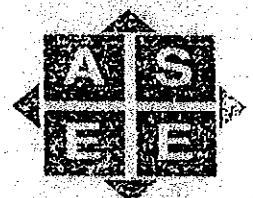


# American Society for Engineering Education

## Civil Engineering Division



April 1999 Newsletter

Editor: Daniel J. McGinley

### MESSAGE FROM THE CHAIRMAN

As the June Annual Conference in Charlotte, North Carolina draws nearer, I hope that many of you are making your final plans to attend. The current Program Chair is Jim Nau (North Carolina State University). Jim has the responsibility for the entire schedule of Civil Engineering Division events. Certain it is, that he and the committee chairs have been working hard to set up interesting, useful civil engineering sessions. Having worked on sessions for a number of years, I know how much effort goes into the preparation for the conference. I particularly want to thank all those who are working to make this conference a success. You will find a schedule of Civil Engineering Division sessions and more conference details elsewhere in the Newsletter.

In looking back over the December Newsletter I note that we paid tribute to Bill Wilhelm, last year's winner of the George K. Wadlin Award and to Professors Cabral, Viau, and Dard last year's recipients of the Glenn L. Martin Best Paper Award. What we failed to include in that Newsletter was the recognition received by Civil Engineering Division Director Stephen J. Ressler, for the development of the outstanding "West Point Bridge Designer" software. For this effort, he received the Educom Award. Congratulations, Steve.

In order to effect a more orderly transition, the Civil Engineering Division conducted officer elections earlier than usual this year, and I am pleased to announce the following results:

**Chair-Elect/Program Chair:**  
Samuel P. Clemence (Syracuse University)

**Director (1999-2002):**  
Vincent R. Drnevich (Purdue University)

Congratulations to both. In line with the usual rotation, Jim Nau (NC State) will succeed me as division chair during the annual conference.

With the election ballot we asked for suggestions to rename the R.A.P. Session. The few responses that I received included:

- Keep session unchanged
- Change to Jam Session
- Change to CHAT (Civils Having Amicable Talk)
- Change to CEED (Civil Engineering Educational Discussion or Discourse or Deliberation or Diatribe)

I don't know whether the last acronym implies that the CE Division has gone to seed, but there is certainly room for more suggestions – and they will be welcome up to and at the Annual Conference.

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**See y'all in  
Charlotte, NC!**

**MESSAGE FROM THE CHAIRMAN**

(continued from page 1)

In the minds of many, the most startling development coming from ASCE during the past year is the policy statement that supports the concept of the Master's degree as the First Professional Degree for the practice of civil engineering at a professional level.

It is both good and appropriate that there be a lot of discussion on the subject. The December Newsletter devoted considerable space to the topic. You will hear more about it in Charlotte when you attend the Annual Conference. Unfortunately, there have been times when the pros and cons (and there are many of both) have been lost in the rhetoric. I have avoided becoming passionate on the subject; perhaps because I will have retired and probably be deceased long before the policy could ever be implemented. I am going to take advantage of this opportunity; however, to get in my two-cents worth.

The current four-year degree does not meet the federal definition of a learned profession. Further, I object to any implication that the civil engineering graduate is less of a professional than a graduate in architecture. Finally, arguments that universities would be unable to meet this demand seem to be somewhat of a red herring – I am sure that universities would be more than pleased to develop appropriate programs, particularly in the time frame that will be involved. How will ASCE get the myriad of registration boards to buy into this concept? I am going to end this column before trying to answer that question!

*Alan Prasuhn PE  
Lawrence Technological University*

**GEORGE K. WADLIN AWARD**

This award recognizes someone who made a major contribution to Civil Engineering education and has been a contributor to the CE Division of ASEE. Wadlin Award recipients have been:

1998	<b>Bill Wilhelm</b>	1992	Colby Ardis
1997	Gerry Seeley	1991	Marvin Criswell
1996	Dan McGinley	1990	Ronald Eck
1995	Walt LeFevre	1989	Glen Martin
1994	Fred Beaufait	1988	Peter Hoadley
1993	James McDonough	1987	George Wadlin

Recommendations for the 1999 Awards may be sent to:

William E. Kelly  
Dean of Engineering  
The Catholic University of America  
Cardinal Station  
Washington DC 20064

## ByLaws Committee

**HISTORY IN THE MAKING**

The CE Division Bylaws Committee is proposing the following amendment to the existing Bylaws in order to ensure the formal recording and retention of the history of the Division. Proposed additions are in *italics* and deletions are crossed through

Section 4 Duties of the Officers, Directors, Executive Board, and Editor and Historian

Section 4.1 through 4.7      No Change

4.8    *The Historian*

*The Historian shall:*

4.8.1 *Be appointed by the Executive Board for a five year term and shall serve on the Executive Board as a voting member.*

4.8.2 *Be responsible for maintaining the historical documents (minute's treasurer's reports, etc.) of the Civil Engineering Division.*

4.8.3 *Be responsible for the editing, production and circulation of the publication "Civil Engineering Division Chairs."*

4.8.4 *Be responsible for other Division publications as directed by the Executive Board.*

Section 5. Election of Officers      No Change

In accordance with Section 9-Jurisdiction and Amendments, these Bylaws may be amended by a majority vote of the active members present at the Annual Business Meeting of the Division. That meeting will occur on Monday, June 21, 1999 in Charlotte, North Carolina, Session 1415 of the ASEE Annual Conference and Exposition.

