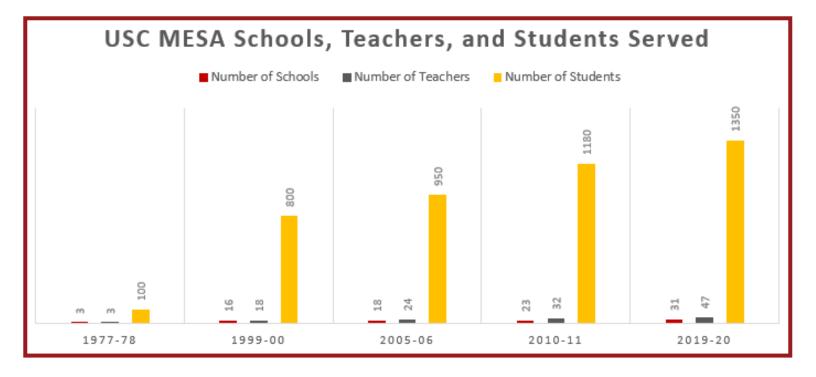




MESA (Mathematics, Engineering, Science Achievement) Mission:

To increase the number of educationally and economically disadvantaged students in STEM.



Program Goals:

- To foster motivation and engagement in STEM.
- To increase students' beliefs in their capabilities to succeed in STEM domains.
- To prepare students to pursue STEM majors at four-year colleges and universities.



Program Activities:

- Hands-on STEM activities and projects
- Project-based learning
- Leadership development
- College exploration and preparation
- Career exploration
- Field trips
- Recognition events
- Parent engagement
- Teacher professional development

Impact:

Percentage of Seniors Enrolled in College 96.2% 63.0% 69.7% USC MESA (2013-2018) Sources: Kurlaender, M., et. al. (2018). Where california high students attend college. Policy Analysis for California Education. Retrieved from https://edpolicyinca.org/publications/where-california-high-school-students-attend-college TED: The Economics Daily. (2017). 69.7 percent of 2016 high school graduates enrolled in



USC MESA High School Graduate Declared Majors (Each Year from 2013 to 2018) Non-STEM majors 40% Major in STEM 60%

college in October 2016. Washington, DC: U.S. Department of Labor. Retreived from http://bls.gov/opub/tec/2017/69-point-7-percent-of-high-school-graduates-enrolled-in-

college-in-october-2016.htm



Research

- Study determined MESA provided study participants opportunities to increase self-efficacy and motivation to persist in STEM.¹
- Study determined MESA inspires students' interest in STEM and prepares students to become college bound, using 10 subscales (e.g., science efficacy, challenge, curiosity, etc.).²
- Tierney, W. G., Corwin, Z. B., and Colyar, J. E. (2005). Preparing for college: Nine elements of effective outreach. Albany, NY: State University of New York Press.

¹Haramis, R., Jung, J., and Parmar, N. (2017). The effectiveness of MESA on the persistence of educationally disadvantaged students in STEM: An executive summary of MESA from secondary to postsecondary education. Retrieved from http://digitallibrary.usc.edu/cdm/singleitem/collection/p15799coll40/id/370082

²Ragusa, G. (2013). MESA science program motivation for science questionnaire results grades 6-12.