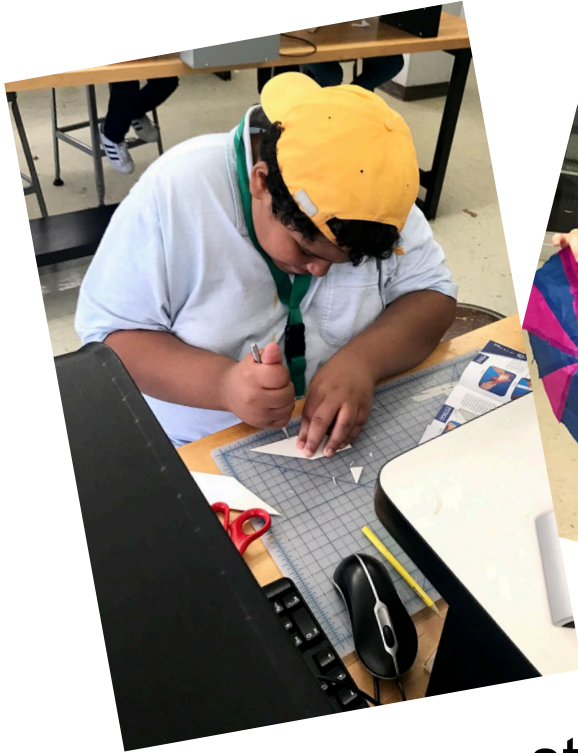
In the
80s ...



... students
explored
technology

Early College Prep – Summer Camp

Today ...



... students explore a wide range
of engineering specializations

Exxon Mobil Bernard Harris Summer Science Camp

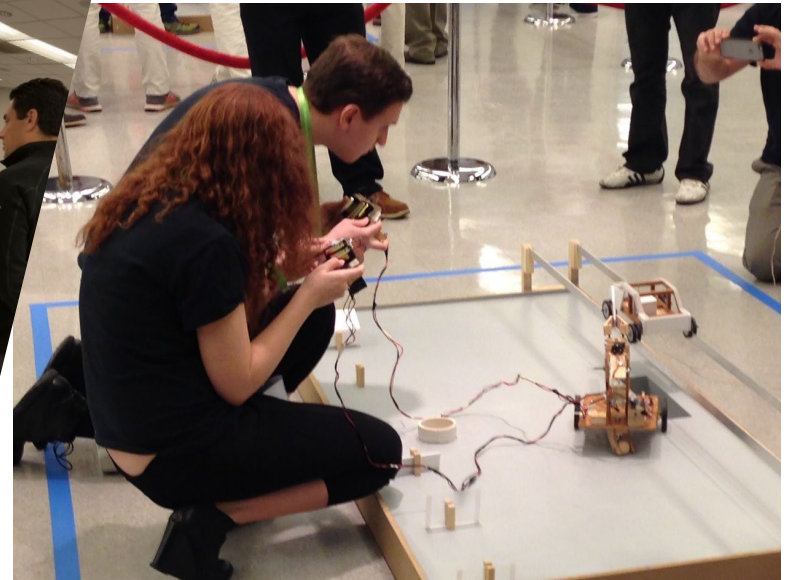
12-year collaboration with Dr. Bernard Harris supported in part by Exxon-Mobil Foundation



Early College Prep – Competitions

NJ Science Olympiad 🌀 TSA TEAMS 🌀 Panasonic

Creative Design
Challenge



Early College Prep – Academy; Options for Advanced Academic Achievement

- Academy: On-campus college courses for high school students
- Options: NJIT courses taught by approved high school faculty at their schools
- Successful completion includes an NJIT transcript



TRiO - Talent Search & Upward Bound

- Federally funded programs for Newark students providing academic, career, and financial counseling to encourage post-secondary enrollment, success and graduation



TRiO - Talent Search & Upward Bound

Working with NJIT professors and staff



TRiO - Talent Search & Upward Bound

Developing cultural awareness



TRiO - Talent Search & Upward Bound



Attending lectures, conferences and presentations

Celebrating graduations



UBELs – Upward Bound for English Language Learners

- Federally funded supports for English Language Learners



Consistent in-school support

UBELLS – Upward Bound for English Language Learners

College guidance & college fairs



UBELLS – Upward Bound for English Language Learners



Conferences & recognitions



PhotoScan by Google Photos

College Bound / GEAR UP

- State / Federally funded supports for underrepresented / underserved students in Newark
- Academic support, SAT/ACT prep, counseling, and more