*Sam Clemence, PE  
Syracuse University*

**GLENN L. MARTIN AWARD**

The 1998 Glenn L. Martin Best Paper Award went to Alexandre Cabral, Rolland Vianu and Denis BJ Dard for *Situated Learning and Motive Strategies to Improve Cognitive Learning in CE.*

Have you written a paper for the 1999 competition?

## Leadership Forum

**NSPE'S ROLE IN ENGINEERING EDUCATION**

Early in the 20th century there were patent experts who believed that all that could be invented had been invented. However, continuous development has proven this belief false. In communications alone over the past twenty years we have improved telecommunications with faxes, cellular technology, caller identification, call forwarding, call waiting, and with the internet e-mail for message and data transfer. Engineers have also migrated from the use of slide rulers and drafting tables to computers for calculations and computer-aided designs for improved quality and faster delivery. As a result of these technical developments, engineers must have lifelong learning to remain current in the use of technological tools.

What does this have to do with NSPE's role in engineering education? NSPE and all technical societies must play a significant part in providing members with opportunities to quickly obtain and use new skills and tools of the trade. NSPE continues to offer courses to its members at chapter, state, and national meetings. Courses include the *Project Manager's Notebook*, *Lobbying as if Your Profession Depended on It*, *Virtual*

*Universities: Your On-Line Options, Leadership in the New Millennium, Breaking Through the Glass Ceiling, Alternative Disputes Resolution (ADR) - A Lawyer's Perspective, Tools for Automating Specification Production*, and many more.

NSPE is currently working with ASCE, the American Consulting Engineers Council (ACEC), and the Virtual Education Corporation (VEC) to develop course materials available through the Internet to meet member needs on an as-needed basis.

NSPE has been focusing on understanding member needs from which we will identify the types of products and services to provide, including educational programs. These continuing education programs will be offered by various delivery systems.

Several states have passed legislation requiring Continuing Professional Competency (CPC) for licensed professional engineers (PEs) to maintain their licenses. NSPE can and must assist PEs by offering courses that meet the regulatory educational requirements for maintaining their credentials. In addition to offering courses to its members, NSPE maintains a comprehensive tracking database containing individual records on all courses taken. This clearinghouse is the Professional Development Registry for Engineers and Surveyors (PDRES). When members need a record of their courses for personal use or submittal to the state's licensing board for compliance, PDRES can supply a complete transcript.

**Welcome!**  
*This column features the thoughts of civil engineering's foremost leaders. Our second series article is authored by NSPE's new Executive Director, Pat Natale*

Along with lifelong learning for engineers, there are several issues in the undergraduate level of engineering education that NSPE has concerns about. NSPE strongly encourages the teaching of engineering ethics as an important part of the Bachelor's level curriculum to start engineers on the proper footing for their careers.

There has been much discussion to reduce the requirement for undergraduate degrees to 120 credit hours. Most engineering programs currently have requirements in excess of 130 hours. The threat of reducing this to 120 hours could have a major impact on the education of future engineering graduates. The drop to 120 hours could result in a reduction of courses in the student's major, in their elective courses or the elimination of humanities courses. This could also affect the addition of the ethics training supported by NSPE. In states where the credit hour limitation is being discussed, engineering programs have generally been exempt. NSPE encourages all engineering schools to maintain a strong, well-rounded program with greater than 120 hours to ensure a well-educated engineering graduate best prepared to enter the workforce.

Another issue being discussed is the concept of the First Professional Degree, which is being spearheaded by ASCE. Engineering would become a five-year program with the student graduating with combined BS-MS degrees. This concept would provide engineers with post-undergraduate degrees when

entering into the market. The idea is still being considered and is a worthy topic, with the "jury" still out. However, as Ernest Smerdon noted in a March 1999 President's Letter in the ASEE *Prism* magazine, "The US Department of Education does not recognize engineering as a professional field because it does not consider any four-year baccalaureate degree program as adequate for a professional degree. This may call for a move to establish the master's degree as the minimum education necessary to enter the profession." NSPE will consider this concept in order to take an official position as the debate continues.

Smerdon also noted in the same column that licensure is an important credential for achieving professional status. NSPE encourages all students to begin working towards obtaining a PE license immediately after graduation. NSPE also continues to partner with technical society student chapters to promote the importance of licensure.

There have been significant changes and developments in the 20th century; however, in the next millennium, changes will come at a much faster pace. NSPE will continue working to serve the educational needs of its membership and the engineering community.

