PK-12 STEM
Research Original Interventions
Research-Based Outreach

Draft for Retreat on 6/16 (6/15/2016 REVISION)
PK-12 Research-Based Outreach

VAST: Viterbi Adopt-a-School / Adopt-a-Teacher

Katie Mills
VAST Administrator

Maja Matarić, VAST Lead

Gigi Ragusa, VAST K-12 STEM Education Research

Darin Gray, Director
Student Affairs’
K-12 Outreach Programs
PK-12 Research-Based Outreach

**VAST:** Viterbi Adopt-a-School / Adopt-a-Teacher

**Broader Impacts**

Helps Local Students / Schools

USC Viterbi
School of Engineering

University of Southern California
Local Schools:
- Low income
- Low resources
- 98% under-represented minorities
- USC Family of Schools
- VAST: >100 schools
PK-12 STEM Research-Based Outreach

VAST ANNUAL EVENTS: Robotics Open House
STEM Spotlight on Depts
SHINE Summer HS Research
CS@SC Summer Camps
Robotics & Coding Academy
Code Dojo
PK-12 STEM Research-Based Outreach

Events form a pipeline to engage schools & students

Faculty gain Broader Impacts through VAST events & custom partnerships (next slide)

Oct 2016
STEM Spotlight
Biomedical Eng

Summer 2017:
SHINE, RET, CS@SC Camps, Discover Engineering

Dec 2016
Code Dojo

>28,000 students

Open House April 2017
Robotics

March 2017
STEM Spotlight ISE

Student Affairs’ programs (MESA, etc.)
PK-12 STEM Research-Based Outreach

Oct 2016
STEM Spotlight
Biomedical Eng

Dec 2016
Code Dojo

Summer 2017:
SHINE, RET, CS@SC
Camps, Discover
Engineering

BROADER
IMPACTS
Custom school
partnerships

BROADER
IMPACTS
Custom school
partnerships

NSF Early Career

Open House April
2017
Robotics

March 2017
STEM Spotlight ISE

Faculty gain
Broader Impacts
via Custom School
Partnerships
created with VAST
VAST works with faculty to create custom multi-year partnerships with schools for Early Career & other NSF Grants.
VAST: Viterbi Adopt-a-School / Adopt-a-Teacher

USC Viterbi National Science Foundation Research Experience for Teachers
• STEM teachers in faculty labs (5 wks)
• Lesson Plans – Common Core

USC Viterbi Summer High School Intensive in Next-Generation Engineering
• Top-performing high school students
• 7 weeks in faculty labs; Ph.D. student mentors

+ Ganas Program: Community College Students