College Bound / GEAR UP

Knowledge Bowl 2003



Educational enrichment



College Bound / GEAR UP

Tours of college campuses
and cultural sites



College Bound / GEAR UP



Achievement, Recognition
and Celebration



Special Programs

Newark Public Schools' STEM Day 2019



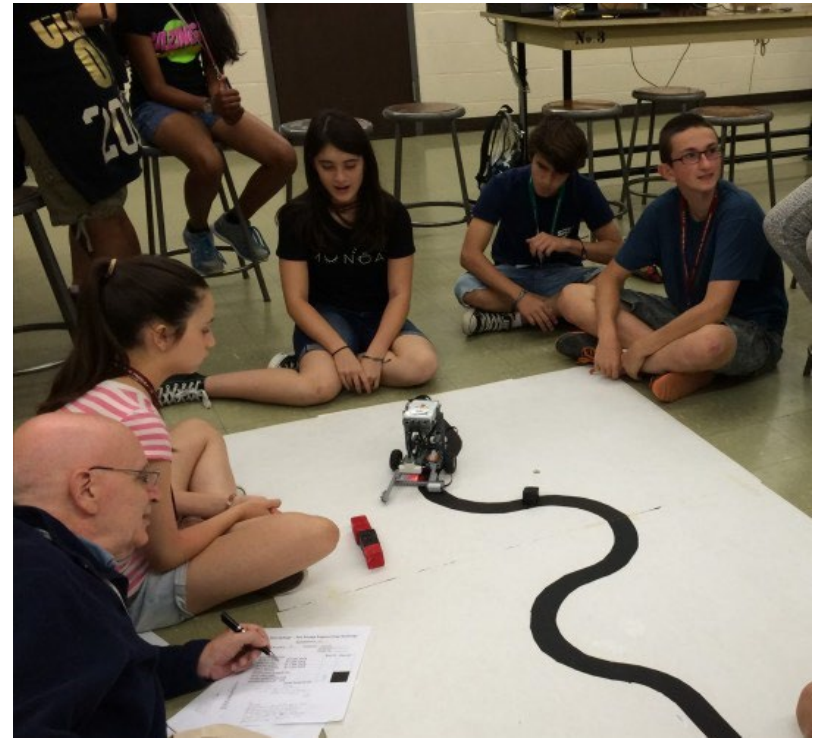
Student teams complete STEM tasks with assistance from NJIT students and outside volunteers



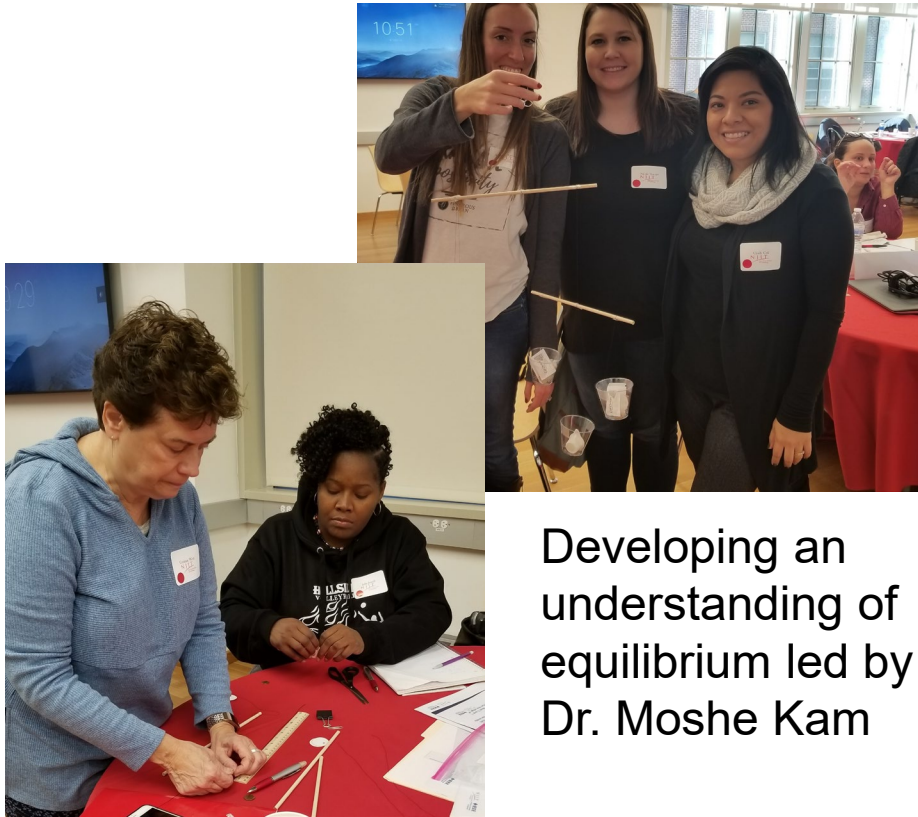
Held in the WEC with a campus scavenger hunt