*Patrick J. Natale, PE  
Executive Director  
NSPE ♦ 1420 King Street ♦ Alexandria, VA 22314-2794  
(Phone) 703-684-2820 ♦ (Fax) 703-519-3763  
(email) [pnatale@nspe.org](mailto:pnatale@nspe.org) ♦ <http://www.nspe.org>*

American Society of Civil Engineers

**EXCEED ★ WISE ★ CE CONGRESS ...and more!****ASCE'S FACULTY DEVELOPMENT INITIATIVE:  
PROJECT EXCEED**

ASCE has launched a new education program (Faculty Development Initiative or FDI) that will give civil engineering instructors around the country an opportunity to improve their teaching skills. Kicking off the initial stage of FDI—dubbed Project ExCEED (for Excellence in Civil Engineering Education)—this summer will be the first in what is expected to be an annual series of teaching workshops. C.E. professors will follow a protocol that has been successfully lab-tested at the nation's oldest engineering school, the U.S. Military Academy at West Point.

Project ExCEED is comprised of three programs: the ExCEED Teaching Workshop (ETW), the ExCEED Program Design Workshop (EPDW), and the ExCEED Effective College Teaching Seminar.

For applications and more information on these workshops, visit the ASCE web site <http://www.asce.org> or call April Tucker (703) 295-6267.

**NATIONAL CIVIL ENGINEERING EDUCATION CONGRESS**

The Education Programs Committee (EPC) of EdAC has planned the first-ever National Civil Engineering Education Congress in conjunction with the 1999 Civil Engineering Conference & Exposition in Charlotte, NC, for October 17-20, 1999. The program in Charlotte will be launched on Saturday (October 16, 1999) with a 1.5-day pre-conference workshop on "Effective College Teaching" sponsored by ASCE's Project ExCEED -- and will continue with a full education program for the next four days. The 1999 National Civil Engineering Education Congress is scheduled to include 13 ninety-minute presentation/discussion sessions, two mini-plenaries (special sessions) with nationally eminent speakers, a special breakfast program

with an address by David Billington, and a full three-day student program including a three-hour National Civil Engineering Job Fair. The Program Chair for the Education Congress in Charlotte is Jerry Rogers of the University of Houston. Please contact Jerry (Tel: 713-743-4276; Email: [djrogers@flash.net](mailto:djrogers@flash.net)) or April Tucker ([atucker@asce.org](mailto:atucker@asce.org)) if you have any questions about the program.

**FACULTY SALARY SURVEY**

As a service to members, ASCE conducted a Civil Engineering Faculty Salary Survey in the fall of 1997. Copies of the report were distributed to all Civil Engineering Department Heads in January 1998. The report may be useful in upgrading faculty salary scales. For additional information or copies of the report, contact Janine M. Jescavage at (703) 295-6080 or email [jjescavage@asce.org](mailto:jjescavage@asce.org).

**WASHINGTON INTERNSHIPS FOR STUDENTS OF ENGINEERING**

Fifteen engineering students entering their final year of undergraduate studies have been selected in a nationwide competition to spend ten weeks this summer in Washington, D.C. Grant Bennett, a student at Colorado State University, has been chosen to represent the civil engineering discipline for the 1999 WISE Program. During the internship students will learn how government officials make decisions on complex technological issues, and how engineers can contribute to legislative and regulatory public policy decisions. Throughout the ten weeks, the students will interact with leaders in Congress and the Administration, industry, and prominent non-governmental organizations. A stipend of \$1,800 is provided; lodging and travel expenses will also be covered. Participants are housed in a dormitory on the campus of George Washington University.

**DEPARTMENT HEADS ROSTER**

A complete roster of all 1998-99 Civil Engineering/Technology Department Heads, including addresses, phone/fax numbers, and email addresses, is available from ASCE's Educational Activities Department. Complimentary copies have been mailed to all Civil Engineering/Technology Department Heads. To purchase a set of pressure-sensitive labels or copies of the roster, contact Deborah Connor at (703) 295-6025 or [dcconnor@asce.org](mailto:dcconnor@asce.org).

**ASCE / ABET PROGRAM EVALUATORS NEEDED / ENGINEERING CRITERIA 2000 PROGRAM EVALUATOR TRAINING OPPORTUNITIES**

ASCE is seeking qualified civil, construction and architectural engineering educators and practitioners to serve as ASCE/ABET Program Evaluators. ABET team members evaluate engineering programs, from their area of engineering expertise, as well as gain an overall perspective of the host institution. Confidential post visit evaluations are prepared and integrated into the final review. *All current and prospective evaluators must attend an EC2000 training session before visiting a program* (Charlotte, NC Sun., June 20, 1999). For additional information on how you can become involved, contact ASCE at (703) 295-6080 or email to: [jjescavage@asce.org](mailto:jjescavage@asce.org).

*Tom Lenox  
ASCE*

Visit ASCE on the World Wide Web

**<http://www.asce.org>.**

EdAC maintains pages containing basic organizational information including a list of divisions/committees, how to join, staff information, benefits of participating in program activities, and grants information. In addition, the ASCE Site is linked to the ABET home page containing program criteria for architectural, civil, and construction engineering.

