

# **EAB's Response to the 2011 Sections Congress Recommendations**

**Region 8 Meeting**

**Liz Burd, Chair PECC  
March 2012**

# IEEE SC2011 - Recommendation #5

- To encourage interest in pre-university students in engineering careers, IEEE to publish a subscription periodical (paper or electronic) targeted to high school students that highlight engineering activities of students. The periodical should also have articles promoting the benefit of an engineering career and what the students can do in college to get involved with IEEE.

**ENGINEERING INSIDE:** January 2012  
**CRIME SCENE INVESTIGATION**

**Engineering the Answer**  
 January, 2012  
 It's a dark and stormy night. Red and blue revolving lights reflect off the wet brick and highlight the steam rising out of a sewer grate. As the camera pans down we see a sea of police cars and an area cordoned off with yellow police tape. Crime scene investigators snap pictures of every surface, collect samples of blood, paint, and other trace evidence, dust for fingerprints, and bag objects that might be relevant to the investigation.  
[Read More](#)

**Meet Sargur Srihari**  
 January, 2012  
 Have you ever wondered how scientists and crime scene investigators use handwriting to solve crimes? We've interviewed Professor Sargur Srihari about how handwriting can be used as evidence. He created an automated system that uses computers to identify patterns in handwriting and other forensic evidence. The system is used all over the world and has helped solve crimes and has been used to convict criminals.  
 Professor Srihari's research led to the first large-scale handwriting address interpretation systems in the world.  
[Read More](#)

**Try Your Hand at Biometrics!**  
 January, 2012  
 Have you ever wanted to solve a crime, or do detective work? There are many ways to get involved in solving! One way is to explore some of the methods and technologies used by the experts who are trying to solve a crime. For example, biometrics is now used in many areas to help identify a unique person by examining one or more of their physical or behavioral traits. There are two main types of biometric identifiers: physiological and behavioral.  
[Read More](#)

**Development of Forensic Software to detect original paintings is not easy!**  
 The most expensive painting ever...  
**POLL**  
 Vote on themes for an upcoming issue.  
 Engineering Inside:  
 • The Music Industry  
 • Signals Around You  
 • Animation  
[Vote](#)

**TIPS AND ADVICE**  
 Join Camps and Competitions  
 One of the best ways to explore a career in science, technology, engineering, or mathematics is to get involved!  
[Read More](#)

**POPULAR TOPICS**  
 biometrics color crime scene  
 engineering forensics get involved handwriting forensic forensic mathematics school students

**IEEE SPOTLIGHT**  
 IEEE Members Reach Out To Students  
 Did you know that IEEE members all around the world like to reach out to students to share what it's like to be an engineer?

