

## **Dr. Richard E. Grace**

Dr. Richard E. Grace has devoted his career to the service of the academic community of Purdue University as a metallurgical engineering professor, founding head of the interdisciplinary engineering division, assistant dean of freshman engineering programs, University Vice President for Student Services, and most recently as founding director of the Undergraduate Studies Program. Today, there are literally thousands of Purdue students, alumni, and colleagues who have benefited from Dr. Grace's counsel and leadership.

### **Materials Engineering**

As a metallurgical engineering professor beginning in 1954, Dr. Grace taught undergraduate and graduate courses and supervised graduate research programs. He taught and mentored 1,000 metallurgical engineering students who are now Purdue alumni. His excellence as a classroom teacher was recognized early when he received the Bradley Stoughton Young Teacher Award from the American Society of Metals in 1962. To this day, as evidenced by the student testimonials included later in this summary, Dr. Grace continues to be regarded by students as an outstanding teacher. This reflects his well-established reputation for sensitivity to the needs of students, for helping them solve problems on the individual, class, or university level.

Within his School, Dr. Grace also took the initiative to create two new undergraduate programs—the Cooperative Education Program and the Interdisciplinary Program in Materials Science and Engineering—which filled previously unmet needs of many students. His abilities as a leader and administrator enabled him to serve as Head of the School of Materials Science and Metallurgical Engineering from 1965 to 1972.

“Dick Grace was the Head of Metallurgical Engineering when I was a student at Purdue. He has been my professor and my friend for over 40 years. During this time, he has taught me the process of asking and discovering the answers to the questions that have led to my growth as a man. This training allowed me to build a computer software firm that has grown over the past two decades to over fifty employees serving the institutional investment community throughout the United States. Dick Grace's dedication to teaching has led to success stories like mine for over four decades.”

— *Barry J. Effron*  
*President (Retired)*  
*Effron Enterprises, Inc.*  
*White Plains, New York*

“Dick Grace was one of the first true gentlemen that I had encountered in my life. Purdue was such an enormous university, and it was so easy to get lost in the numbers of students. But in Dick’s school, you were a person to be treated with great respect as an individual. He gave of himself to each of us, and as a result, we all are better learners, better graduates, and better citizens.”

— *Michael J. McCulley*  
*President and CEO (Retired)*  
*United Space Alliance*  
*Houston, Texas*

“Dr. Grace recognized an academic potential in me as an undergraduate long before I recognized it myself. ... The success and confidence I gained as one of his early materials science students has provided the framework upon which all of my professional success has been built.

“Dr. Grace has been a tremendous mentor, role model, and friend for me from 1961, when I first signed up for metallurgical engineering at Purdue, until today. He helped me with the hard choice between joining Admiral Rickover’s nuclear submarine navy or going to graduate school upon graduation, and throughout my naval career he has continuously been available for advice and counsel.”

— *Kenneth D. Barker*  
*Captain (Retired)*  
*United States Navy*  
*Suwanee, Georgia*

“Although Dick Grace was an excellent scientist in his own right and thus offered fine technical direction throughout my graduate studies, I believe the most lasting lessons involved his guidance on communication skills. [He] insisted on clarity and accuracy in both written and oral presentation of technical results. He believed that much of the value of an investigation would be lost if not presented well.”

— *Leon C. Walters, Ph.D.*  
*Division Director (Retired)*  
*U.S. Department of Energy*  
*Argonne National Laboratory*  
*Idaho Falls, Idaho*

### **Interdisciplinary Engineering**

In September 1969, Dr. Grace founded the Division of Interdisciplinary Engineering Studies. The impact of his accomplishment is substantial: this attractive and competitive program offered nontraditional majors in undergraduate engineering and prompted curriculum reform across the Purdue engineering spectrum. The keystone to the program was, and continues to be, self-discovery and individual counseling. Dr. Grace headed the division from 1969 to 1982, personally counseling more than 1,000 students and developing academic plans of study in fields such as acoustical, architectural, biomedical, environmental, nuclear, and systems engineering. Three of those engineering programs—Biomedical, Nuclear, and Environmental and Ecological Engineering—have since evolved into academic schools/divisions within the College of Engineering at Purdue University.

