GIFTS – Getting Students to Make Fact-Based Presentations in a First Year Engineering Course

Ashish Borgaonkar and Jaskirat Sodhi -New Jersey Institute of Technology



PURPOSE

Employer feedback on engineering graduates points out their lack of communication skills and lack of experience in presenting fact-based information. Making effective presentations is imperative for students to be able to demonstrate their ideas and designs efficiently. An introductory first-year engineering course is an opportunity for instructors to encourage students to research facts on various topics and present them in a formal setting to the class.

4 Students Per Team

Student teams are assigned randomly a "for" or "against" side for each topic.

Some Examples of Current Engineering Topics

Apple Vs. Samsung

Self Driving Vehicles

Are Robots Taking Over Our Jobs?

Renewable Energy

Use of Drones

Cloud Storage

Net Neutrality

Bathroom Bill

Corporate Consolidation

Week 1:
Assign
Activity

Week 2:
Toastmasters

Town Hall

Presented by the student chapter of Toastmasters Club on campus. Toastmasters is an organization that operates clubs worldwide to help members improve their communication, public speaking and leadership skills.

Emphasis is on presenting fact-based information regardless of their individual feelings about the topic.

2 + 2 + 2 Format (6 min per topic)

2 Min - First Team Presents in favor of the topic

2 Min - Second Team Presents against the topic

2 Min – Rebuttals/Discussion

DISCUSSION/REBUTTAL PERFORMANCE

A. Responsiveness and receptiveness to questions
 B. Succinct answers with adequate explanation

Town hall Meeting Evaluation Sheet

Good Example: DRIVERLESS CARS

"Automated vehicles could eliminate 90% of the deaths and injuries caused by human driver error."

Wall Street Journal

"Driverless cars are typically hit from behind by inattentive or aggressive humans unaccustomed to self-driving motorists being such sticklers for the road rules."

The Guardian, July 5th 2016



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