IEEE Teacher In-service Program How to Begin

HSBC Workshop
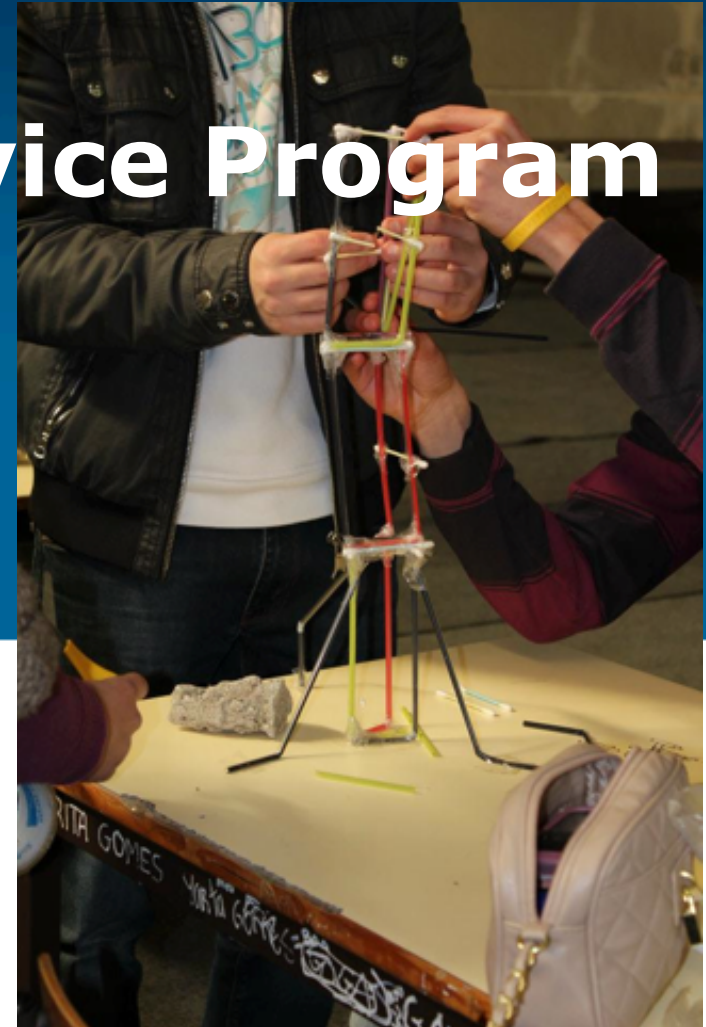
Fábio Domingos

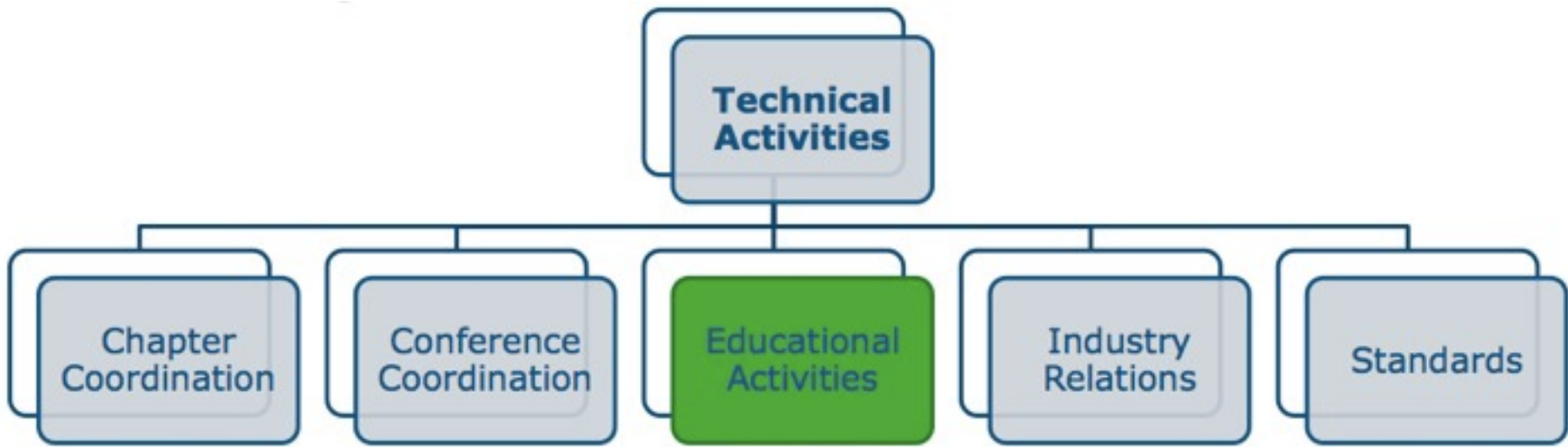**TISP Coordinator IEEE-IST**

Rui Costa

Ad Hoc member to the IEEE Region 8 Pre-University Works Sub-Committee

15 December 2012

Standing (sub)-Committees

EASC – Operational Areas
Aligned to EAB

Pre-University | University | Post-University (Continuing Education)

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EASC – Operational Areas
Aligned to EAB

Kindergarden	Pre-University	University	Post-University (Continuing Education)

PRE-UNIVERSITY EDUCATIONAL ACTIVITIES

