



**STEM
Portal**

Inspiring the engineers of tomorrow

Stamatis Dragoumanos

*IEEE Educational Activities Board
Pre-University Education Coordination Committee*

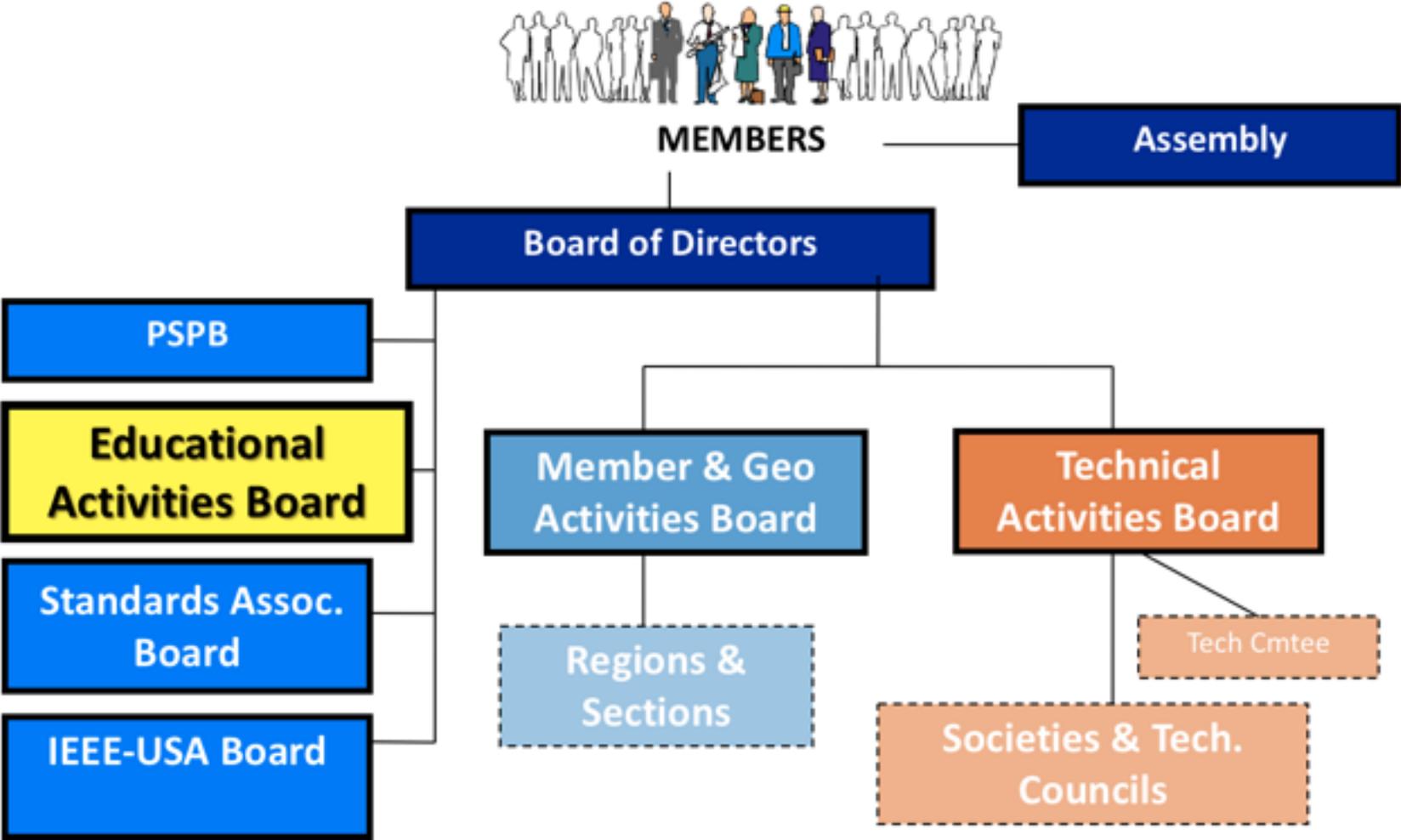
Pre-University Education Coordinating Committee