ASEE ANNUAL CONFERENCE &amp; EXPOSITION ◆ JUNE 20-23, 1999

**BUSINESS MEETINGS, MEAL AND SOCIAL EVENTS**

*The program for the Civil Engineering Division has been finalized.*

*The activities include four technical sessions, five meal events, and one RAP session for open forum discussion. Please review the following program and make plans to join us in Charlotte this June.*

Session 1115  
7:00 to 8:15 am  
Monday June 21

**Civil Engineering Executive Board Meeting Breakfast**  
(ticket price \$11)

This is the annual Civil Engineering Executive Board business meeting. All CE Division officers, directors, and standing committee chairs should attend. Those not wishing to eat breakfast may attend free of charge.

Session 1415:  
12:30 to 2:00 pm  
Monday June 21

**Civil Engineering Business Luncheon**  
(ticket price \$20)

This is the annual luncheon and meeting of the CE Division. All members should attend. A ticket is required for lunch. Those not wishing to have lunch may attend free of charge.

Session 1915  
7:30 to 10:00 pm  
Monday June 21

**Civil Engineering RAP Session**

(ticket price FREE)

Location: Atlantic Beer & Ice Company, 330 North Tryon Street (See map.)

This is the annual RAP Session, an open discussion of issues of interest to civil and environmental engineering educators and practitioners. All members are encouraged to attend. Please come to share your views and enjoy your favorite beverage and munchies.

Session 2815  
7:00 to 10:00 pm  
Tuesday June 22

**Civil Engineering Social and Dinner**

(ticket price \$40)

Location: Bistro 100, 100 North Tryon Street, in Founders Hall, NationsBank Corporate Center, (See map.)

This off-site social gathering is open to members, guests and friends. Division awards will be presented.

Session 3415  
12:30 to 2:00 pm  
Wednesday June 23

**Chi Epsilon Luncheon**

(ticket price \$20)

This is the annual Chi Epsilon luncheon with presentations. A ticket is required for lunch. Those not wishing lunch may attend free of charge.

Session 2415  
12:30 to 2:00 pm  
Tuesday June 22

**Civil Engineering Planning Luncheon**

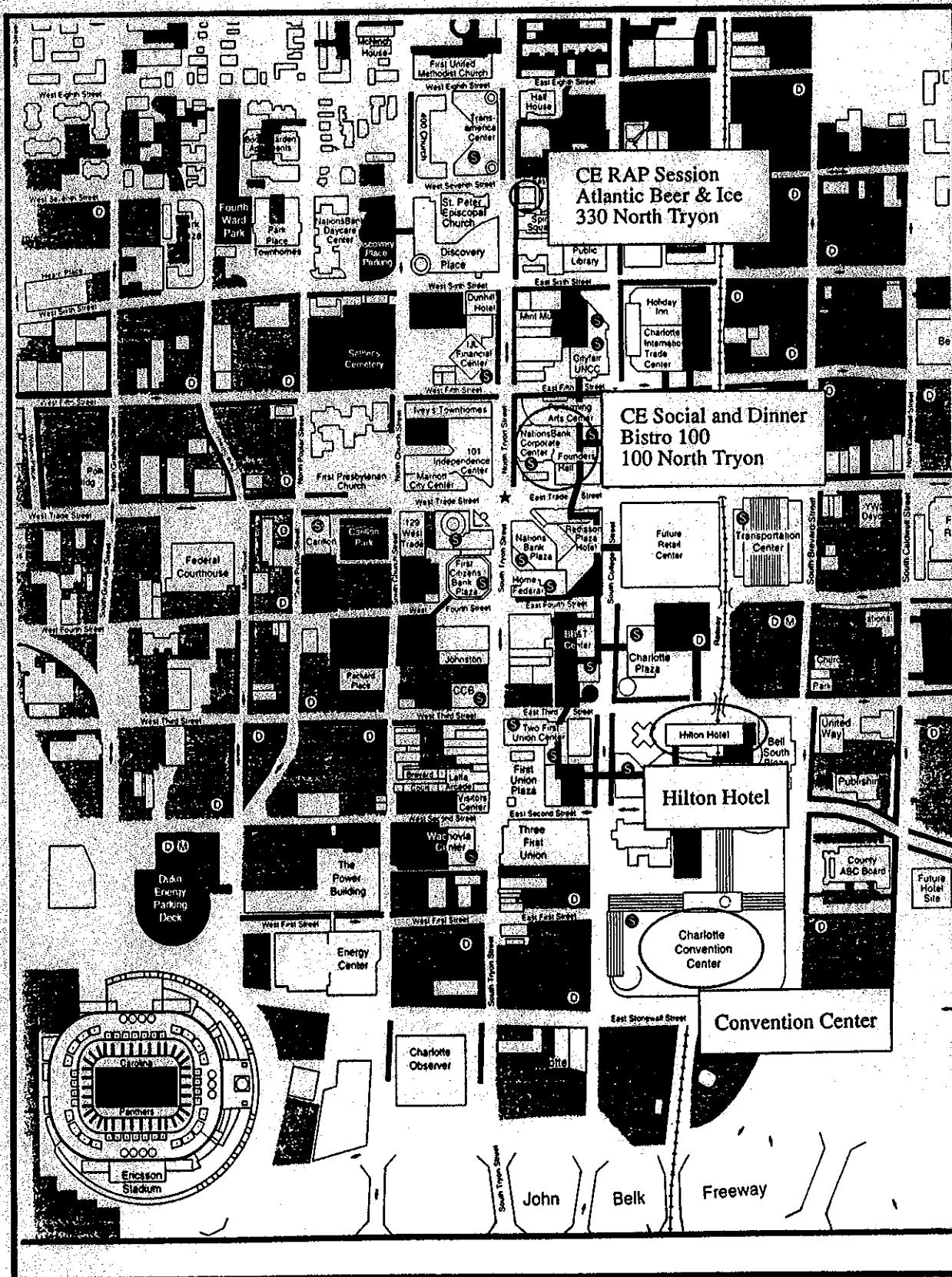
(ticket price \$20)