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Teacher In-Service Program (TISP)

Engineering Projects In Community Service (EPICS)

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

IEEE
Advancing Technology for Humanity

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.

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.
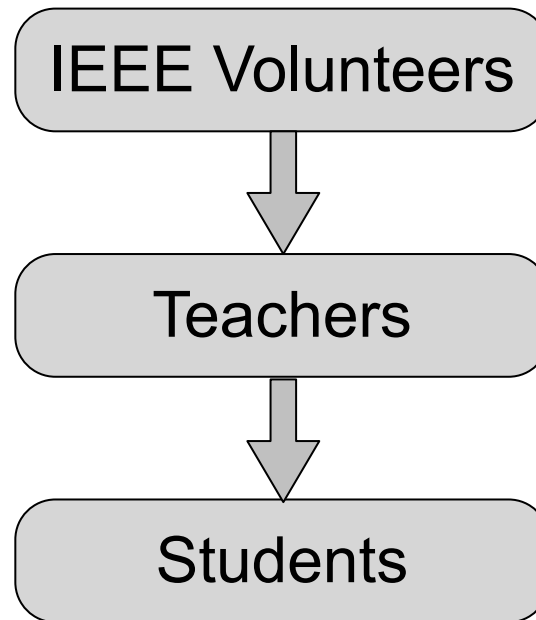
EPICS-IN-IEEE : GREECE

Think about this...

IEEE
Advancing Technology
for Humanity

What is TISP?

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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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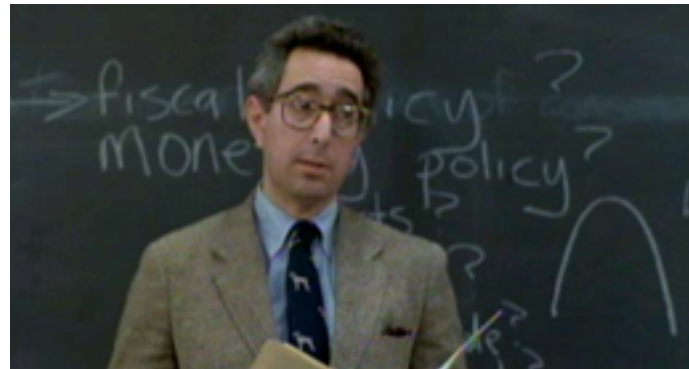
IEEE Volunteers