Medibotics

- NSF-funded program linking physics and biology to the engineering design process
- Students simulated medical procedures using LEGO NXT Mindstorms™



Professional Development



Developing an understanding of equilibrium led by Dr. Moshe Kam



Engineering brain safety – for TSA TEAMS coaches led by Dr. Burr-Alexander

Professional Development

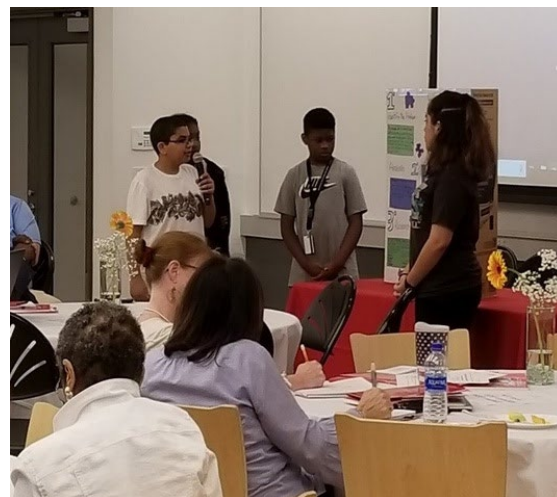
- Utilizing NJIT state-of-the-art facilities:
Makerspace



STEM School Leadership Forum



Dr. Bernard Harris,
Keynote speaker 2018



Students present to
Leadership Forum attendees



Attendees discuss points
made during a presentation

School Partnerships

- We help to develop STEM / STEAM programs in districts and schools

St. Rose Grammar School

Belmar, NJ

Mr. Greg Guito, Principal



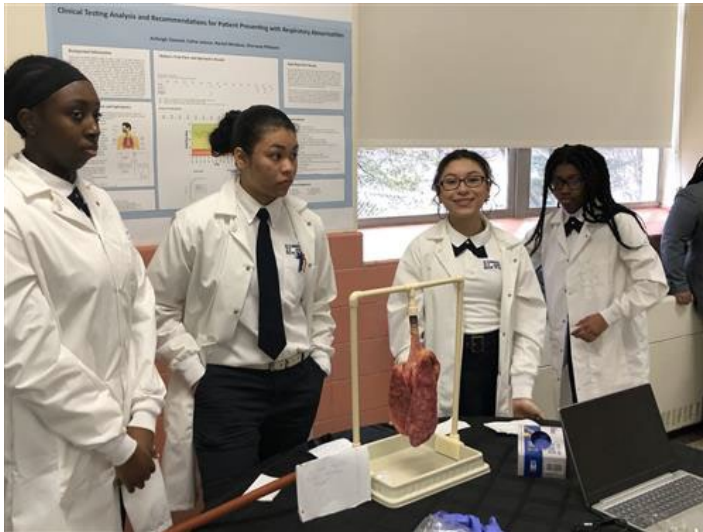
STEM PROGRAM & NJIT

NJIT assists and trains our faculty as we foster student interest and growth in the STEM subjects

[Learn More](#)

School Partnerships

- We facilitate NJIT faculty collaborations with partner districts and schools



STEM Innovation Academy of the Oranges

Dr. Tina Powell, Orange Public Schools

Prof. Thomas Jaworski, NJIT

Civil Engineering

STEM Family Workshops

- Engaging parents and children in the excitement of STEM



Planning for the Future

New in 2020:

- *Forensic Science Educational Conference* in collaboration with Prof. David Fisher, NJIT Forensic Science Department and the American Academy of Forensic Sciences



January 14-16, 2020 NJIT campus

- *Elementary STEM Competition* Grades 3-5 Spring 2020 NJIT campus

Friends of CPCP

- We welcome community engagement and participation in our programming
- Time, Talent & Treasure: We accept financial support through the Foundation @ NJIT and many forms of in-kind support directly through the Center
- To join us as a Friend of CPCP or for more information, contact:
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Martha.C.Churchill@njit.edu
973-596-5368



The CPCP Staff – Dedicated to Supporting STEM Education



