Introduction  
African Americans and Latinos are underrepresented in Science, Technology, Education, and Mathematics (STEM). These fields are growing substantially compared to non-STEM fields.

The shortage of African Americans and Latinos in STEM fields must be addressed if the democratic principles that America prides itself on having are to be upheld.

Through our literature review, we found that minority participation in STEM & Information Sciences can be improved in a variety of ways:

- Providing information & access to scholarships.
- Providing information & access to tutoring services.
- Providing information & access to real-world activities related to STEM.
- Encourage students to engage in STEM by educating them on college requirements and career possibilities.
- Built a curriculum around these findings, and created handouts for the students.
- Conducted a Pre,Post survey to gauge iDiscover’s effectiveness

Method

Research Question

How can we increase the amount of diversity in Science, Technology, Engineering, and Math (STEM) fields?

Literature Review

The Association for the Study of Higher Education found that economic concerns about college are particularly important to minorities when considering what college to attend and what courses to take.

Late Middle School is a good place to teach about STEM because the children have not begun to formulate a committed vision towards a career path and are open to influence.

Educational theory supports the role of experiential learning in STEM education: activities such as research and internships. Students often are more enthusiastic about STEM when they are exposed to the field through group-activities.

Figure 1. Recent and Projected Growth in STEM and Non-STEM Employment

Observations from iDiscover:

- Lakeland Middle: Located in inner-city Baltimore. 54% Female, 46% Male.
- Very motivated set of students and staff.
- Technology was archaic but still present
- Students were most interested in financial aid and scholarships, intrigued by the summer programs. Very excited when distributing the resources we gathered for them.
- Students and staff had difficulty grasping the concept of Information Science. Became more interested when I spoke to some students individually about the interdisciplinary nature of IS.
- Held a discussion with the students where they suggested how information on social sites could be organized.
- School administration stressed that the students needed tutoring resources in Math. This guided our construction of the handouts.

Significant Results from Surveys

Do you have a good understanding about STEM?

Before iDiscover  After iDiscover

- Mathematics: 97%  36%
- Science: 3%  64%
- Engineering, and Math (STEM) fields?

How likely are you to pursue Mathematics in college?

Before iDiscover  After iDiscover

- Mathematics: 22%  44%
- Science: 78%  50%

Acknowledgements/Sources

- Mike Depew, James “Kip” Courrier, and Courtney Loader – i3 Inclusion Institute
- Lakeland Middle School Staff and Students
- UMBC Research Compliance Center
- Way2GoMD – University System of MD
- For sources refer to: http://pastebin.com/bn5FrRPU