

Web Portal

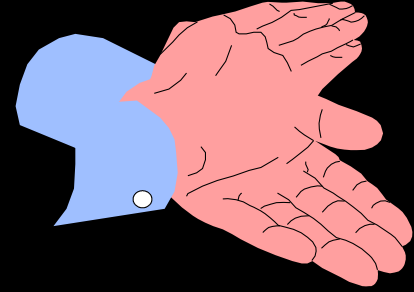
For High School Students

And Counselors

IPRO 309



Team



Sponsor

**International Engineering
Consortium**

– **Michael Janowiak**

Advisor

– **Gerard Volland**

Team

Web group

- **Mayank Chadha**
- **Umang Jain**
- **Samad Khan**
- **Nikolaus Kling**
- **Mihir Patel**

Documentation group

- **Sameer Ahsan**
- **Anshul Gupta**
- **Anjali Kumar**
- **Preeti Nirwal**





Objective & Need for project



- **To encourage more high school students to enroll in engineering and science.**
- **Need for this project**
 - **Shortage of Engineers**
 - **Low awareness about these fields**
 - **Rapidly changing environment**



Solution

- **Through the development of a web portal, consisting of information that would motivate students towards these majors.**
- **Why a web portal**
 - **Accessible to everyone**
 - **Build upon a continual need**
 - **Can be updated**
 - **Respond to questions from users**
 - **Wide variety of reusable information already available from**
 - Individual universities**
 - Commercial organizations**
 - Government associations**
 - Various publications that rank institutions**





Why a web portal

- **The sheer number of sources and volume of information about colleges and careers can be quite daunting to navigate.**

A single authentic, trusted and easily accessible resource would be invaluable.



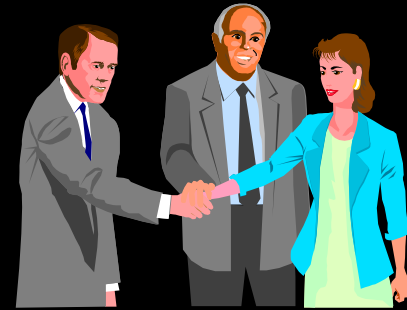
Procedure



- **Early Issues to resolve**
 - **Which high schools to target?**
 - **Action: Met with Dean of Undergraduate Admissions Terry Miller**
 - **Input from IEC**
 - **Action: Made Questionnaires**
Set up Appointments with high school counselors



Data Collection



- **Which high schools targeted:**
 - **Brother Rice**
 - **Whitney Young**
- **High School Counselors Surveyed by Written Questionnaire**
- **Students Surveyed by Written Questionnaire**



Questionnaire (Students)



- **What year will you be graduating?**
- **What is your nationality?**
- **What is your parent's occupation?**
- **What are your favorite subjects?**
- **What are your hobbies ?**
- **Do you participate in any extra curricular activities?**
- **What AP classes are you taking, plan to take, or have taken?**
- **Does your school place emphasis on engineering and natural sciences?**
- **Who are the major influence in your educational path?**
- **What do you discuss with your counselor ?**

