

RECOGNITION AWARD

Presented to

FOUNDATION COALITION

Headquarters: Texas A&M University College Station, TX, USA

For Innovations and Accomplishments in Catalyzing Broad Improvements in Global Engineering Education

by

International Advisory Board iNEER

October 18, 2004 Gainesville, Florida, USA

iNEER Award Nomination

(A)

Nominator's name, title, affiliation, address, e-mail address, and telephone number. Preferably, the nominator should not be someone from the same institution as the nominee.

Glen E. Johnson, Ph.D., P.E. Dean, College of Engineering Tennessee Technological University Cookeville, TN 38505 USA Email: gjohnson@tntech.edu Telephone: +1 931-372-3172 FAX: +1 931-372-6172

John D. Carpinelli Associate Professor of Electrical and Computer Engineering New Jersey Institute of Technology University Heights; Newark, New Jersey 07102-1982 USA Email: <u>carpinelli@njit.edu</u> Telephone: +1 973-596-3536.

(B)

B.1 Nominee's (proposed award recipient's) name, title, affiliation, address, e-mail address, and telephone number.

Foundation Coalition Jeffrey E. Froyd, Project Director Director of Academic Development Texas A&M University TAMU 3405 College Station, TX 77843-3405 Email: <u>froyd@tamu.edu</u> Telephone: +1 979-845-7574 Fax: +1 979-862-1940

B.2 Category of award (Leadership; Achievements; or Recognition).

Leadership

B.4 Summary of Accomplishments of Nominee (Reasons for Nomination). The Foundation Coalition has created a set of resources for faculty members to use in working with one or more of the key components of the Foundation Coalition: student teams, active/cooperative learning, curriculum integration and learning communities, assessment and evaluation, increasing participation of white women and underrepresented minorities, technology-enabled learning, and curricular and organizational change. Thousands of copies of document resources have been downloaded and Foundation Coalition workshops have been hosted across the world. With these resources other institutions have built on the work of the Foundation Coalition to create innovative curricular and educational initiatives at their own institutions. More information about the available resources can be found at the Foundation Coalition web site: <u>http://www.foundationcoalition.org</u>

- B.5 Suggested citation for the award (maximum length: 15 words).
 Example: "For Innovations and Accomplishments in Catalyzing Improvement across Engineering Education"
- B.6 Two letters of support must accompany each nomination. Maximum length: 1 page. Preferably, letters of support should come from individuals who are not affiliated with the same institution as the nominee.
- B.7 Statement by nominator as to whether, to his/her knowledge, nominee will be present at the iNEER event in person to receive the award if it is awarded to him/her.

I will be at the iNEER banquet on Monday, 18 October 2004

B.8 Please attach a copy of the nominee's resume.

6208 Nelway Drive McLean, VA 22101-3137

October 5, 2004

iNEER Awards Committee, c/o iNEER Secretariat New Jersey Institute of Technology University Heights Newark, NJ 07102-1982

Re Leadership Award for Foundation Engineering Education Coalition

This letter is in support of awarding the Foundation Coalition one of your Leadership Awards.

Until my retirement two years ago I was in the Directorate for Engineering at the National Science Foundation as Senior Adviser for Engineering. My several duties included being the Program Director for the Foundation Coalition and the Gateway Coalition.

I have been very close to the two Coalitions, visiting all the members from time to time, being at all internal reviews and being the staff person when each Coalition was reviewed by external reviewers.

The purpose of the overall coalition program was to research and develop undergraduate engineering education on behalf of all engineering educators. Foundation was selected to be one of the coalitions to build on the earlier work of Dr. Carl Erdman of Texas A&M University. He died in the early stage of the Coalition and the leadership was passed first to Dr Karen Frair of the University of Alabama and finally to Dr. Jeff Froyd who by that time had myed from Rose-Hulman to Texas A&M.

The Coalition changed for the better how engineering education was carried out at the member schools, first by enabling members to adopt the best practices of their peers and then by detailed research on the various alternatives available to them. The members of the Coalition ranged from very large: Texas A&M, to the small: Rose Hulman Institute of Technology. Like the other coalitions is worked hard at outreach which is essential if the coalition program is to change engineering education as a whole, rather than just at the participating institutions.

The totality of the Foundation Coalition's achievements are fully documented at their website. They and the other coalitions have made a substantial contribution toward aiding US undergraduate engineering education achieve its full potential and thus improving engineering education in general.