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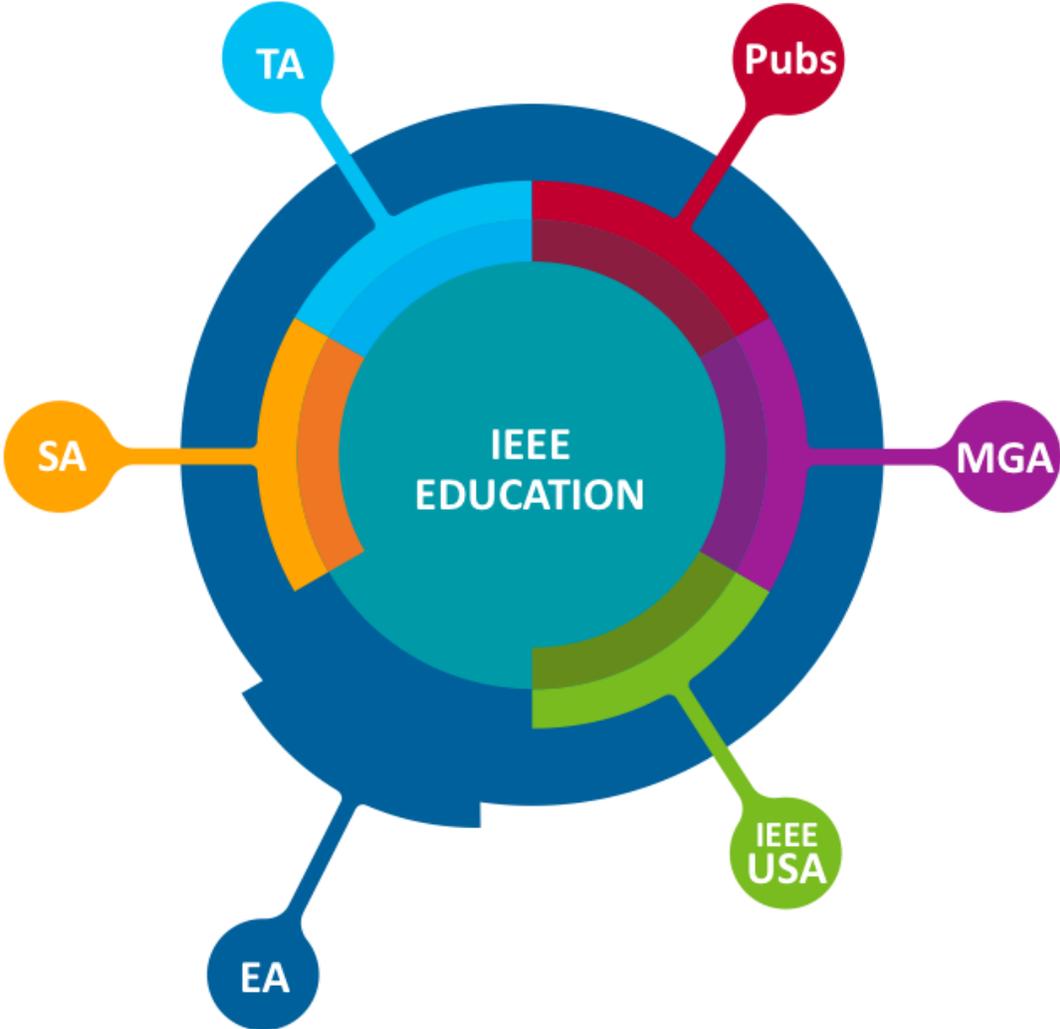


IEEE will:

- Drive global innovation through broad collaboration and the sharing of knowledge.
- Enhance public understanding of engineering and technology and pursue standards for their practical application.
- Be a trusted source of educational service and resources to support lifelong learning.
- Provide opportunities for career and professional development.
- Inspire a worldwide audience by building communities that advance technical interest, inform public policy, and expand knowledge for the benefit of humanity.

Education Across IEEE

Expanding our collective impact in education through coordination



Why STEM Outreach?

- Because it is in our stated and un-stated mission
- Because in many IEEE Sections there is a noticeable decline in young people interested in engineering, computing and technology
- Because we believe we can tackle the problem head-on and produce positive results

Why STEM Outreach?

