The Educational Activities Board and Region 8

A Presentation for the Region 8 Committee

Moshe Kam,
VP for Educational Activities

14 April 2007
What is the objective of this talk?

- Discuss specific activities of EAB that Region 8 can participate-in/develop/use
Meeting the Growing Demand For Engineers and Their Educators 2010 - 2020 International Summit

Munich, Germany
9 - 11 November 2007

Arthur Winston, General Chair
Objectives and Participants

- An international conference on the growing demand for engineers and their educators and about actions required to meet that demand for engineers and their educators in the period 2010-2020

- Participants
  - Invited representatives from industry, government, and academia
  - Authors of papers and posters
  - Focus on decision makers and policy makers who can steer the educational system at both pre-university and university levels
Desired Outcome

- A road map: here is what we need to do to address the key two constituencies
  - “engineering” and “education”

- Best practices: here is what seems to have worked
Munich Summit; Arthur Winston, Chair

How did Region 8 participate so far?

- **Planning Committee**
  - Gerald Anleitner (R8)
  - Victor Fouad Hanna (R8)
  - Dave Janosz (Educator – R1)
  - Moshe Kam (EAB – R2)
  - Fanny Klett (R8)
  - Andreas Luxa (R8)
  - Rolf Remshardt (R8)
  - Rupert Rompel (VDE)
  - Michael Schanz (VDE)
  - Bill Sparkman (Educator – R6)
  - Charles Turner (R8)
  - Douglas Gorham (IEEE Staff)
  - Jessica Czeczuga (IEEE Staff)
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How did Region 8 participate so far?

- Identified themes and topics
- Identified speakers and participants
- Provided contacts to Industry and the EU
- Helped with cooperation with VDE
How can Region 8 be of further help?

- Promote the event

- Encourage decision makers to participate
  - and contribute papers, when appropriate

- Consider financial sponsorship
  - A motion is on the agenda of R8
How can Region 8 be of further help?

CALL FOR ACTION

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Women in the Engineering School

IEEE Discovery Based Projects

for First Year Students of Electrical Engineering, Computer Engineering, and Computer Science
The problem…

- In most countries women are under-represented in the engineering student body.

- While women made significant progress in Medicine and Law they have not increased their participation in Engineering to the same degree.

- The dropout rate of women from engineering programs is high.
IEEE Discovery Based Projects

for First Year Students of Electrical Engineering, Computer Engineering, and Computer Science

- A new program, intended to develop and distribute projects that educators of Electrical and Computer Engineering (ECE) and Computer Science (CS) can use in the first-year classroom
Desired Projects

- High quality, hands-on, team-based projects that focus on real-world problems
  - Solutions can be shown to benefit society

- Projects should allow students to discover the importance of contemporary ECE/CS problems and elicit excitement about creative solutions
How R8 can be involved

- Help EAB promote the program
  - Flyers are available

- Inform education chairs and chairs of university programs that the program has been launched

- Arrange teleconferences with interested parties
  - An EAB representative will always be glad to be on the line
How R8 can be involved

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Recognition of Leaders in Education
EAB has a successful awards program

www.ieee.org/education

- Accreditation Activities
- Continuing Education
- Informal Education
- Pre-University
- Major Educational Innovation
- Meritorious Service
- Employer Professional Development
- Society/Council/Section Professional Development
Region 8 and the EAB awards…

- In the last few years there are almost no nominations from Region 8
  - While the number of nominations from all other Regions have gone up

- Possible explanations:
  - Region 8 does not care about education awards
  - Region 8 lags other regions in educational excellence – the talent is simply not in Region 8
  - Region 8 is deficient in getting organized to prepare nominations for awards

- Which one is it?
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CALL FOR ACTION

- Please send in Region 8’s nominations
The Teacher in Service Program

“Engineering in the Classroom”
Training sessions

- A full-scale TISP training for volunteers

- Open to all Sections in a Region or an Area
  - All expenses are paid by IEEE-EAB

- We are looking for volunteers who will follow up and take the activities to the schools

CALL FOR ACTION

- Now is the time to plan a TISP event in Region 8 in 2008

- The event needs to be planned at least a year in advance by a fully engaged volunteer committee
On Line Portal

TryEngineering.org
Most recently…

- New countries were just added to the school search; currently:
  - Australia, Brazil, Canada, France, Germany, India, Japan, Korea, Malaysia, Mexico, New Zealand, Pakistan, UK, USA, South Africa

- Versions in additional languages are in preparation
  - Spanish, French, Japanese, Russian, German, Chinese
How Region 8 can assist...

- Suggest engineers and students for interviews that will be featured on the site.

- Get student branches to send stories to the monthly newsletter:
  - short essays on student life and perspectives

- Review the Spanish, French, German, Russian and English versions of the site and help us with terms and region-specific material.
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CALL FOR ACTION

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Accreditation
Key Activities

- Providing help to accrediting bodies in formation
  - Including training of evaluators

- Providing help to groups that want to start new accrediting bodies

- Education about accreditation
How R8 can be involved

- Help with the inventory of accreditation agencies and new accrediting bodies

- Inform the membership that IEEE seeks involvement in local accreditation
  - This is true even if it is all done by the government

- Work with EAB to establish presence of IEEE Sections in local accrediting bodies
How R8 can be involved

CALL FOR ACTION

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Continuing Education
The best of IEEE’s educational content delivered in one-hour long online learning modules
- 50 modules are included in the current version
- By the end of 2007 we will have at least 75

The latest information on emerging technologies and seminal works
- presented at the best of IEEE’s conference tutorials, short courses and workshops
Expert Now IEEE news

- “Free samples” are available to the membership
  - Three courses currently available on www.ieee.org/education

- The whole library is available for subscription to the membership
  - One course at a time
  - At a considerable discount

A Member Benefit
How can Region 8 get involved

- Review the available modules and titles
  - Provide feedback

- Use modules in Section and Chapter meetings
  - Module is projected with Q/A and comments by a local expert
  - Successful pilot run in Singapore

Free in 2007
How can Region 8 get involved

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AN ACTION ITEM FOR R8 EDUCATION CHAIR AND COMMITTEE

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## Summary of Calls for Action

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Thank You