

Analysis of a Statewide K-12 Engineering Program: Learning from the Field

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Engineering Our Future NJ

Statewide initiative based at Stevens to promote engineering in elementary, middle, and high schools in NJ



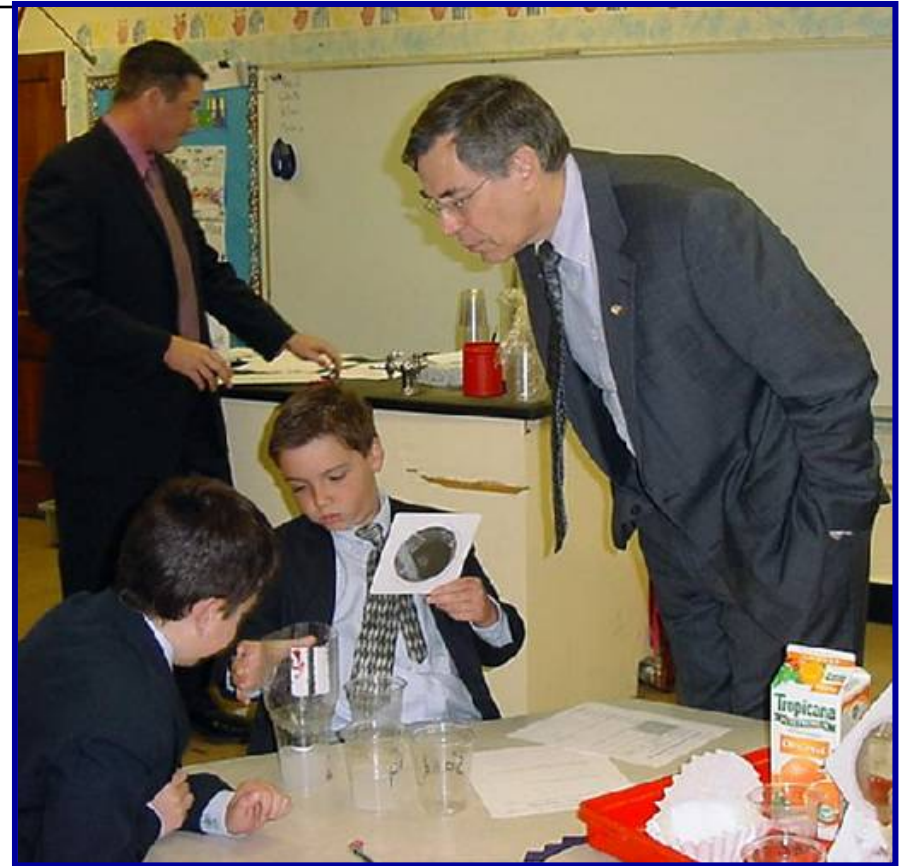
Goal



Ensure that all NJ children experience exemplary engineering curricula, ***with a focus on innovation***, as a requirement of their elementary, middle, and high school education by 2010

Key Initiatives

- Professional development
- Policy efforts
- Partnerships and capacity-building
- Promotion
- Research



EOFNJ Approach

Statewide PD and awareness-building effort

Phase 1 – Pilot project (2005-06) to understand student learning of science & engineering concepts and classroom implementation issues

Phase 2 - Scale-Up (2006-08) to reach 2,000 educators through a statewide network, influence policy, promote importance of engineering, continued research

Phase 3 – Best Practices (2009→) curriculum recommendations, PD, capacity-building

Professional Development

Varied by:

- Content
- Grade level
- Duration
- Classroom support
- Location



Program Curricula



- Engineering is Elementary
- A World in Motion
- Engineering the Future
- Building Math
- Pro/Engineer
- CIESE Online Engineering Projects