Plans for the 2000 ASEE Annual Conference will be finalized and planning for the 2001 conference will be initiated at this meeting. All members should attend. A ticket is required for lunch. Those not wishing to have lunch may attend free of charge.

*The moderator for all business meetings, meal and social events is Alan Prasuhn, Chair of the Civil Engineering Division.*

**ASEE ANNUAL CONFERENCE & EXPOSITION**  
**JUNE 20-23, 1999**  
**CHARLOTTE CONVENTION CENTER**  
**CHARLOTTE, NORTH CAROLINA**

ASEE ANNUAL CONFERENCE &amp; EXPOSITION ♦ JUNE 20-23, 1999

**LOCATION MAP**

ASEE ANNUAL CONFERENCE &amp; EXPOSITION ♦ JUNE 20-23, 1999

**TECHNICAL SESSIONS****COUNT'EM DOWN  
TO CHARLOTTE!**

*Your Program Chair's Top  
Twelve List of the 101 Reasons  
to Come to Charlotte in June*

12. To attend a Durham Bulls minor league baseball game in Durham, NC, a stone's throw from Raleigh. (A lot of fun, I guarantee!)
11. To visit the campuses of our rival institutions, Duke U in Durham (the home of the 1999 NCAA Basketball Runners-up Blue Devils) and the University of North Carolina at Chapel Hill (the Tarheels, yuck!).
10. To visit Raleigh, the capital of the Old North State, only three hours away. Come on over after the conference for a personal guided tour of North Carolina State U and the Department of Civil Engineering. We have a grand new Construction Facilities Laboratory where we are able to conduct large and full scale experimental research in structural engineering.
9. To visit your Vice/Program Chair's hometown, Hickory, North Carolina, only one hour from Charlotte.
8. To visit the North Carolina Zoological Park, near Asheboro, only a little over an hour from Charlotte.

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**Session 1315: 10:30 to Noon, Monday June 21****Use of Information Technology to Enhance CE Education**

Session: Committee on Computer Applications

Moderator: Robert Henry, University of New Hampshire

Abstract: This session will discuss innovations in and current uses of microcomputers, virtual classrooms, the world wide web, asynchronous learning networks, and multimedia to assist student learning in civil engineering education. The negative impacts that improper uses of information technology can have will also be discussed.

## Presentations:

- "Integrating Upper-level Undergraduate Students with Graduate Students Through a Video-taped Course in Hydrology," Paul Mathisen, Worcester Polytechnic Institute.
- "Enhancing Construction Engineering Education Using Internet Based Tools," Anil Sawhney, Prawit Rotsawatsuk, and Andre Mund, Western Michigan University.
- "Multimedia Geotechnical Laboratory Testing," Muniram Budhu, University of Arizona.
- "SEVE: Update on Development," Robert Henry, U of New Hampshire.

**Session 1615: 4:30 to 6:00 pm, Monday June 21****"Soft" Engineering Skills in CE Practice**

Sponsor: Committee on Professional Practice

Moderator: Robert Tener, Purdue University

Abstract: Session participants can learn what is meant by "soft" skills, what CE practitioners expect in BSCE graduates, and how these skills are assessed.

## Presentations:

- "Needs for Soft Skills in Smaller Civil Engineering Firms," Harold J. Farchmin, Graef,Anhalt, Schloemer & Associates, Inc..
- "Improving Listening, Teamwork, and Leadership Skills through Innovative Civil Engineering Classroom Experiences," Robert Green, Virginia Military Institute.
- "Teaching Moral Reasoning Skills Within Standard Civil Engineering Courses," Sal Arnaldo, Public Works Department, City of Tallahassee.
- "Self-Efficacy Concepts and the Evaluation of Instruction," David Haws, Boise State University.