In addition, Dr. Grace established and advised IDEAS (Interdisciplinary Engineering Association for Students) and served as faculty adviser for Omicron Delta Kappa and Tau Beta Pi honorary societies. He wrote a key grant proposal to the Alfred P. Sloan Foundation that resulted in funding for the “Man Series” on the social dimensions of engineering. This program marked the first time Dr. Grace’s impact reached students outside of engineering, as he directed 35 professors in engineering, liberal arts and management who developed team-taught classes.

“Dr. Richard Grace is a proven innovator and motivator. His founding of the Division of Interdisciplinary Engineering provided me and countless other students the vehicle with which I could study engineering in depth, while retaining a larger view of continuing on in a related field in graduate school.

“Dr. Grace always took a keen interest in all the students enrolled in I.D.E. He provided personal counseling sessions regularly and watched our academic and social progress in school with the interest of a parent. He continues to keep in touch, even now after more than 25 years of separation.”

— *James F. Porcello, Patent Attorney  
Partner,  
Emch-Schaffer-Schaub-Porcello  
Toledo, Ohio*

“As a friend and former employee and student of Dr. Grace, I believe that his greatest influence on Purdue over the last 40-plus years has been as a highly respected mentor to students, alumni, faculty and staff alike.

“Dr. Grace is an outstanding gentleman, a devoted family man, a dedicated fraternity brother, a pioneering educator, a skillful businessman, an unparalleled administrator, and a dyed-in-the-wool Boilermaker.”

— *David M. Jones  
President,  
Edamar, Inc.  
Johnson City, Tennessee*

### **Freshman Engineering**

In 1981, Dr. Grace was chosen to be Assistant Dean of Engineering and Head of the Department of Freshman Engineering. His major responsibility: retention of Freshman Engineering students. He directed the guidance and counseling of about 2,200 students *each year*; thus, he had an impact on more than 10,000 engineering students from 1981 to 1987. Dr. Grace designed and implemented the Engineering Admissions Index (EAI), used to admit freshman engineering students into the professional programs of study. He also supervised three Freshman Engineering initiatives that evolved into nationally recognized models:

- Freshman Honors Program
- Minority Engineering Program
- Women in Engineering Program

“As a freshman engineering student I was apprehensive about college and a long way from home. Dr. Grace went far beyond his responsibilities as an adviser and made Purdue feel like home. He was a friendly face in the sea of strangers. As Vice President for Student Services, he has taken the opportunity to make Purdue feel like home to all students. Many past and present Purdue students, myself included, consider Dick Grace a professional and close personal friend, a true testimonial to his dedication to Purdue.”

— *Gregory M. Ayers, M.D., Ph.D., FACC*  
*President,*  
*Ayers Medical Consulting, LLC*  
*Eastsound, Washington*

“Dr. Grace ... went far beyond his responsibilities to me as Dean of Freshman Engineering. I'll never forget when he scolded me for dropping a class because I felt it was too difficult. He made me add it back and work that much harder to succeed—I got an A.

“He gave me and other students odd jobs to do around his house to earn money when things were really tight. All these gestures were done silently, without any attention or limelight.”

— *W. Andrew Wells, M.D.*  
*Otorhinolaryngology*  
*Augusta, Georgia*

## Student Services

From 1987 to 1995 Dr. Grace's impact broadened beyond the frontiers of engineering to encompass all of Purdue, including the regional campuses. In essence, he had an impact on the life of 65,000 students every year.

At Purdue, the umbrella of “Student Services” covered 13 departments and divisions offering enrollment, retention, and quality-of-life services. More than 400 personnel collaborated to provide these services, which required an annual budget in excess of \$22 million.

As Vice President for Student Services, Dr. Grace's major contribution was to unify the various departments in order to improve and personalize the quality of service for *every student* at Purdue University. In pursuit of this end, he was the first to implement several total quality management (TQM) projects to improve recruiting, retention and graduation rates:

- Creating vision, mission and goals to unify all student service activities,
- Instituting Quality Student Services (QSS), a year-long project to obtain student feedback about daily operations in every department,
- Developing and implementing a multi-year Staff Satisfaction project to improve creativity and excellence, communication between departments, and staff training and development,

- Organizing student organization leaders to promote retention of beginning freshman students with an “Ask Me” discovery program, and
- Leading the Undergraduate Student Entry (USE) project to create integrated and seamless operations between Admissions, Financial Aid, Registrar and Bursar for beginning freshmen and their families. In 1995, Purdue's first electronic Application for Admission/Preliminary Financial Aid Estimate was launched in dial-in modem format; by 1998 Purdue’s electronic application was fully on-line.

