



## **Engaging learners outside the classroom walls: Preliminary evaluation of three informal STEM education programs at NASA Goddard Space Flight Center, Greenbelt, MD USA 20771**

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Tomorrow's classroom may not be a classroom. In fact, it may not be a room at all. With a recent focus on summer learning and the understanding that much of the achievement gap may be directly related to "unequal access to summer learning opportunities" (National Summer Learning Association, 2011 & Russo, 2011), educators are targeting after-school and summer-times to fill the gap. For those students who "don't get it" during the day, a longer school day may not be the solution. More of the same is not always better. Different, on the other hand, may well be the key to improved learning and may drive the model of education in the future. The nature of this investigation was to identify those informal education programs at NASA Goddard Space Flight Center (Greenbelt, Maryland USA) that instilled inspiration and engagement in participants. During 2011, NASA Goddard Space Flight Center hosted two such programs and supported a third: an open house event for the general public, a museum educators' workshop, and NASA's BEST Students (NBS) educator professional development at the Los Angeles, California Unified School District (LAUSD) "Beyond the Bell" after-school program. Each was a unique experience. The open house drew approximately 15,000 with over 4,000 taking part in structured informal educational programs, the workshop supported 30 informal educators from museums across the United States, and NBS hosted 33 after-school coach-educators from LAUSD. Formative evaluation of these programs was carried out and preliminary results indicate high levels of engagement, desire for follow-on learning, and interest in additional hands-on and partnership opportunities. Each event enjoyed positive reviews and each served to further deploy high-quality NASA STEM content to learners. This work was first presented at the American Geophysical Union 2011 Fall Meeting in San Francisco, California. Since then, additional museum educators' workshop data has been collected and NBS has been added.

### References

Russo, J. (2011, June 22). School's out but learning continues. Orange County Register. Retrieved from <http://www.ocregister.com/opinion/summer-305514-learning-school.html>

National Summer Learning Association. (2012). Know the Facts [Webpage]. Retrieved from [http://www.summerlearning.org/?page=know\\_the\\_facts&hhSearchTerms=%22unequal+access+to+summer%22](http://www.summerlearning.org/?page=know_the_facts&hhSearchTerms=%22unequal+access+to+summer%22)