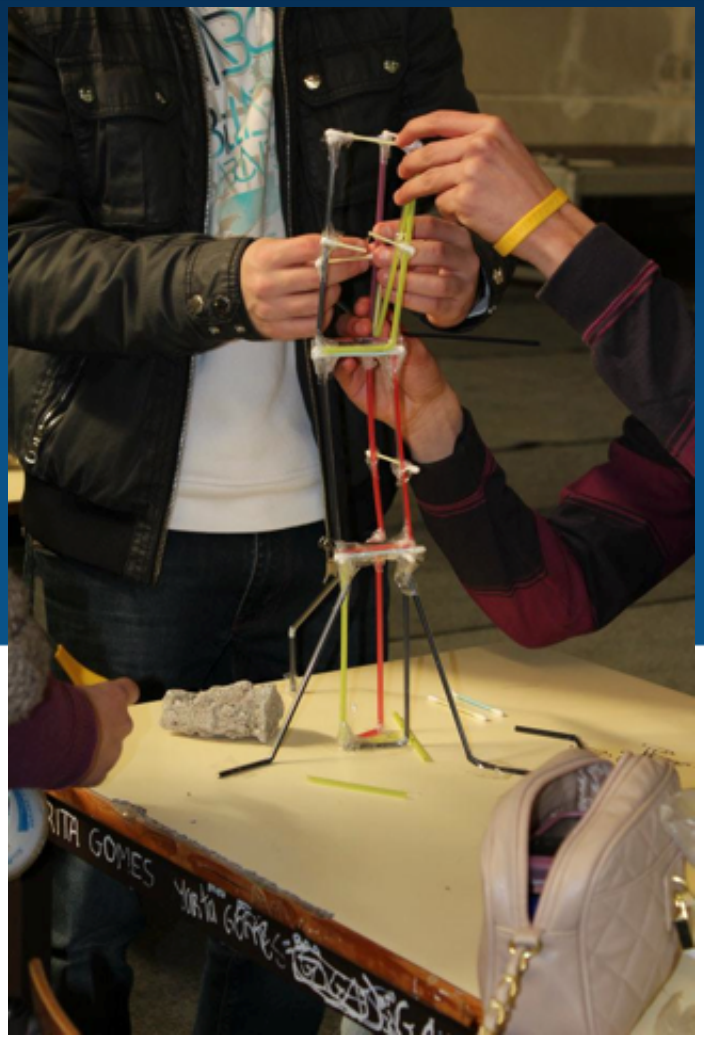
IEEE TISP
Teacher In-Service Program



2013 IEEE Türkiye Başkanlar Kurultayı-Ege Üniversitesi

Rui Costa

IEEE R8 Educational Activities Sub-Committee member

7 February 2013

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Lets Energize.

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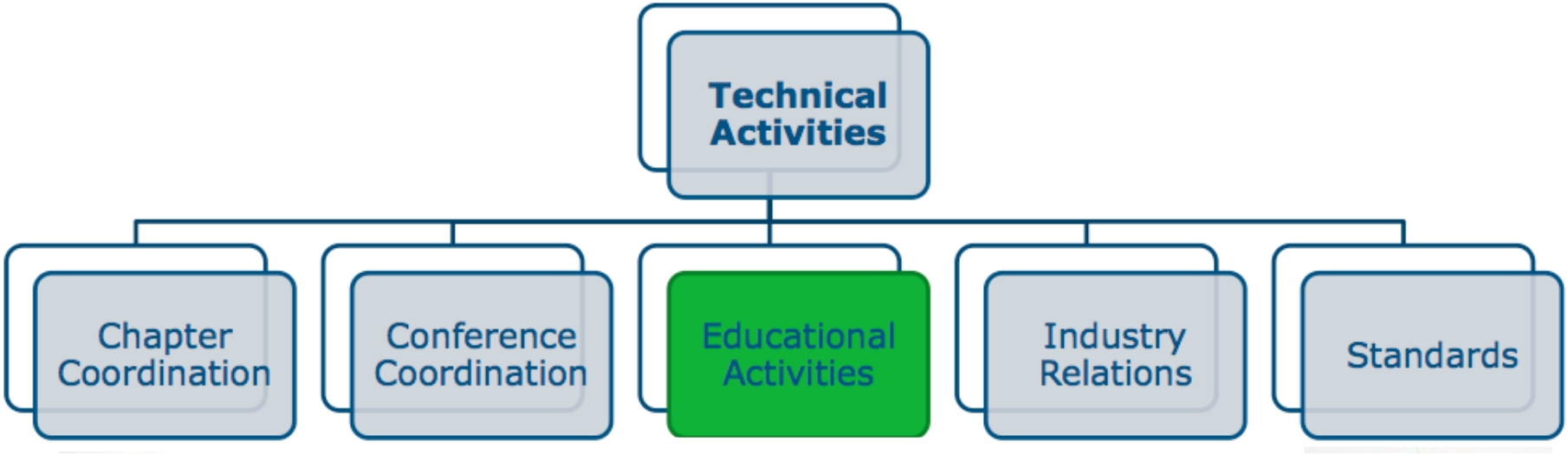
Standing (sub)-Committees