Always a popular speaker, Dr. Grace met with approximately 50 student organizations each year. He also served as faculty advisor to Iron Key, a senior leadership honorary society.

“Dr. Grace’s confidence and belief in my abilities helped inspire me to pursue my doctorate and a career in research. His advice to me as a graduate student and young engineering professional continue to guide the directions and goals I set for myself.”

— *Timothy L. Jacobs, Ph.D.*  
*Director of Operations Research*  
*US Airways*  
*Tempe, Arizona*

“By working closely with Dr. Grace through such groups as Iron Key and the Athletic Affairs Committee, I discovered his genuine concern for the best interests of Purdue’s students.

“Many times throughout my career at Purdue, Dr. Grace took extra effort to encourage me to strive for excellence in all aspects of my life. Even though some goals seemed unreachable to me, he was a great cheerleader and gave me support in any way he possibly could.”

— *Julie Eddleman*  
*Marketing Director*  
*Procter & Gamble*  
*Cincinnati, OH*

“Dr. Grace’s involvement with Purdue is more similar to a life description than a job description. This is a man who has dedicated his life to his University. He has chosen to remain in educational administration when he could be in industry. He has chosen to work in this field because he has the drive to make things happen, and he sincerely desires to make a difference in higher education.

“Dr. Grace is a friend to the students of Purdue. He has opened his office, his weekends, and his home to students and alumni. If there is one thing that I will remember the most about my interaction with Dr. Grace, it would be that he taught me to follow my dreams, to pursue my goals with all the passion and drive that I have.”

— *Kristen Doster Manz*  
*Quaker Oats*  
*Houston, TX*

## Undergraduate Studies Program

Beginning in 1995, Dr. Grace became the Founding Director of the Undergraduate Studies Program, a pilot initiative he designed and implemented to provide academically qualified, beginning students a new opportunity to enroll at the West Lafayette campus and explore academic and career options before choosing a major or a College. The primary focus: to improve recruitment and retention of undecided/exploratory undergraduates. Through 1999, more than 1,000 beginning students had enrolled in the Undergraduate Studies Program (USP), and their grade point average surpassed the campus-wide average for freshmen. In 2001 the University Division was merged into the Undergraduate Studies Program. The combined enrollment of undecided/exploratory students who are seeking or changing majors now exceeds 1,100 annually.

One hallmark of the program was the special three-credit course, EDPS 200, Life and Career Planning, designed specifically to help USP students discover both themselves and an appropriate college major. Based upon student evaluations, Dr. Grace was selected in 1999 “as one of three departmental nominees for the School of Education’s Outstanding Faculty Teaching Award.” [Dr. Grace declined the nomination in favor of younger faculty members whose careers were “on the rise.”]

“Professor Grace was my instructor in EDPS 200. I was undecided in my major and between his guidance and instruction, I was able to choose my major. He was always available for after-class help and was more than excited to be in class teaching. As a senior looking back on my education, Professor Grace was the instructor that stands out as the most influential individual and professor.”

— *Robert Little*  
*B.A. in Communications*  
*August 2000*

“When I arrived as a freshman enrolled in the Undergraduate Studies Program, Dr. Grace was one of the first people I met. Not only did he provide me with a program that would help me decide on a major, but he also worked very hard to make me feel welcome on this rather large campus.

“As a student in EDPS 200, I had the opportunity to have Dr. Grace as a professor. The class was designed to help students explore different majors and become familiar with Purdue’s campus. Dr. Grace got to know each of the students in our class. Not only was he concerned with where our lives were headed, but he also made it a point to be sure that we felt comfortable being at Purdue. It was wonderful to have an advisor and professor care enough to get to know me as a person and help me find the best path for my future.”

— *Carrie Drake*  
*B.S. in Civil Engineering*  
*May 2001*

“I was a student in one of Dr. Grace’s EDPS 200 classes for first-semester students with undeclared majors. As a professor, Dr. Grace showed a great interest in each and every one of his students. He was always willing and happy to work with students individually, during or out of class, and help in their progress. On several occasions, I stayed after class to ask him questions about what we were learning in

class or about problems with my progress in choosing a major and career, and he would always take the time to answer my questions, or redirect me to people who could. Dr. Grace always showed a positive attitude and did his best to motivate everyone in the class.”