- The demands of the **21st century** will require **technological innovation** to deliver advanced technologies and infrastructure solutions in developed and developing countries
- In several countries, the level of mathematics and science literacy may be one indication of potential loss of future competitiveness
- There have been flat or declining engineering enrollments in most developed nations

Shaping the Future of Technology through Education

STEM and technology education is crucial to not only solving today's issues, but also to preparing for the challenges of tomorrow.



Climate Change

IEEE: Enabling Innovation and Technology Solutions

IEEE at UN Climate Change Conference



Climate
Change

Energy Transition Education Network



Presentation at the IRENA Pavilion
Sharm El-Shaikh, Egypt , 10 Nov 2022

Partnership with International Renewable Energy Agency

Energy Transition Education Network
(IRENA)

ETEN Founding Partners

Convened by:  **IRENA**
International Renewable Energy Agency

Partners:  **unesco**

Teach For All
A Global Network

 **for every child**

 **Higher Education Sustainability Initiative**

HESI+10
Celebrating 10 years with Higher Education Sustainability Impact

 **IEEE**
Advancing Technology for Humanity

 **ENERGY TRANSITION EDUCATION NETWORK**



IEEE Pre-University Mission & Vision

Mission

We foster educational outreach to pre-university students around the globe by supporting teachers and IEEE volunteers with the tools for engaging activities and measurable outcomes.

Vision

IEEE and the world will look to IEEE pre-university leadership and insight in bringing youth to the global technical community.

Core Values

- Global Community Building
- Service to Youth
- Diversity and Inclusion
- Excellence
- Innovation and Discovery
- Empowerment

IEEE's STEM Global Reach* (vTool Events YE 2022)

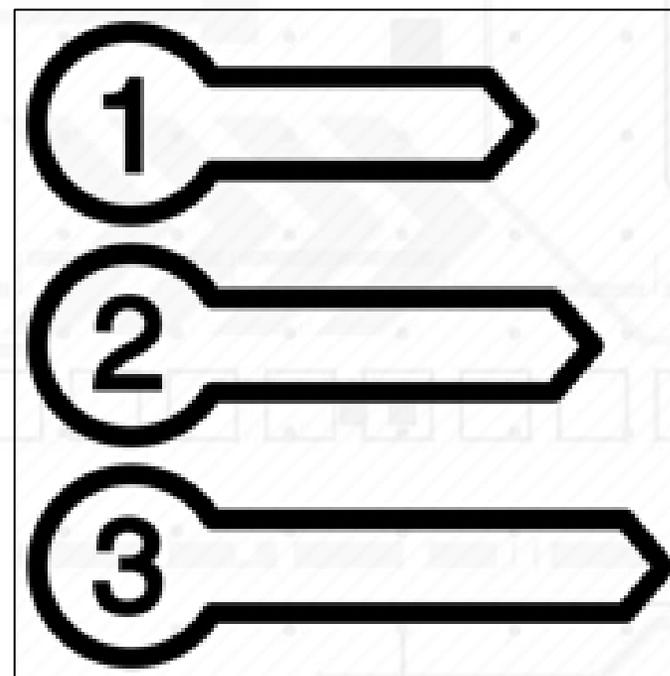
- **62,672 Students Impacted**
- **12,141 Teachers Reached**
- **8,648 Parents Engaged**
- **7,718 Volunteers Involved**
- **621 Events Conducted**
- **43 Countries Represented**



vTool Events Reported*

2023 Tasks and Priorities

- IEEE Pre-University Educational Volunteer Training NIC Grant
- Global Pre-University Virtual Classroom Visits NIC Grant
- TryEngineering.org Revamp
- STEM Grant Program
- STEM Champion Program
- STEM Community
- TryEngineering.org Revamp
- IEEE STEM Summit
- Lesson Plan Alignment
- Marketing (Newsletter, Social Media, Blog, etc.)
- Foundation 50th Anniversary Project
- EDUCON 2023
- TryEngineering Summer Institute (TESI)
- TryEngineering Together (TET)
- Presidents' Scholarship
- EdWeek







Video credit: EiE

