

## Miami

65% Hispanic/Latino  
18% Black/African-American



### Miami-Dade County Public Schools

4<sup>th</sup> largest public school district  
62% Hispanic/Latino  
25% Black/African-American

### FIU College of Engineering & Computing

5878 students/39% Pell; R1 Public Doctoral Univ.  
68% Hispanic/Latino 19% Women (12% Latinas)  
18% Black/African-American

# Our K-12 Story: Comprehensive Program at Scale

Competency & Knowledge Dissemination

Awareness & Engagement



Early College Education



Engaging the next wave of engineers and computer scientists



## Engagement & Awareness

- Engineering Expo
- Engineers on Wheels

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29% engagement

## Competency and Knowledge Dissemination

- Miami Prep (Since 1996)
- ENLACE (Engaging Latino Communities for Education, since 2000)
- Summer Transportation Camp (since 2015)

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5-week summer program for grades 3-12; pre and post tests

15 years; + 350 students in grades 4-12 annually

- After School Programs
- Math AP Tutoring (The Algebra Project)

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10 years; 200 students at 5 local elementary schools

5 high schools, Saturday classes  
Projects linked to Math

# College Credit & Teacher Training



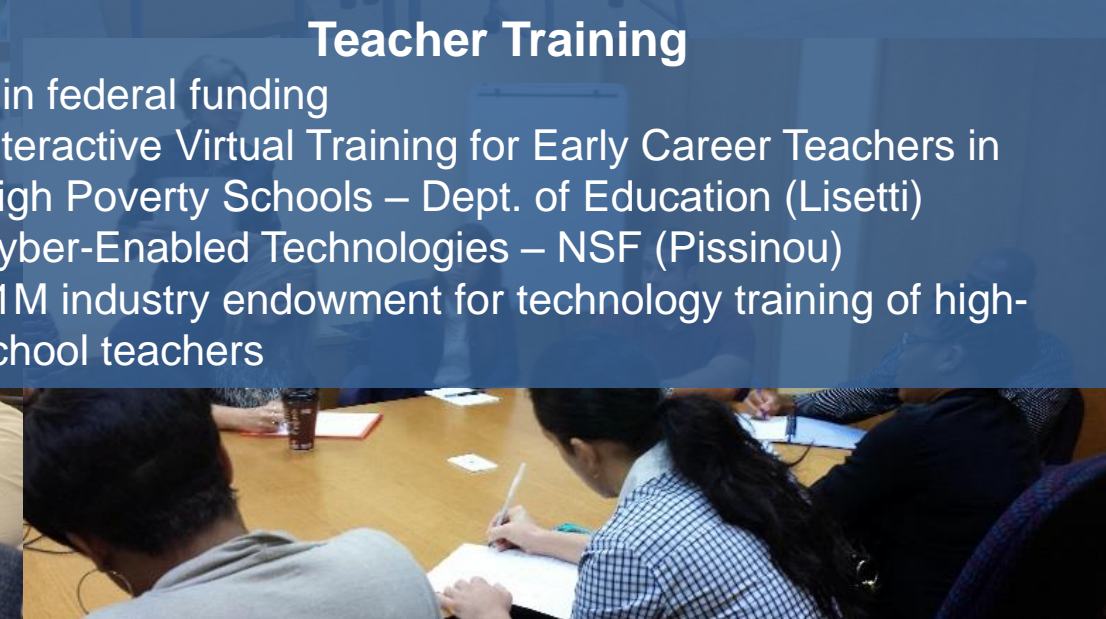
## Dual Enrollment

- Cohort-based
- On-campus
- 20-30 students per semester



## Teacher Training

- +1M in federal funding
- Interactive Virtual Training for Early Career Teachers in High Poverty Schools – Dept. of Education (Lisetti)
- Cyber-Enabled Technologies – NSF (Pissinou)
- \$1M industry endowment for technology training of high-school teachers



# At-Scale Laboratory for Implementing and Evaluating Strategies to Propel Students from Populations Underrepresented in STEM

- Meet a need in the community: Engage and Enhance Awareness
- Enhance K-12 in-reach/outreach: Build Competency through Knowledge Dissemination
- Improve Education: Infuse College Curriculum into High Schools; Educate Teachers



Engaging, Educating and Empowering  
the next wave of engineers and computer scientists