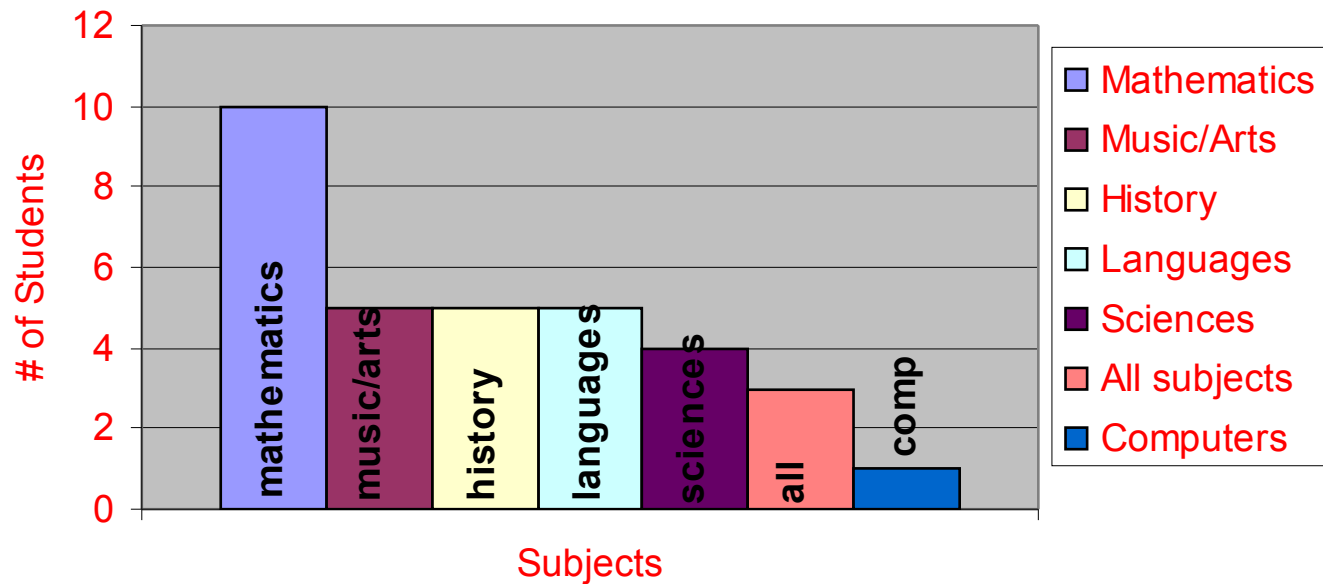


Questionnaire (Students)

- Do you plan to go to college?
- Will you visit the potential schools?
- What questions will you ask of the school?
- **What are some factors that contribute to the college you choose?**
- Would you choose your major according to job opportunities or your field of interest?
- What kind of job do you plan to have in the future and why?
- Do you want to work in an office building or on-site ?
- Do you understand what engineering and natural sciences are ?
- What are some goals you want to accomplish in your life?
- Would you use a website designed to educate you more about engineering and natural science majors?
- What would you like to see on it?
- Which websites do you use currently ?