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7. To visit the beautiful Outer Banks of North Carolina, only hours away. Wide, white sandy beaches, the Wright Brother's Memorial in Kitty Hawk, and the Cape Hatteras National Seashore. The Cape Hatteras Lighthouse is in the process of being moved!
6. To visit the fabulous Biltmore House & Gardens in Asheville, only several hours away.
5. To visit the Blue Ridge Parkway, perhaps the most scenic highway in America, only several hours away.
4. To visit The Great Smoky Mountain National Park, only several hours away.
3. To visit Reed Gold Mine, less than one hour from Charlotte.
2. To visit the Mint Museum in Charlotte. This US Mint was in operation from 1838 to 1861 and minted gold coins from the precious metal obtained from the first gold rush in America. (Coin collecting is a hobby of your Program Chair.)

*And the Number One Reason...*

1. To participate in a great event, the 1999 ASEE Annual Conference, and the activities of the Civil Engineering Division.

*The opinions expressed above are those of a native of North Carolina and may not necessarily reflect the sentiments of the organization... except during the year he is the Chair of the CE Division!*

**TECHNICAL SESSIONS**

(continued from previous page)

**Session 2315: 10:30 to Noon, Tuesday June 22****Innovative CE Laboratory Experiences**

Sponsor: Committee on Teaching Methodology

Moderator: Steve Ressler, United States Military Academy

Abstract: This session will present the development, implementation, and assessment of innovative civil engineering laboratory experiences, including virtual labs and simulations.

**Presentations:**

- "Reinforce Design and Construction Issues with a Comprehensive Laboratory Project," John Schemmel, University of Arkansas.
- "CEE 2602, Civil Engineering Measurements: A Hands-On Introduction to the Profession," Frank Falcone and Edward Glynn, Villanova Univ.
- "Early Experimentation with Civil Engineering Materials," James Hanson, Lawrence Technological University.
- "Innovative Laboratory Experiments that Enhance Civil Engineering Design," Beena Sukumaran, Rowan University.
- "Use of a Small-Scale Models Testing Laboratory to Teach Structural Dynamics," Anant Kukreti and Benjamin Wallace, Univ of Oklahoma.

**Session 2515: 2:30 to 4:15 pm, Tuesday June 22****Master's Degree as First Professional Degree?**

Sponsor: Committee on Educational Policy

Moderator: Dennis Fallon, The Citadel

Abstract: One of the major questions which the civil engineering profession is debating is the requirement that the Master's degree should be the entry level degree. This session will address the pros and cons of this issue.

**Presentations:**

- "Why Four Years?" Howard Epstein, University of Connecticut.
- "On Professional Degree Requirements for Civil Engineering Practice," James Yao and Loren Lutes, Texas A&M University.
- "Innovative Master's Degree in a Professional Program," Ed Koehn, Lamar University.
- "MIT's Master of Engineering Program in Civil and Environmental Engineering--A First Professional Degree," Eric Adams and Rafael Bras, Massachusetts Institute of Technology.
- "Professional Masters Program: A Model for the Five Year Professional Degree," Phillip Gould and Kevin Truman, Washington University.



## MOST CIVIL ENGINEERING PROFESSORS ARE WIMPS

Thomas E. Mulinazzi, Ph.D.  
University of Kansas

### INTRODUCTION

When I applied to be the Associate Dean for the School of Engineering at the University of Kansas, I took this career step because I felt that I could improve our admissions standards. I saw several students who, in my opinion, didn't have the qualifications to be accepted into graduate school. I was not ready for the reactions that I received from some of my fellow faculty members in the Civil Engineering department.

There are three times when a faculty member could make a decision relative to a graduate student:

- (1) admission (2) grading in a course and (3) examinations (prelims, qualifying, comprehensive, or final defense). Let's analyze each of these in more detail:

### ADMISSIONS

Many Civil engineering faculty members cannot tell a student face to face that the student is not qualified for graduate school. Whenever a student walks into my office and says Professor "Jones" has recommended that he, the student, should come to me and discuss graduate school, I already know what the answer will be - a resounding NO. If the student were qualified, the professor would have been more than happy to pass on the good news. By sending the student to me to receive the bad news, the professor can then say, "I wanted you in graduate school, but the Dean wouldn't let you."

One C.E. professor signed a plan of study for a student's Ph.D. program and the student had not completed his MS degree. When I asked the student why he was submitting a Ph.D. Plan of Study, the student said that he "wanted" to continue on for a Ph.D. degree. Having heard some comments about this student's inability to carry on research at the MS level, I approached the professor who had signed the Plan of Study. The professor informed me that the particular student in question was not qualified to go on for a Ph.D. degree. I then asked him why he signed the student's Plan of Study. The professor responded that he never intended for that to mean that the student was acceptable as a Ph.D. student.

He just signed the piece of paper because the student wanted him to sign it. In reality, this professor could not say NO to this student and I had to be the bearer of "Bad News." That same student continued on at KU for a second MS degree in Civil Engineering. His second committee gave him a "C" for his MS project and sent the student on his way.

