Reaching Middle School Girls From Groups Underrepresented in the Sciences With an Innovative Approach to Astronomy and Astrobiology Teaching. A. L. Shields[1,2], [1]NSF Astronomy and Astrophysics Postdoctoral Fellow, Harvard-Smithsonian Center for Astrophysics, 60 Garden St., Cambridge, MA 02138: aomawa.shields@cfa.harvard.edu [2]NASA Astrobiology Institute

Introduction: Given that kids from groups traditionally underrepresented in the sciences often stop pursuing their interest in STEM fields long before they enter college, due to a lack of self-confidence and few role models who look like them [1], there is a critical need for an innovative approach to astronomy and astrobiology education that targets girls from underrepresented groups at an early age.

I've developed a workshop for underrepresented girls in grades 6-8 that teaches key concepts in astronomy and astrobiology, using nontraditional methods. The workshop, entitled "Universe: More Than Meets the Eye", integrates creative strategies such as free writing, theater exercises, and visual art into the informal hands-on framework. The result is a new, innovative astronomy/astrobiology curriculum that addresses each girl as a whole by providing an avenue for individual self-expression and personal exploration that is interwoven with scientific engagement and discovery. I will present an overview of and lessons learned from the pilot workshop carried out in Spring 2015 with girls at Irving STEAM Magnet Middle School in Eagle Rock, CA (Figures 1 and 2), which has a student population that is ~80% Hispanic.

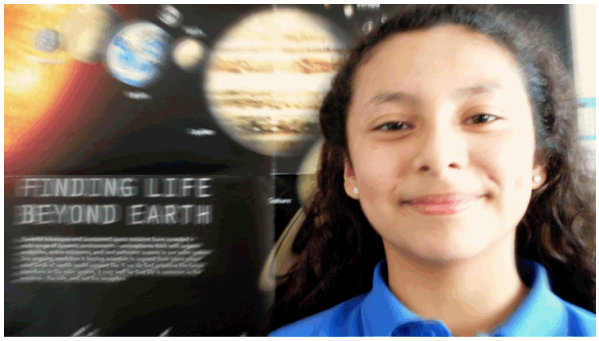

Figure 1: Irving STEAM Magnet Middle School's Valerie Gonzalez participates in the workshop "Universe: More Than Meets the Eye", Feb. 18-Mar. 9, 2015 in Eagle Rock, CA.

[1] Weir, K. (2007) *Spectrum*, 35, 7.