↓

Teachers

↓

Students

Problems of TISP

★ Receptivity of teachers
   • Many of teachers don't like engineering
   • They don't have the experience of engineering world
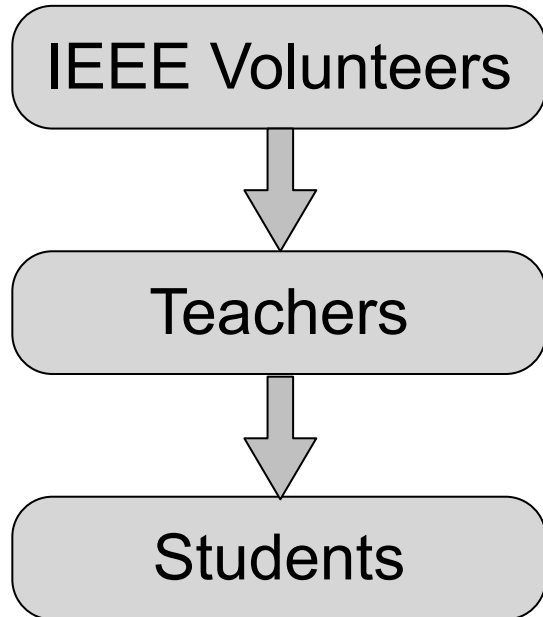   • Many of them are conservative

★ Receptivity of students
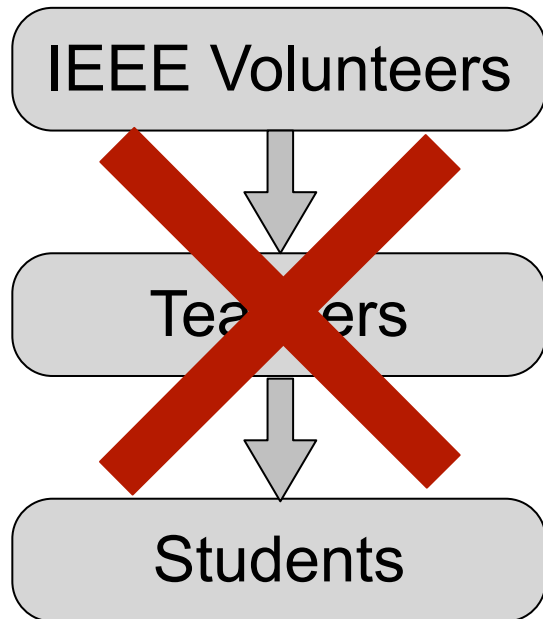   • Students look at this as another lesson