It has also been my experience that a persistent student will prevail. If a student keeps asking for admission long enough, someone will let him into graduate school. As Engineering professors, we must keep in mind that not everyone should go on for a graduate degree, even if they want to, for whatever reason. I have heard a wider range of reasons for admissions. One student hit me with a serious guilt trip. "If I am not accepted into graduate school, I will have to return home and join the army. I will probably be killed, and it will be all your fault." He is now in the Iraqi army, I think.

There must be a control placed on all academic programs. The control can be either with admissions, with a tough grading policy or with difficult examinations and/or defenses. It is my opinion that it is easier to control admissions than it is to control the other two areas.

**Many Civil Engineering faculty members cannot tell a student face to face that the student is not qualified for graduate school.**

### GRADING

This was the area that surprised me the most. I never realized that a vast majority of my colleagues gave only "A's" or "B's" in graduate courses. If we had high admissions standards, this policy would be great. But with the large number of students accepted on either a probational or provisional status, the grading must reflect the true capabilities of the graduate students. If only "A's" and "B's" are given, then everyone will meet the requirements of the probationary or provisional admission, and no one will ever be dismissed.

Certain Civil Engineering professors do give "C's" or lower in their graduate classes. These professors are usually avoided by the marginal or submarginal students, who have a "book" on the professors. During my time as Associate Dean for graduate studies, out of approximately 500 students I never saw more than 35 grades of "C" or lower in graduate courses. Come on people! Are we really being fair to the students if we give them passing grades, which indicate that the students can perform at a certain level?

One C.E. professor signed a plan of study for a student's Ph.D. program and the student had not completed his MS degree. When I asked the student why he was submitting a Ph.D. Plan of Study, the student said that he "wanted" to continue on for a Ph.D. degree. Having heard some comments about this student's inability to carry on research at the MS level, I approached the professor who had signed the Plan of Study. The professor informed me that the particular student in question was not qualified to go on for a Ph.D. degree. I then asked him why he signed the student's Plan of Study. The professor responded that he never intended for that to mean that the student was acceptable as a Ph.D. student.

to leave and never return. Not only did the student plagiarize his MS project, but he could not answer the questions asked of him based on his course work. After the student had left the room, one of the committee members made the following comment: "I should not give all 'A's' in my classes." This particular student had earned three "A's" from that committee member.

More of us must be stronger and give the students the grades they earn. The students will be mad and you will feel uncomfortable for a while, but the profession is depending on you to educate qualified graduate students.

### EXAMINATIONS

Have you ever heard of the statement, "He has gotten this far, it would not be fair to flunk him at this point?" Or have you heard, "The student has committed so much time and effort to his degree program, we really should pass him." I disagree strongly with both of these comments. Admission into a graduate program does not guarantee a graduate degree. Some of my colleagues do not seem to agree with this last statement. These are the same colleagues who will push to get everyone and anyone admitted to the graduate school. Are we really being fair to the student and to the profession if we send an unqualified graduate into the Civil Engineering profession? Who will suffer? The graduate will soon find out that he is not qualified to perform and the school will lose any good reputation it had with the employer.

I have sat in on many MS examinations and Ph.D. examinations. I am amazed and shocked at the general feeling that the student must pass the exam. Why call the exercise an exam if it is nothing more than a friendly discussion? Some of our students bring in cookies, cake and soft drinks for the committee to enjoy during the exam. Ladies and gentlemen, the final MS oral exam or the Ph.D. final defense is not meant to be a social event or an afternoon tea! If the student has not met the requirements, the student should not receive the degree.

I still appalled over the incident where a thesis option MS student in C.E. was in her final MS defense when the committee decided that her work was not really MS thesis level work. They switched the student to a non-thesis option and awarded her a MS degree based on her "project report." If the thesis was unacceptable, the student should not have received the degree. The good guy complex again.

Several of my colleagues are very hesitant to ask any questions, let alone difficult questions, on oral examinations. Why agree to be on an examining committee if you are afraid to ask tough questions? Have you ever sat for a graduate final defense without having read the thesis or dissertation? I was shocked last semester to find out that this is a common practice among some of my C.E. colleagues. Now I know why they don't ask questions. The purpose of most oral examinations is not to flunk the student, but to determine if the student knows the basics and to see how the student can defend his professional opinion. I feel that the various examinations that exist in graduate schools are there for a purpose. One of which is to assure that without competency not everyone who wants a graduate degree can get one.

### CONCLUSIONS

Everyone wants to be seen as a "good guy". This is referred to as the good guy complex. If one can pass the responsibility for a negative response onto someone else, then the other person is the "meany". As the Associate Dean for the School of Engineering at the University of Kansas, I feel that I have to wear the hat of the "meany". I guess that is why Associate Deans make the big bucks; they have to take the blame for many of the negative decisions affecting students.

I strongly believe that the best place to control the quality of our graduate engineering programs is at the admissions phase. If we only have qualified students entering our graduate programs, then the grading and the examination policies really do not matter. Many times we are tempted to accept a body, any body, in order to have a G.F.A. or G.R.A. My advice is to keep this thinking to a minimum or else the quality of our undergraduate programs will also suffer.