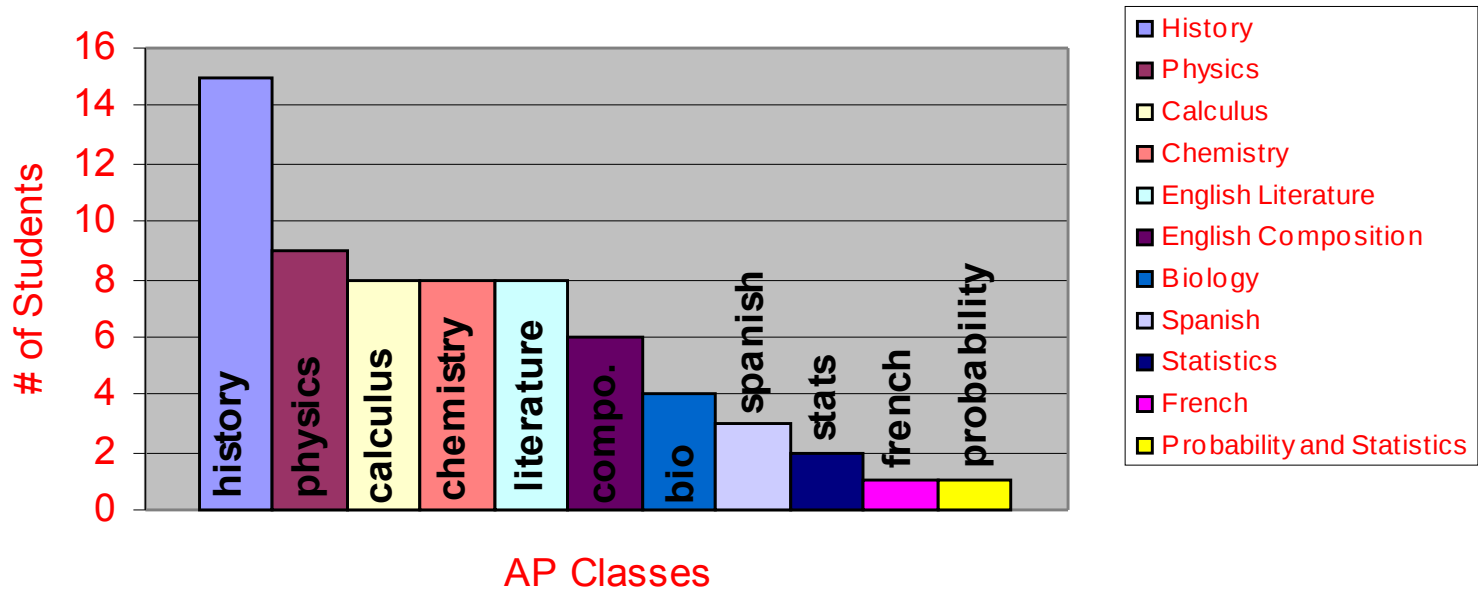
Results

What are your favourite subjects?



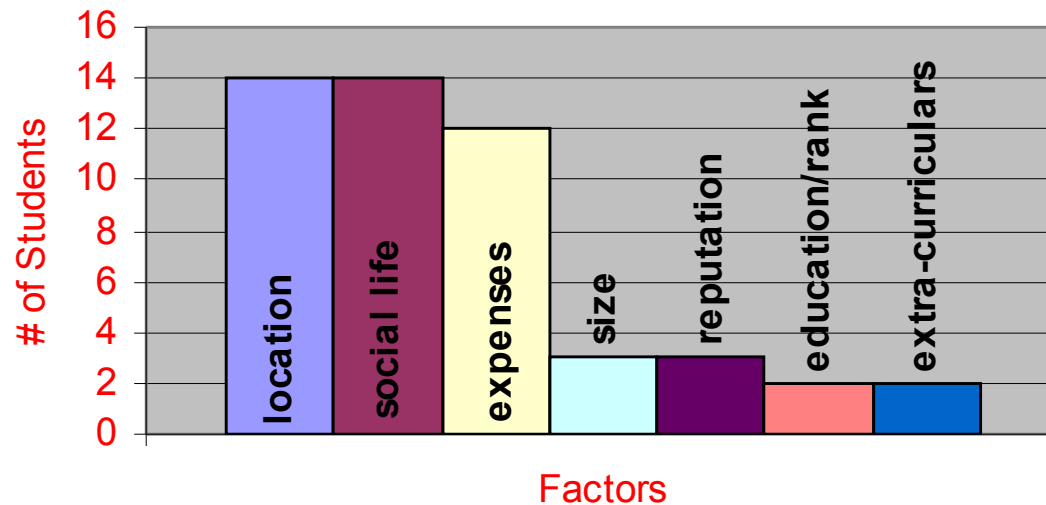
Results

What AP classes are you taking, plan to take, or have taken?



Results

What are some factors that contribute to the college you choose?





Our Web Portal



Different Categories:

- Scholarship
- Student/Counselor Network
- College Finder
- News
- Major engineering fields
- Quiz



Home page

IEC Educational Services v. 1.2

Home News Engineering Colleges Contact Us



Student Network

Take a look inside to find different colleges, professions, and educational resources that will help you get ahead today.

Scholarships

Find Scholarships and Financial Aid programs about different colleges.

Counsellor Network

For counsellors from different schools and organizations, to exchange ideas to help high school students choose a career.



Choosing Your College?

Find a college that best suits you, based on SAT/ACT score and GPA.