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TISP 2.0

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IEEE Volunteers

Teachers

Students

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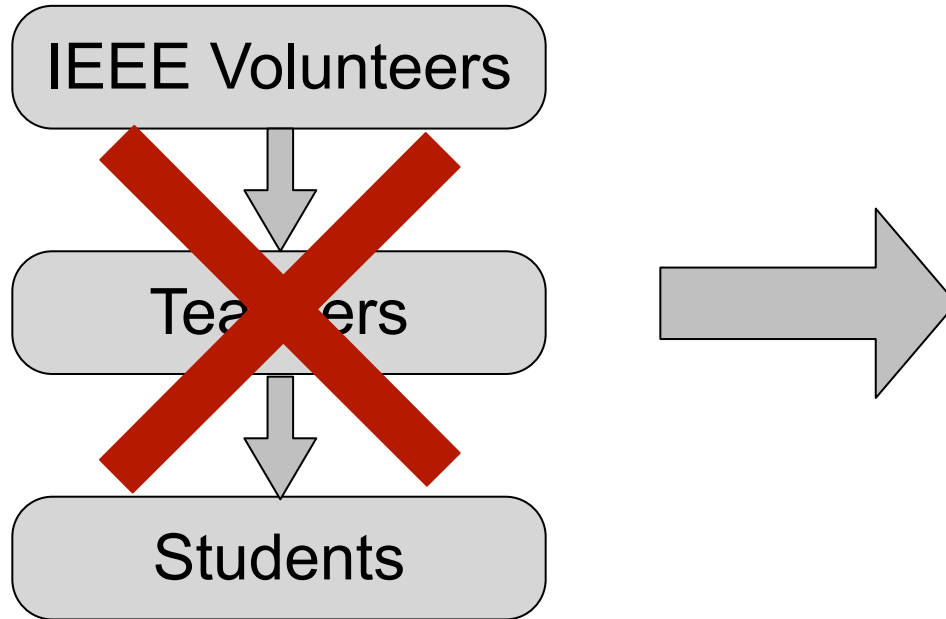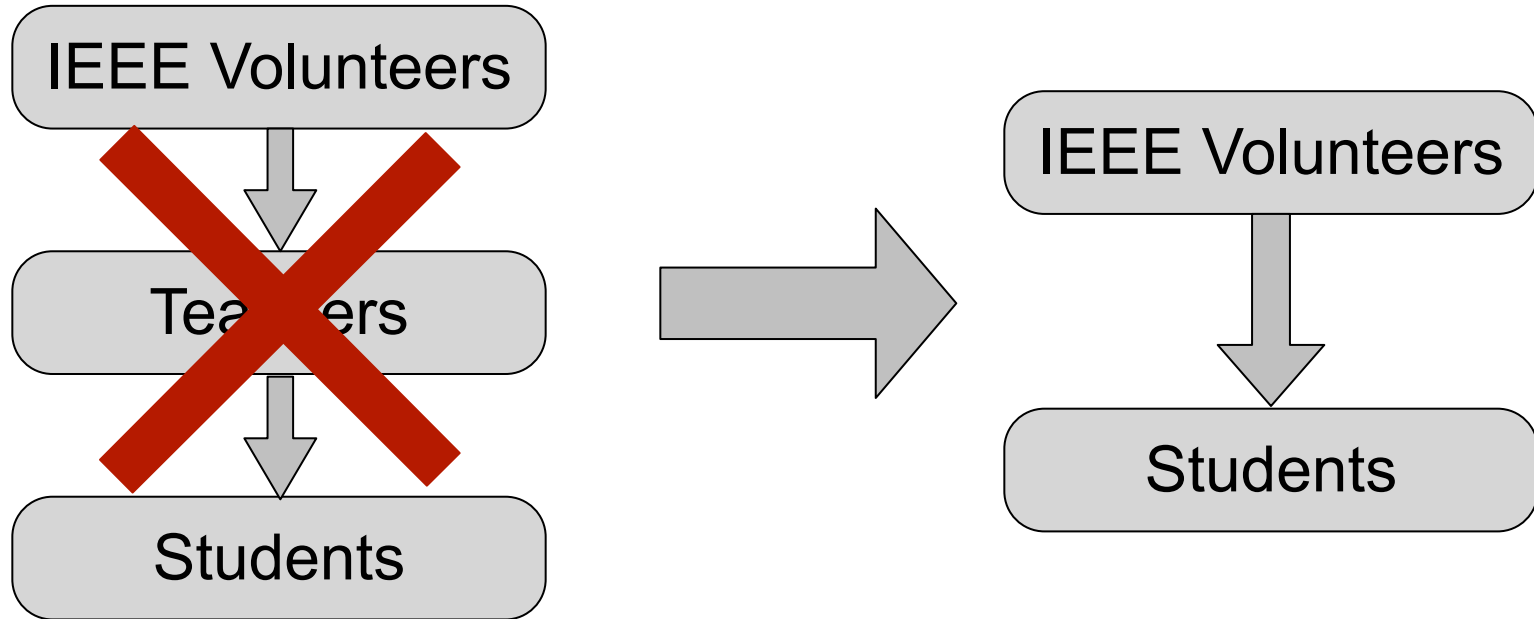
TISP 2.0

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

How to make it

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How to make it

★ Choose schools
   • begin to contact your oldest schools because they are more receptive

★ Choose activities
   • http://tryengineering.org/

★ Make the budget

★ Organize your team

★ Go schools

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How to make your budget

★ Be creative

★ In first year you have funding of EAB
   • Y.Pelham@ieee.org
   • L.Bowlby@ieee.org

★ Present the budget for the section

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

Questions

"If you don't ask, you don't get"
                                    Gandhi, Mahatma

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