

An Introduction to STEM Career Assemblies

Doing Well By Doing Good (DWBDG) has been a hallmark for DeVry University and is engrained in our strategic priorities. Careers in science, technology, engineering and math (STEM) are projected to grow more than 7 percent faster than non-STEM occupations through 2018¹, yet the rate of enrollment in many STEM degree programs is declining. Between 2001 and 2009, the number of college graduates increased about 29 percent yet graduates with engineering degrees only grew by 19 percent.²

In 2013, DeVry University began a movement called STEM Ready, a cause-related platform around which the university and its faculty, staff, students and alumni can galvanize. The mission of the STEM Ready movement is to introduce more high school students to STEM and careers in STEM-related fields.

While we already have a successful HerWorld program, we will be increasing our nationwide impact on STEM through grassroots events, working with our corporate partners to introduce high schools to STEM-related curricula, among other initiatives.

As part of the STEM Ready movement, DeVry University launched a high school assembly program in three pilot markets: Atlanta, Chicago and Los Angeles. Due to positive feedback and growing interest from high school educators, the Assemblies have expanded to additional markets. Our STEM Career Assemblies aim to introduce STEM in a unique, yet compelling, way that will spark students' interest and curiosity in STEM fields by telling the story of The Science and Technology Behind Team USA, in partnership with the U.S. Olympic Committee.

STEM Career Assemblies are currently offered to 9th and 10th grade students in "traditional" high schools. Other metro areas will be added in future years. The assembly can be approximately 50-60 minutes in length and is designed to be conducted either in a high school classroom, auditorium, cafeteria or gymnasium.

DeVry University looks forward to helping high school teachers bring STEM to their students in an unexpected way, by launching its newest STEM program in 16 years.

¹ Beede, David, Tiffany Julian, David Langdon, George McKittrick, Beethika Khan, and Mark Doms. STEM: Good Jobs Now and for the Future. Rep. U.S. Department of Commerce Economics and Statistics Administration, July 2011. Web. http://www.esa.doc.gov/sites/default/files/news/documents/stemfinalyjuly14.pdf.

² Light, Joe, and Rachel Emma Silverman. "Generation Jobless: Students Pick Easier Majors Despite Less Pay." *Wall Street Journal*. N.p., 9 Nov. 2011. Web. 8 Feb. 2013. http://online.wsj.com/article/SB10001424052970203733504577026212798573518.html.





Fact Sheet

According to the U.S. Department of Commerce, careers in science, technology, engineering and math (STEM) grew three times faster than non-STEM fields in the past 10 years³. Yet, the number of students enrolling in college in STEM-related degree programs is dropping, leaving a gap between in-demand STEM jobs and the skilled professionals to fill them.

To help close that gap, DeVry University launched STEM Ready, a movement to introduce more high school students to STEM and careers in STEM-related fields, and doing so in conjunction with its faculty, staff, students, alumni, corporate partners and the U.S. Olympic Committee.

As part of the STEM Ready movement, DeVry University offers a high school assembly program to introduce STEM in a unique, yet compelling, way. **STEM Career Assemblies** will help spark students' interest and curiosity in STEM fields by telling the story of *The Science and Technology Behind Team USA*, in partnership with the U.S. Olympic Committee.

STEM Career Assemblies are geared towards 9th and 10th grade students, designed to be 50 to 60 minutes in length, depending on the high school's class schedule, and can be conducted in a classroom, auditorium, cafeteria or gymnasium. Assembly highlights include:

- **DeVry University College & Career Champion** introducing STEM themes as they relate to sports and other activities of interest to teens
- **High-energy video** demonstrating the intersection between STEM skills, sports and success through the lens of Team USA and their partners
- U.S. Olympic athletes sharing their stories on how STEM has impacted their sport and/or their individual performance

The Science and Technology Behind Team USA

^{3 &#}x27;STEM: Good Jobs Now for the Future.' U.S. Department of Commerce, Economics and Statistics Administration. July 2011. http://www.esa.doc.gov/sites/default/files/reports/documents/stemfinalyjuly14_1.pdf



STEM Career Assemblies will put a face to careers in STEM-related fields by exposing students to experts and athletes either *within* a STEM field or *affected* by a STEM field, but in unexpected ways. Our mission is to demystify 'white lab coat' stereotypes and demonstrate that these career paths can lead to 'cool,' rewarding professions.



The It is



Need to Prepare for College

estimated that by 2020 nearly two-thirds of high-skilled, high-paying jobs in America will go unfilled due to a lack of qualified candidates, a situation that is compounded as more than half of college presidents say students arrive at college less prepared than a decade ago⁴.

STEM Career Assemblies align with the need to prepare next generation's workforce for the millions of STEM-related jobs that will become available.

Why STEM?

Recent statistics shed light on the urgency to encourage high school students to anticipate the educational skills and requirements needed for academic and career success once they enroll in college.

By introducing high school students to careers in STEM-related fields, **STEM Career Assemblies** can inspire students to pursue these important career fields.

- STEM occupations are quickly becoming the careers of the future
 - STEM occupations are projected to grow by 17% from 2008-2018, compared to 9.8% growth for their non-STEM counterparts⁵
- Yet while teens understand that careers in STEM-related fields can offer the best chance at a future job, they are not achieving in the subjects that matter most to get those jobs
 - Of high school graduates who took the ACT, only 46% achieved College Readiness

 Benchmark in math and 31% in science⁶
- Even those that are doing well in related subjects are not pursuing STEM
 - o 75% of qualified high school students don't enter STEM majors in college⁷

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- 18% of students don't pursue the subjects because they don't know enough about the career fields; while 16% say they don't feel prepared for the rigors of science and math in college⁸
- There is a lack of STEM role models
 - o 1/3 of teachers <u>never include discussions on careers in STEM-related fields</u> in the classroom⁹

4 'Is College Worth It?' Pew Research Study. 5/17/11

5 "STEM: Good Jobs Now and for the Future", US Dept. of Commerce, 2011

 $6\ \text{``Math, science ACT scores rise}$ – but not enough", Change the Equation, 08/23/12

7 "STEM" Executive Summary, Georgetown University, 2011

8 "A Career in STEM? Probably not, say too many students", Change the Equation, 2012

9 STEM Survey Report, Carnegie Mellon University, 2008

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• <u>Two-thirds of teens felt discouraged</u> from pursuing STEM because they didn't know anyone in these fields or didn't understand their career options¹⁰

Through STEM Ready and its **STEM Career Assembly** program, DeVry University is demonstrating its commitment to introducing more high school students to careers in science, technology, engineering and math, motivating students to pursue their career goals and inspiring them to live up to their greatest potential.

For More Information:

Email Pao Yang at pyang@devry.edu Visit **www.devry.edu/stemready** or e-mail STEMReady@devry.edu