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EASC - Operational Areas

Aligned to EAB

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PRE-UNIVERSITY EDUCATIONAL ACTIVITIES

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PRE-UNIVERSITY EDUCATIONAL ACTIVITIES

Teacher In-Service Program (TISP)

Engineering Projects In Community Service (EPICS)

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A moment about EPICS

EPICS

Organizes university and high-school students to work on engineering-related projects for local area non-profit organizations.

Conceived and championed by IEEE 2007 President Leah Jamieson.

EPICS-in-IEEE

Empowers student branches and IEEE GOLD groups to work with high school students on EPICS community service-related engineering projects

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A moment about EPICS : The needs

- Community service organizations need help from people with technical backgrounds to leverage technology to deliver the services they provide.

- There is a need to emphasize the role of community service to students in IEEE's fields of technical interest.

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Areas of interest

- **Education:** K-12 schools, museums, adult learning programs, after school programs

- **Access and abilities:** adaptive services, clinics for children with disabilities, programs for adults with disabilities, assistive technology

- **Human services:** homelessness prevention, affordable housing, family and children agencies, neighborhood revitalization, local government

- **Environment:** environmental organizations, neighborhood associations, parks & recreation

*

Requirements

- Complete the application: http://www.ieee.org/education_careers/education/preuniversity/epics_high.html
- Identify Pre-University students
- Identify Non-Governmental partner
- Submit the application for seed funding to epics-high@ieee.org

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University of Cape Town (South Africa Section, South Africa) - Western Cape Breeze

- The University of Cape Town Student Branch developed a wind power turbine out of scrap material which was able to deliver 50 W of power.
- Wind turbine has the potential to be used as lighting for the school or for a mobile clinic
- Over 7 sessions, secondary school students met to learn about renewable energy and to construct the wind turbine. Students learned importance of design and environmental impact.

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EPICS-IN-IEEE : TURKEY

Think about this...

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What is TISP?

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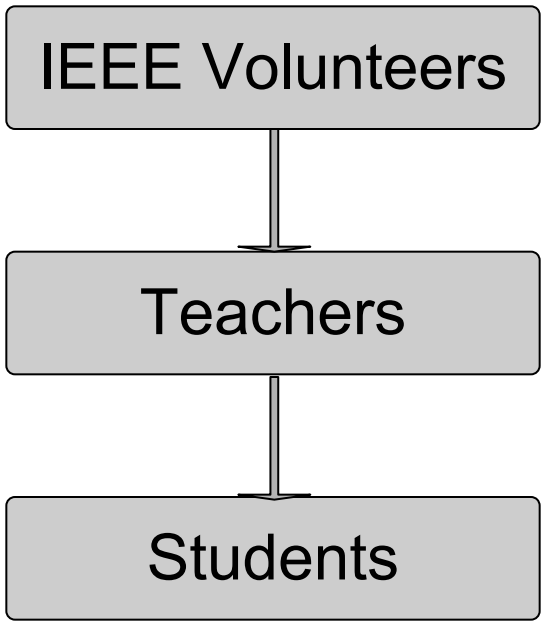
What is TISP?

A program that trains IEEE volunteers to work with pre-university teachers with a goal of promote engineering and sensitize pre-university students for engineering.



