

Subramaniam, M., Ahn, J., Waugh, A., Ledford, A. & Stoop, L. (2013). Leveraging the Library: Using Sci-Fi, Storytelling, and New Media Literacy to Ignite Student Interest in Science. Paper to be presented at the *American Association of School Librarians 16<sup>th</sup> National Conference*, Hartford, Connecticut.

### **Program description for promotional purposes.**

How can middle and high school library programs help students identify with STEM in their everyday lives? In this workshop, we present an educational program called Sci-identity. Students in Sci-identity embed STEM ideas into their own creative writing, and share them in an online community of storytellers ([www.sci-identity.org](http://www.sci-identity.org)). Workshop participants will learn how to run their own Sci-identity programs. We will share our approach, session plans, and teach the digital technologies used in the program.

### **Program description for program reviewers.**

In this half-day workshop, researchers from the University of Maryland will be collaborating with four District of Columbia Public Schools librarians to share our approach in creating a science, technology, engineering and mathematics (STEM) infused after-school program in middle and high school libraries (funded by the National Science Foundation). In this after-school program, students are exposed to various forms of STEM infused media ranging from informational videos, sci-fi movies to science fiction young adult literature by their librarians. After school sessions range from an examination of utopias and dystopia and comparing different representations of the future, to explorations of technologies that allow meteorologists to get close to tornados. The students then write short stories that incorporate relevant scientific ideas into their narratives, on a secure social media platform, [Sci-identity.org](http://Sci-identity.org). Students use a variety of digital tools to create their stories, such as the iOS application StoryKit, Comic Life that tells a story. We will conduct the following activities during the workshop: (1) share session plans, resources, technology, pathfinders and graphic organizers used in our after-school sessions; (2) facilitate the development of new session plans by co-designing these additional sessions with participants; (3) engage participants in writing their own science stories, inspired by the sci-fi and popular science on [Sci-identity](http://Sci-identity.org); (4) engage participants in remixing stories of other participants and/or collaborating with other participants to create science stories and (5) demonstrate the relationship of the activities in the after-school programs to AASL Standards for the 21<sup>st</sup> Century Learner guidelines and new media literacies. At the end of this half-day workshop, participants will be well equipped to run similar STEM-infused after-school program at their schools.

### **Program Outline**

1. Introduction of workshop facilitators – the research team and the librarians;

2. Overview of Sci-dentity after school program;
3. Presentation of a few selected examples of session plans, resources, technology, pathfinders and graphic organizers used in the after-school sessions – highlighting the librarian’s role in these sessions;
4. Co-design similar sessions with participants
5. Using the newly developed sessions in (4), participants will write their stories on Sci-dentity site – *individual hands-on exercise on iPads*
6. Demonstrate how Sci-dentity addresses *AASL Standards for the 21<sup>st</sup> Century Learner* guidelines and new media literacies

### **Program Learning Objectives 1**

At the end of the workshop, participants will be able to design and implement a STEM-infused after-school program at their school libraries, modeled after the Sci-dentity project.

### **Program Learning Objectives 2**

At the end of the workshop, participants will be able to utilize the social media platform for story writing (sci-dentity.org), integrate various other digital tools into their library programs and be able to facilitate the learning of multiple literacies as outlined in the *Empowering Learners: Guidelines for School Library Programs*.

### **Program Learning Objectives 3**

At the end of the workshop, participants will be able to make connections between the after-school session activities to the *AASL Standards for the 21<sup>st</sup> Century Learner* skills, dispositions and responsibilities and use Sci-dentity as an additional resource for implementing AASL standards and guidelines (AASL Strategic Plan).