# Lighting Up Community Collaborations Through Academic Libraries

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# EXECUTIVE SUMMARY

The Big Orange STEM Saturday (BOSS) at the University of Tennessee (UT) Libraries is an innovative and interactive educational program. This program focuses on creating pathways to college for underrepresented high school students by introducing them to the possibilities of careers in Science, Technology, Engineering, and Mathematics (STEM). At its core, BOSS is a highly collaborative event that relies heavily on developing strong partnerships and collaborations between the UT Libraries, local high schools, and programs for underrepresented high school students. This chapter presents a case study of the BOSS program with both the natural and intentional partnerships that the UT Libraries developed and sought over the last eight years. It also showcases recommended practices for developing community partnerships and questions for other academic libraries and librarians to ask themselves when considering community partnerships and collaborations.

## INTRODUCTION

The Big Orange STEM Saturday (BOSS) is a free, educational, half-day conference that is hosted by the University of Tennessee, Knoxville (UTK) Libraries for high school students who are interested in STEM careers. When BOSS began, organizers originally hoped to bring students into an academic library to experience a professional conference with engaging learning activities and networking opportunities. The conference now centers on providing pathways to college for underrepresented high school students. BOSS began in 2012 and hosted a small conference in 2013 with 60 attendees. This beginning reflects a small number of partnerships that assisted with the program. Over time, BOSS has grown in size to over 120 attendees, expertise, and influence with many intentional partnerships and collaborations. Significant partnerships include UTK departments, organizations, and students, as well as various community groups.

## LITERATURE REVIEW

Although the UT BOSS program was one of the first of its kind to gain popularity, several other universities and libraries have created similar programs with community collaboration and academic promotion. It is important to note that there are a number of STEM outreach programs that connect pre-college students with higher education. This literature review will go over several of these programs that make an impact on preparing the students to access different career paths and improve skill literacy in STEM fields.

There are several programs in higher education that seek to introduce pre-college students to the potential of STEM careers. Louisiana State University (LSU) hosts an annual program that offers free college preparatory classes to high school students while providing assistance for the American College Test (ACT) (Williams et al., 2019). The program reflects the value and benefits of serving underrepresented students through focused outreach. This program is called the LSU Upward Bound (LSU-UB). Williams et al. state:

The LSU-UB program's objective is to holistically motivate and provide low-income and first-generation students with the comprehensive skill set needed to obtain a college degree. 'First generation' is an underrepresented group, and the term brings a common denominator of barriers and challenges for students and their families when it comes to educational access and opportunity. (p. 12).

A second example of this type of program and outreach project is National Lab Day (NLD); a shortterm initiative from 2009-2010 (National Science Foundation, 2010). It partnered with the National Science Foundation, National Science Teachers Association, the American Chemical Society, the Bill and Melinda Gates Foundation, and the John D. and Catherine T. MacArthur Foundation (National Science Foundation, 2010). NLD was an annual program that focused on promoting hands-on learning and on-going connectivity within the community. NLD was originally developed to meet similar needs of the LSU-UB program in providing a non-traditional way of appealing to students' STEM development and growth. NLD invited high school students to participate in a day-long event where they engaged in hands-on learning and lectures with STEM research professionals and K-12 educators. Multiple colleges participated in NLD to introduce college-bound students to their programs and prepare them to contribute to community outreach. When NLD was adapted at Oklahoma State University, leaders real16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/lighting-up-community-collaborations-throughacademic-libraries/313672

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