Spring 4-25-2012

STEM Future Dallas

Jacob Fleming
*Southern Methodist University*

Jessica Hart
*Southern Methodist University*

Alex Saucedo
*Southern Methodist University*

Follow this and additional works at: [https://scholar.smu.edu/big_ideas_2012_spring](https://scholar.smu.edu/big_ideas_2012_spring)

**Recommended Citation**

Fleming, Jacob; Hart, Jessica; and Saucedo, Alex, "STEM Future Dallas" (2012). Big iDeas 2012 Spring Updates. Paper 3. [http://digitalrepository.smu.edu/big_ideas_2012_spring/3](http://digitalrepository.smu.edu/big_ideas_2012_spring/3)

This document is brought to you for free and open access by the Big Ideas 2012 at SMU Scholar. It has been accepted for inclusion in Big iDeas 2012 Spring Updates by an authorized administrator of SMU Scholar. For more information, please visit [http://digitalrepository.smu.edu](http://digitalrepository.smu.edu).
STEM Future Dallas

Big iDeas Symposium
Southern Methodist University
April 25, 2012
What is it?

STEM: Science, Technology, Engineering and Mathematics

Careers in STEM fields are diverse and crucial to the economy

STEM careers and the education to obtain them are challenging but rewarding

Above: Scientists are often not fully trained until after they are 8 years old.
Okay, it’s important. But what’s the problem?

American students are well behind other first-world countries in science and math.

Below the median in both categories.

High-school student interest and math proficiency are dwindling.

Bottom line: America is behind.

Above: Obligatory pie chart. No wonder we got a grant.
Credit to The Washington Post, “Lack of interest and aptitude keeps students out of STEM majors.”
Our solution

Examine the problem from a smaller scale: Dallas as a microcosm for the US.

- Gain a “student’s perspective” on STEM careers.
- Interview experts and educators from the different sectors.
- Compile news and information in a concise, user-friendly, frequently updated website.

Above: It is a perfect microcosm because it’s the most American.
Goal: Gain a “student’s perspective” on STEM careers.

- Questionnaires and interviews
  - Undergraduate students: SMU
    - STEM majors, but particular interest to business majors
  - Secondary (high school) students: DISD, Highland Park

While primary education is a crucial concern as well, we will constrain our focus to these two groups.
Our solution

Goal: Interview experts and educators from the different sectors.

Audio and video recorded interviews for multimedia and website purposes

Gain perspectives from different areas of the industry; views of education, student interest, and career

Targeted groups: Texas Instruments, UT Southwestern Medical Center, Teach for America
Goal: Compile news and information in a concise, user-friendly, frequently updated website.

- Collect relevant news stories and research articles, and sort according to particular issue
- Present our own findings in an intuitive manner
- Create an interactive community component allowing for comments and participation from visitors
Our team

- Jacob Fleming
  - Major: Biological Sciences, Chemistry
  - Minor: Philosophy

- Jessie Hart
  - Major: Environmental Science
  - Minor: Psychology, Education

- Joey Ottolenghi
  - Major: Psychology
  - Minor: Biology, Chemistry

- Alex Saucedo
  - Major: Electrical Engineering (Biomedical Specialization)
  - Minor: Chemistry, Mathematics

Above: There is no “STEM” in “TEAM”. But there is ¾ of it, so it’s pretty close.
So far...

Central website and blog: stemfuturedallas.blogspot.com
- Domain coming soon!
- Blog posts on our project and current issues

Facebook: facebook.com/stemdallas
- Visibility of project to SMU students and others

Twitter: @STEMDallas
- Frequent news updates pertaining to STEM issues and our project
Future of the project

- Launch full website and domain
- Update social components consistency
- Survey and interview SMU students
  - Fall: Survey and interview high school students
- Summer: Gain perspectives from industry experts
Summer

Jacob: UT Southwestern Research Fellow
   Biomedical research and health care

Jessie: Breakthrough Houston: 7th Grade Life Sciences
   Primary education in STEM

Alex: Texas Instruments Applications Engineer
   Engineering and industry

Joey: SMU-in-Italy Study Abroad
   Living the dream (and designing surveys)
   Living with spotty Italian WiFi
STEM Future Dallas

http://stemfuturedallas.blogspot.com

www.facebook.com/STEMDallas

www.twitter.com/STEMDallas

Special Thanks to:

- SMU Big iDeas Program
- Office of the Provost
- Faculty sponsor Larry Ruben, PhD
Welcome to the future...

STEM Future.

... Dallas.

Science!  Synergy!  Results!