DEANS OF ENGINEERING AND DEANS OF EDUCATION: TAKING THE LEAD TO ENHANCE TECHNOLOGICAL LITERACY

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Abstract—Technological innovation is becoming increasingly important in our everyday lives. Educational systems have not been able to keep up with the technological advancements of the last 10 years. Engineers have been responsible for many of these innovations. It seems logical that engineers and educators should form collaborations that can help to prepare excellent teachers and engineers to meet the challenges of an increasingly technological world. The “Deans’ Summit” event is the first time that Deans of Engineering and Deans of Education have formally met with the express purpose of launching on-campus collaborations. This panel session will discuss the action plan developed by 60 pairs of Deans of Engineering and Education, from the same institutions, at “Taking the Lead: A Deans Summit on Education for a Technological World.” Panelists will share how engineers and educators, working together, can have a significant impact on curricula reform and teacher preparation.

Index Terms—collaborations, pedagogical enhancement, strategic plan, technological literacy.

BACKGROUND

With the growing influence and increasing complexity of technology, the public must have a certain level of technological understanding to make informed decisions and to attain a reasonable quality of life. It is crucial that future and current teachers have the resources, skills, knowledge and support necessary to empower students to be effective citizens, consumers and members of the workforce.

SUMMIT OVERVIEW

This session will feature a panel reporting on the Deans’ Summit held in Baltimore on 1-2 October 2001. This event, entitled Taking the Lead: A Deans’ Summit on Education for a Technological World brings together up to 60 Deans of Engineering and 60 Deans of Education, from around the world. Breakout groups at the conference will develop: 1. An overall strategic plan that will have broad impact on campus reform and 2. Specific action plans for each institution represented. Deans of Engineering and Deans of Education are in key positions to reflect the concerns of their faculty and to promote collaborative programs at their universities. They can facilitate a variety of joint ventures that can help to prepare excellent teachers and engineers to meet the challenges of an increasingly technological society. The panel will consist of up to 5 Deans who participated in the conference. They will present the Summit’s overall recommendations and summarize strategies and activities that colleges can implement to impact education reform in both engineering and education schools.

GOALS

Teacher preparation is a crucial issue and the Summit’s core mission is facilitating alliances that can work toward enhanced practices among science, mathematics, engineering and technology educators that will lead to improved teacher performance and student achievement. This can only be accomplished if the Summit succeeds in: 1. Opening up channels of communication, 2. Demonstrating the benefits of collaboration, 3. Developing specific, on-campus partnerships, 4. Facilitating on-going productive alliances, 5. Preparing university faculty to cooperatively address the standards in the areas of math, technology, and science, and 6. Promoting engineering and teaching as valued careers.

FOLLOW-UP

Participants are expected to return to their campuses with plans for collaboration that were agreed upon at the Summit. A variety of activities, both short term and long term will ensure that the strategic plan developed at the Deans’ Summit will be implemented and will launch future initiatives. These include: developing individual campus “action plans”, holding follow-up meetings, establishing an “Ambassadors for Collaborations” program, and conducting follow-up interviews with Summit participants.

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