**PAST ISSUES**  
 January 2012

# IEEE Spark

- PECC New Initiative – a monthly publication for students ages 14-18



Internet

50%



Advancing Technology for Humanity

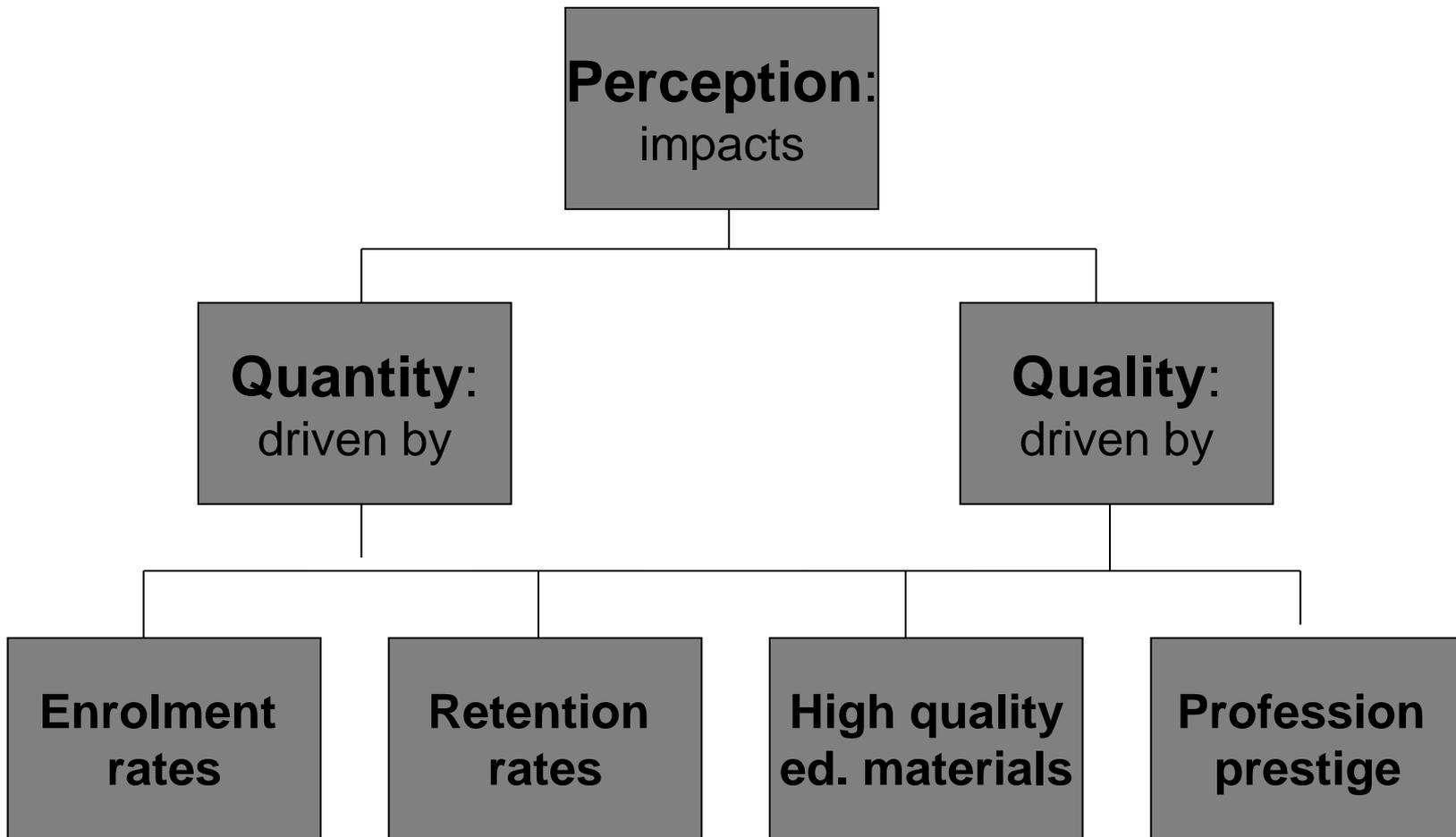
# IEEE SC2011 - Recommendation #1

- Develop a comprehensive long-term strategy to increase the number of next generation youth pursuing science and engineering careers.
- To address the perceived / real reduction in the number of students entering engineering and science at the post-secondary level and the expectation that the issues will become worse as the number of retiring scientists and engineers increases in coming years.

# Steps taken so far...

- The PECC met to consider how to take forward these recommendations
- The PECC considered:
  - What influences student choice
  - Who are the main stakeholders are
  - How to address our goals
- What future steps are needed to address the recommendations

# What influences student choice..



# Strategy: Change perception

- Design new & capitalise on existing programs to enhance public perception of the ETC discipline
  - Quantity: to maintain and eventually increase the number of students who meet the HE entry requirements for ETC programs
    - *Initiatives*: early childhood program, tools for parents and educators, young engineers club
  - Quality: to enhance students aptitude for ETC and problem solving
    - *Initiatives*: evolution of the profession, tools for parents and educators, positive spin on the profession

# Next steps

- Develop business plans for the initiative
  - Appropriately design and resource program
  - Manage risks
- Define leadership strategies
- Work with the Sections
  - To support implementation
  - Run programs appropriate to their local needs
  - Collect and report evaluation measures