— *Alexis Clymer*  
*B.S. in Computer Science*  
*May 2003*

### **Other Higher Education Service**

From 1995 to 1998, Dr. Grace was the Founding Coordinator of Purdue’s Service Learning activities with the Indiana Campus Compact, which serves as this state’s link in a national chain of more than 600 colleges and universities committed to helping students develop public service skills. Dr. Grace’s leadership encouraged students in service learning—experiences that engaged them in community service as an integrated part of their academic coursework.

During 1997-1999, Dr. Grace served as chair of the NCAA Athletics Certification Self-Study Steering Committee, a team of 24 students, faculty members and senior administrators who conducted a self-study project for the first NCAA certification of Intercollegiate Athletics at Purdue.

Dr. Grace also served as co-chair of the Class of 1951 class gift project during 1996-2001. This project included the restoration of Memorial Mall and “Hello Walk” and the creation of a Steven C. Beering scholarship at a total cost of \$875,000.

For more than 50 years, beginning in 1956, Dr. Grace has served as faculty adviser to Purdue’s chapter of the Phi Gamma Delta fraternity; in 1958 he founded and presided over the Lambda Iota Graduate Corporation. In 1980 he created the “Richard C. Grace Outstanding New Member” award, and in 2002 he co-chaired the Lambda Iota Chapter Centennial.

### **Community Service**

Dr. Grace’s efforts have also made an impact in non-academic areas. For example, in 1983 he chaired the United Way campaign at Purdue, reorganized the team captain structure and raised \$256,000—106% of the goal. From 1993 to 1995, he served as president of the Lafayette Symphony Foundation Board of Directors. Under his leadership a campaign to raise \$500,000 was completed, bringing the assets of the Foundation to \$2 million.

Upon appointment from Governor Mitch Daniels, Dr. Grace served on the Indiana Commission on Aging from 2005 to 2010. This Commission is advisory to the Division of Aging, Family and Social Services Administration (FSSA).

Dr. Grace and his wife have endowed several major awards:

- Richard E. and Connie F. Grace Award for the woodwind sections of Purdue's All-American Marching Band and Symphonic Band,
- Richard E. and Connie F. Grace endowment of the principal Horn Chair in the Lafayette Symphony Orchestra,
- Connie F. and Richard E. Grace endowment to acquire and conserve works in the permanent collection of the Art Museum of Greater Lafayette,
- Richard E. and Connie F. Grace Freshman Scholars in Purdue's Undergraduate Studies Program,
- Richard E. and Connie F. Grace Engineering Education Fund in Purdue's School of Engineering Education, College of Engineering, and
- Richard E. Grace Engineering Education Fund in Purdue's School of Materials Engineering, College of Engineering.

### Summary

The distinguished career of Dr. Richard E. Grace at Purdue University has been marked by close, personal, life-shaping involvement with thousands of students as a teacher, mentor, and creator of new opportunities for undergraduate students. He has established a shining name for creative problem-solving, especially among undergraduate students. His devotion to students has made him an award-winning teacher, a peerless counselor, a sought-after advisor to student groups, and a tireless advocate on behalf of Purdue's entire student body. Even after his retirement as a University Vice President in 1995, he continued to create and design new programs, such as the Undergraduate Studies Program, which will benefit students into the 21st century.

Upon his retirement from Purdue University in 2000, he was named Vice President for Student Services Emeritus and Professor Emeritus of Metallurgical Engineering. In 2002, Dr. Grace published *When Every Day Is Saturday*; subtitled *The Retirement Guide for Boomers*, this book is based on his recent research with 700 retirees from Purdue University and Eli Lilly Tippecanoe Laboratories. In 2010, the Purdue Press published a second, revised edition of *When Every Day Is Saturday*.



In 2008 Dr. Grace was honored with “A Celebration of Discovery: Dedication of the Richard E. Grace Conference Room and Creation of Endowment” in the School of Materials Engineering, Armstrong Hall of Engineering.

In 2008 Dr. Grace also participated in the Purdue Libraries Archival *Oral History Program* (video and transcription of Purdue history). In 2011 he completed a Memoir about the history of Freshman Engineering at Purdue University.

Dick and his wife, Connie, have received awards from the Wabash Valley Trust for Historic Preservation (2009) and Indiana Landmarks (2011). They have been recognized for their research, service, leadership and stewardship in historic preservation, particularly for their Mid-Century Modern house in West Lafayette. In 2012 their house was listed on the National Register of Historic Places, United States Department of the Interior.

Dick and Connie Grace live in West Lafayette, Indiana and winter at Longboat Key, Florida.