I strongly endorse your recognizing the achievements of the Foundation Engineering Education Coalition.

Sincerely,

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William S. Butcher, Ph. D., P.E.

Phone 703 356 6003 Fax 703 448 5323 e-mail wsbutcher@cox.net



THE UNIVERSITY OF MICHIGAN

Assistant Dean for Undergraduate Education 1261 Robert H. Lurie Engineering Center 1221 Beal Ave. College of Engineering 647-7105 Ann Arbor, Michigan 48109-2117 647-7126

TELEPHONE: 734-FACSIMILE: 734-

To: John Carpenelli New Jersey Institute of Technology

From: Gary D. Herrin, Assistant Dean for Undergraduate Education, College of Engineering,

and Professor of Industrial and Operations Engineering

Subject: Support for Foundation Coalition (Jeff Froyd) Nomination for iNEER Award

Date: September 6, 2004

For the past 4 years, faculty from the University of Michigan and I have participated in an Innovations in Undergraduate Engineering Education conference sponsored by NSF. Each year, the Foundation Coalition (led by Jeff Froyd) plays a central role in organizing this miniconference; sharing experiences and leading discussions on how to implement the many advances in education practice that the Foundation Coalition has helped to develop. It is always an inspiration to me to learn who the real leaders are in undergraduate education innovations and to benefit from their research and experiences. I know the other participating universities (Univ of Wisconsin, Ohio State, Purdue, Smith College, Penn State, etc.) each benefit as well.

I also routinely refer my colleagues and others to the excellent website that is maintained by the Coalition to learn best practices and to benchmark our efforts with those of the Coalition. The Coalition and Jeff Froyd are most deserving of recognition for leadership in sharing best practices in engineering education pedagogy and in promoting improvement of learning by our students. I am pleased to add my support for the nomination of the Foundation Coalition and Jeff Froyd for this year's iNEER Award.



Dr. Michael A. Collura Department of Chemistry & Chemical Engineering School of Engineering & Applied Science October 7, 2004

Secretary-General iNEER

Dear Mr./Ms. Secretary-General:

I wish to express my support for the nomination of the Foundation Coalition for an iNEER Leadership Award. The Foundation Coalition, its director, Jeffrey Froyd, and its members are widely recognized for their world-wide impact on engineering education through their pioneering efforts during the past decade. The innovations developed and promulgated by the Foundation Coalition have been the catalyst for significant and lasting change in the way we view the education of future engineers. Their outreach has been global in scope, as evidenced by the international nature of participants in their workshops and seminars, their significant web presence and the voluminous citations of their work by engineering education researchers world-wide.

For many years there have been a few brave voices proclaiming the merits of active and cooperative learning as an effective teaching strategy. However, it was not until the efforts of the Foundation Coalition that the awareness of this issue has been raised to the level necessary for significant impact. By providing readily accessible workshops along with proven curricular materials, they have effectively converted an international body of engineering educators to become believers, practitioners and disciples of active and cooperative learning methods. The impact of this extends to improvements in retention along with quality of the education in engineering.

The work of the Foundation Coalition to increase the participation of women and underrepresented minorities in engineering is also of international importance. The recognition of cultural bias in the engineering education system is a first step in broadening the appeal and effectiveness of engineering education to a wider audience. The recognition that engineering will be practiced in a global economy highlights the importance of this aspect of the Foundation Coalition's work.

On a personal level, faculty at my university embarked on a journey to transform our engineering programs so as to better prepare graduates for the engineering work of tomorrow. After spending countless hours defining the characteristics needed by our graduates and researching what has been done to develop such attributes, we concluded that much of the work of the Foundation Coalition was aligned with our vision for engineering education. During the past couple of years we have been greatly helped by the materials developed by the Foundation Coalition as well as by articles published by engineering education researchers who have been influenced by work of the coalition. In addition, individual members of the Foundation Coalition have been exemplary in their willingness to work with us and encourage our efforts. I can honestly say that we would not have been able to make the very significant progress we have made in a relatively short period of 2 years without standing on the shoulders of the members of the Foundation Coalition.

I would urge you to act favorably on the nomination of the Foundation Coalition to receive a 2004 iNEER Leadership Award.

Sincerely, Michael a. Colluna

Michael A. Collura, Ph.D., P.E.

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