## SPEAKING OF DEANS...

As a teacher I am faced with an interesting problem every year regarding whether I want to spend time with my students or focus on my research. The answer is, "Take both." While I am a firm believer in research, I also believe that my students are important and a professor's job is to teach. I try to balance the two, spending time with the other, and I can get in the lab and get some work done.

First a video, now a complete course in...

## APPLIED ETHICS

In ten short years, the Institute for Professional Practice (IPP) has established itself as a key provider of educational programs for engineering and science students, faculty, recent graduates and emergent practitioners. IPP programs focus on creating an understanding of professional and ethical responsibilities encountered in practice.

Now IPP, a non-profit engineering society dedicated to helping engineering students and recent graduates in their professional development, has produced a new instructional module entitled *Applied Ethics in Professional Practice* to provide students and emergent engineers with an understanding of the factors impacting ethical decision making in engineering practice.

The program is structured around a constructivist philosophy: that the learners will have a better grasp of the concepts when they construct their own knowledge of professional ethics, as opposed to passively being told how to make value based decisions. This philosophy is appropriate for both college-aged students and professionals with several years of practice.

This new course module, including a participant's reader, instructor's guidebook and presentation overheads will be available in May 1999.

It complements "Testing Water ...and Ethics", IPP's 28-minute video addressing ethics released last May. Over 250 copies of the video and accompanying workbook are already in circulation.

The video program costs \$150, but college/university faculty may obtain single copies for \$100. The new course module including a participant's reader, instructor's guidebook and overheads costs \$150. Contact IPP at 1-888-IPP-2723.

*Sam Clemence, PE  
Syracuse University*

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**CELEBRATING OUR 10<sup>TH</sup> ANNIVERSARY**

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Editor's Column

## STEP UP TO THE CHALLENGE

Retired Army General Colin Powell looks you in the eye (most likely from your television) and asks you to become a mentor. That person who signs your paycheck "asks" you to participate on yet another interdepartmental committee. Your spouse (kids, neighbor, friend, etc.) points out an opportunity for some additional community service... and the list goes on, and on, and on.

It used to be just phone lines, bumble bees and gossips were "busy." Today, it's the all too real knee-jerk response to the question "How are you?"

Modern technology has given us all the opportunity to be more productive; to contribute more to our employer's prosperity, our community's success, and our Nation's well being. Albeit at some expense.

While you're working late on an important project, who is attending the town council meeting? While you're raising funds for the Heart Association who is running the Rotary Club? While you're coaching, who is having dinner with your clients?

Buzzwords like "quality time" and "multi-tasking" are taking their toll on volunteers. Prioritizing the many things we "need" to do, often leaves no time for the things we "want" to do. Yet, the NSPE Code of Ethics clearly states (Section III.2.a) "Engineers shall seek opportunities to be of constructive service in civic affairs and work for the advancement of the safety, health and well-being of their community."

That would imply that, in addition to doing the best job possible for your employer, it's necessary to give the "rest" of your time to other important endeavors.

There are over six hundred members of the ASEE CE Division. Try to imagine all 600+ contributing ideas, information, insights and leadership abilities toward the advancement of Civil Engineering education.

The opportunities are endless. Consider making your talents available to the ASEE CE Division soon; so we don't need to go to the University of Tennessee just to see "Volunteers" (neat nickname) in action!

*Dan McGinley  
Editor*

**THANK YOU** for taking the time to read this newsletter AND for sending me your input. If you have suggestions, please call 973-857-6511 or e-mail: [Bridge2PE@aol.com](mailto:Bridge2PE@aol.com)

## Program Summary

### Civil Engineering Division, ASEE - 1999 Meeting: Charlotte, North Carolina

SESSION TIME	MONDAY, JUNE 21	TUESDAY, JUNE 22	WEDNESDAY, JUNE 23
7:00 to 8:15 a.m.	Session 1115: CE Div Executive Board Meeting and Breakfast		
8:30 to 10:15 a.m.	Session 1115: (cont'd)  <i>Main Plenary</i>		<b>SEE INSIDE FOR DETAILS</b>
10:30 to Noon	Session 1315: Use of Info Technology to Enhance CE Education	Session 2315: Innovative CE Laboratory Experiences	
12:30 to 2:00 p.m.	Session 1415: CE Div Business Meeting and Luncheon	Session 2415: CE Div Planning Meeting and Luncheon	Session 3415: Chi Epsilon Luncheon
2:30 to 4:15 p.m.	<i>Focus on Exhibits/ Poster Session</i>	Session 2515: Master's Degree as First Professional Degree?	
4:30 to 6:00 p.m.	Session 1615: "Soft" Engineering Skills in CE Practice		
Evening	Session 1915 (7:30-10pm) <b>CE RAP Session</b> Atlantic Beer & Ice Co. 330 North Tryon Street	Session 2815: (7:00-10pm) <b>Annual CE Social &amp; Dinner</b> Bistro 100 100 North Tryon Street	Session 3805: <b>ASEE Annual Awards</b> <b>Banquet</b> (reception starts at 6:30 p.m.)

### ASEE Civil Engineering Division

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