The Green Report

Preface

Engineering Education for a Changing World

Released in October 1994, Engineering Education for a Changing World is a joint project report by the Engineering Deans Council and Corporate Roundtable of the American Society for Engineering Education.

The idea for this project originated last year at a joint meeting of the ASEE Engineering Deans Council Executive Committee and the ASEE Corporate Roundtable. Norman Augustine, Chairman and CEO of Martin Marietta Corporation and Chair of the Corporate Roundtable, suggested that with the end of the Cold War, engineering education needed a new set of guiding principles to replace those that had been developed following World War II. Rather than a world based largely on superpower competition and national security, engineers now faced a world of intense international economic competition and widespread public uncertainty about the uses of technology.

In response to this challenge, the ASEE Engineering Deans Council and the Corporate Roundtable held a planning meeting in November 1993, and developed an outline for the project. Since other studies of engineering education were ongoing, it was agreed that along with writing a short, action-oriented report, the project would do two things: focus on partnerships as a critical element in making change and produce a specific, feasible plan for implementation following release of the report. To provide guidance and oversight for the project, MIT President Charles Vest agreed to co-chair a national advisory council with Norman Augustine.

A two-day workshop was held in February 1994, to examine key issues in engineering education. The meeting was built around the work of five task groups--each assigned to look at a different aspect of the issues--which were made up of deans of engineering, corporate executives and government agency representatives. Based on the reports and recommendations of those task groups, the Project Board developed a draft report. It focused on areas we felt could make the biggest difference in helping engineering colleges meet the challenges of the new world of engineering.

We sent out the draft report to the workshop participants, every dean of engineering, the ASEE Corporate Roundtable members, and members of the project National Advisory Council. We were gratified by the enthusiastic response to the report; the comments were thoughtful and constructive and many have been incorporated into the report. It was also encouraging to learn that many engineering colleges already have been re-examining their colleges' mission and programs, and plan to use the study report to facilitate that process.

In June, we presented an outline of the report to an overflow crowd at a mini-plenary session at the ASEE annual conference. The resulting discussion showed us how important these issues were to engineering educators and how widespread was the view that engineering colleges needed to make significant change. To promote further discussion, the report will be made available on the Internet.

With publication of the report, we now look ahead to the implementation phase of the project. Over the next few years, the ASEE Engineering Deans Council will lead the effort to assess what engineering colleges are doing to effect change, refine the action items of the report, and set milestones for assessing future progress toward their implementation. We look forward to broad participation in that task.

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