Quick References:

- Top 20 Engineering Colleges
- College Rankings by Tier
- College Requirements
- Colleges and their Requirements
- Engineering and Science Today

College Finder

Find a college that's best for you



Terms and Conditions Privacy IPRO 309





Scholarship

IEC Educational Services v. 1.2

[Home](#) [News](#) [Engineering](#) [Colleges](#) [Contact Us](#)



Scholarships and Financial Aid

[Scholarships](#) - A college scholarship search with a database of over 600,000 college scholarships, grants, fellowships & internships totaling over \$1.4 billion.

[CollegeNet](#) - The Mach25 database contains over 600,000 awards totaling over \$1.6 billion.

[GoCollege](#) - The largest scholarship database in the country.

[CollegeLink](#) - Browse thru available scholarships sorted by section and category.

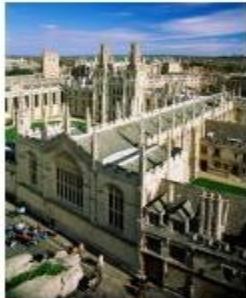




College Finder

IEC Educational Services v. 1.2

[Home](#) [News](#) [Engineering](#) [Colleges](#) [Contact Us](#)



College Finder

[U.S. News](#) - The best articles, interactive tools, and rankings to help you choose the right college.

[Petersons](#) - Find a college by selecting your preferences for location, majors, enrollment size, tuition, sports, and more.

[CollegeView](#) - Examine over 3,000 schools to find your perfect fit.

[CollegeNet](#) - Search to focus on schools that are best suited to your interests and personality.

[Embark](#) - Uncover options you never knew existed and target the best schools for you.

[GoCollege](#) - Adjust several parameters to widen or narrow your search.

[CollegeSource](#) - 19,101 College Catalogs in complete cover-to-cover, original page format





Engineering

IEC Educational Services v. 1.2

[Home](#) [News](#) [Engineering](#) [Colleges](#) [Contact Us](#)



Civil Engineering

Civil Engineering is the original of the engineering disciplines. With the increase in population, the growing complexity of industries, and changing urban centers, the civil engineer's task- applying science to the control and utilization of the environment for the total benefit of mankind- represents a challenge unsurpassed in all engineering fields. The civil engineer often is confronted with conditions so variable and complex that they cannot be precisely defined by science and mathematics. Therefore, knowledge of the arts and social sciences, as well as the physical sciences, is essential.

In addition, because civil engineering requires overall planning of very large projects whose components involve many other disciplines, it is also necessary to have knowledge of management techniques. The goal of the civil engineering degree program is to provide an education that enables graduates to make far-reaching decisions that draw not only from technical knowledge but also from integrity and judgment.

Some of the most well known colleges for civil engineering are Rose-Hulman Institute of Technology, IN; United States Military Academy, NY; Bucknell University, PA; Cal Poly-San Luis Obispo.



[Terms and Conditions](#) [Privacy](#) [IPRO 309](#)





Additional Tasks



- **Narrow search** survey on the front page, creating a dynamic web portal and asking the user about engineering and their interests. The database would be able to match their needs to the sites that would most benefit them.
- **Streaming video** of current engineering students and working professionals, describing their experiences, projects, and faults they have taken to get where they are.
- **Motivational stories** about engineering fields to interest students.
- **Going global** expanding the resources provided by the website in order to meet the needs of International students.

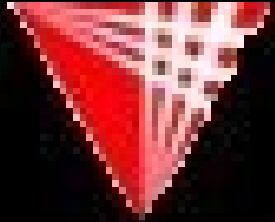




Final Remarks

- **As a team we faced different situations that are involved in problem solving.**
 - **Lessons learnt:**
 - realizing what the problem was
 - formulate different tasks that were necessary to solve it
 - overcoming setbacks
 - Not all schools willing to participate
 - Delay in return of questionnaires!
 - Not being able to meet with the students & counselors in person
 - Deciding which web sites to include in the portal
 - Not enough time
- **We have worked towards attaining our goal of making our resource more beneficial to High School students in order to inspire them in choosing Engineering and Science as their profession.**





Web Portal for High School Students And Counselors

QUESTIONS???