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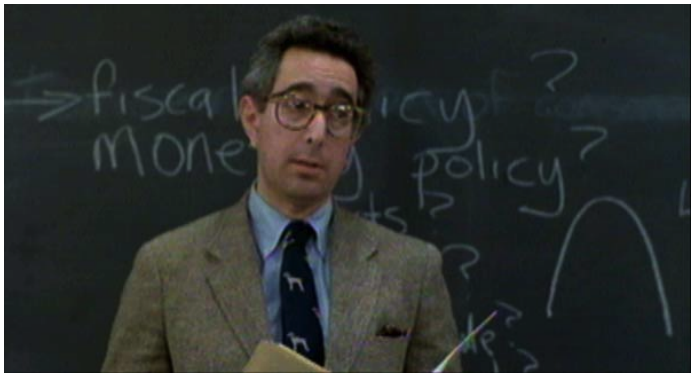
TISP Lessons

Based on approved lesson plans

- Prepared/reviewed by IEEE volunteers
- Tested in classrooms
- Aligned with Education Standards
- Designed to highlight engineering design principles



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TISP GOALS

- Empower IEEE “champions” to develop collaborations with local pre-university education community to promote applied learning
- Enhance the level of technological literacy of pre-university educators and students
- Increase the level of understanding of the needs of educators among the engineering community
- Identify ways that engineers can assist schools and school systems

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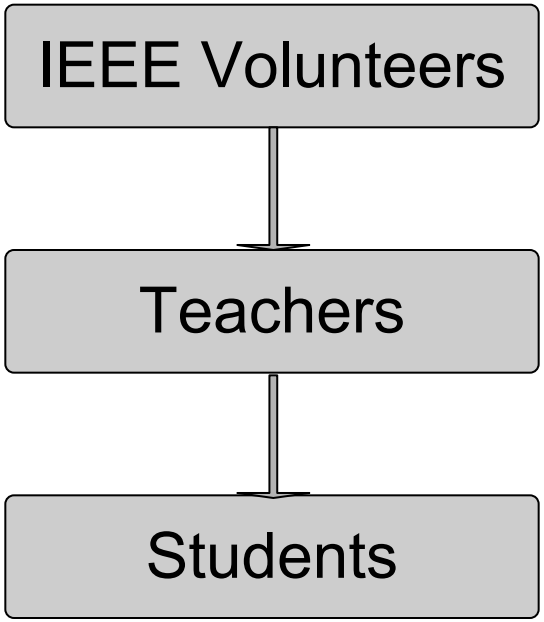
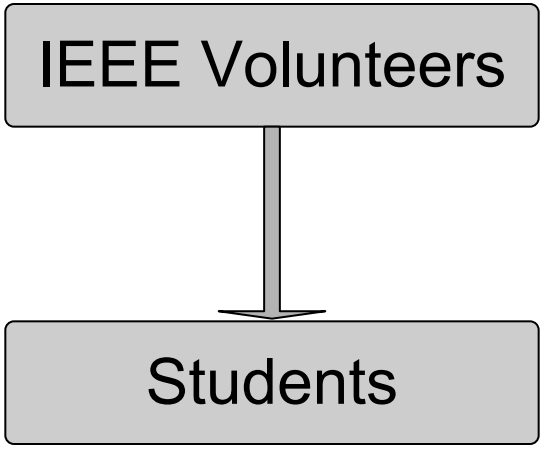
TISP



TISP 2.0



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TISP 2.0

- We are the teachers
- We go to schools
- Students like us because we are young like them
- Students look to us like a “super heroes” and dream to be likes us

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How to make it ?

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How to make it

- Choose schools
- Begin to contact your previous schools because they are more receptive
- Choose activities @ http://tryengineering.org/
- Make the budget
- Organize your team
- Go to schools

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How to make your budget

- Be creative
- Send your proposal to r8puw@ieee.org
- Present the budget for the section*

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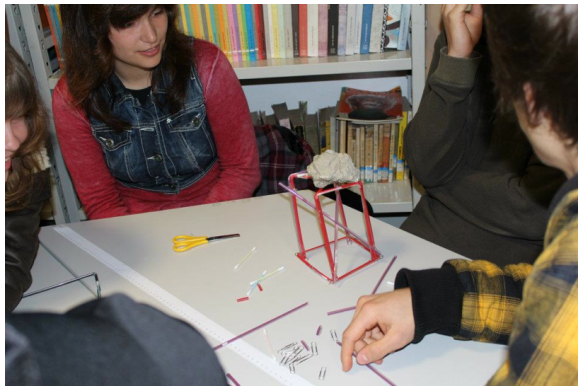
At schools

- Make a good presentation about engineering world but in a fun way
- Make the most dynamic activities possible
- Competition between students is always good and motivational
- Spend a good time with students



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Questions?

“If you don’t ask, you don’t get”
Gandhi, Mahatma

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Lets get physical!

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Your first TISP activity

- Fulfill the objective
- Use **only** the materials on your tables
- Respect the Rules
- Have fun and surprise everyone

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MACGYVER

ROBOT ARM / Trebuchet

- Materials + Rules

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