From the Director’s Screen
How do you measure success? Program Director Wayne Pferdehirt finds answers in “real learning.”

Focus on Students
Jennifer Culp’s Engineering Applications of Statistics class project helps to save product runs and money for her company.

Focus on Faculty
Harry Steudel talks about teaching in MEPP and some of his consulting experiences, including training at the base of a volcano in Costa Rica.

Focus on Alumni
Alumni start MAD, the second annual MEPP Alumni Development Series conducted via Webconferencing.

Feature Article: Evaluation
Learn why you have all those evaluations to complete—even after graduation—and how your answers help to improve the MEPP program.

Technology Update
Get a preview of new learning technology that MEPP will be testing and possibly using next semester and beyond.

Overheard in the Forum
Find out what statistics and swimsuits have in common and read other humorous comments from the EAS discussion forum.

Announcements
Newsletter naming contest
Upcoming academic dates
Upcoming open houses for potential students
MEPP, the next generation
Promotions and job moves
MEPP in the news
“Real learning gets to the heart of what it means to be human. Through learning we re-create ourselves. Through learning we become able to do something we never were able to do. Through learning we re-perceive the world and our relationship to it. Through learning we extend our capacity to create, to be part of the generative process of life. There is within each of us a deep hunger for this type of learning.”

Peter Senge, The Fifth Discipline

It is now eight years since Tom Smith and a group of colleagues in the Department of Engineering Professional Development began planning the program that eventually became MEPP. It is four years since we began admitting students to the first cohort, the Class of 2001. As we begin to admit the Class of 2005, I find myself attempting to measure the program’s progress in a variety of ways. For example, it is genuinely exciting to realize that 82 of the 83 students admitted to the Classes of 2001, 2002, and 2003 will have graduated this Spring. Despite the rigor of the curriculum, student support for one another, combined with the genuine dedication of faculty and staff, have produced truly incredible results.

The success of MEPP can also be measured by the external validations of the program’s results. Selection of the program in 2002 by the University Continuing Education Association for its top award shows that the program equals the quality of the best graduate degree programs – whether on or off campus. The most meaningful measure of success, however, is not numbers or accolades. The most significant measure is that of a changed life. Peter Senge says that in real learning, “we become able to do something we never were able to do...we re-perceive the world and our relationship to it.” That’s the kind of learning we strive to achieve within MEPP. Here are a few quotes from MEPP students and graduates that reveal the tips of this “real learning” happening within MEPP.

“I think my participation in the MEPP program has helped me to organize my life. It has helped me to look at what I’m doing; what are my goals—not only for this year but for the next five years, for the next ten years. And, while I think it’s something that’s healthy for everyone to do, I don’t think everyone stops and does it. So I think that my effectiveness as a human being has improved because I’m paying attention to myself and my needs and, therefore, doing a better job at everything that I’m touching.”

“I can vaguely remember two years ago when my career was stagnant and the future did not look bright. It’s amazing how much a person can grow in two years. Since starting MEPP, my career has turned 180 degrees. Trying to maintain a balance of family, school and work has forced me to reevaluate my entire future. As a result, the goals that I set for myself two years ago are steadily becoming a reality.”

“Through the past couple of years I stopped whining like an engineer—that management doesn’t know what it is doing—and started understanding what makes business work. I became one of the problem solvers instead of just a resource to be managed. I could sit at meetings and quietly explain to engineers why marketing needed the project timeline moved up in words they understood, whereas a year before I would have been on the other side of the fence. In short, I matured.”

“My change of perspective has been dramatic. My filter to the world had been almost entirely an engineer’s perspective. MEPP gave me the opportunity to put on the shoes of the financial controller, customer, management, stockholder, or the manufacturing department needing to assemble what engineering hath wrought. The credibility required of a leader comes not only from expertise but from the understanding, relationships, and trust of the people with whom we interact.”

Being able to read and treasure those kinds of quotes makes it all worthwhile to MEPP faculty and staff. It’s about lives changed. That’s how success is really measured.
Focus on Students: The $500,000 Class Project

By Karen Al-Ashkar

[Editor’s note: In this regular column, we plan to feature stories about students and their learning. If you have an interesting story about a MEPP project or learning experience, please send it along to Karen or Wayne.]

It all began with clogged screens. In most cases, this might not be as bad as it sounds, but in this particular case the clogged screens were fouling up a run that could easily cost the company half a million dollars!

Jennifer Culp, Class of 2003, decided the clogged screen issue would be the focus of her class project for Engineering Applications of Statistics...in effect killing two birds with one stone, or perhaps more aptly said, solving two problems with one project.

Jennifer works for a multi-national pharmaceutical company and she knew that having screens stay clear during runs had the potential to save the company millions of dollars. She designed an experiment to test the effects of varying some of the process parameters.

After seeking approval from her management, she tested each set point for five consecutive days, with one run each day. The testing took six weeks for a total of six different configurations. The outcome was measurable, the project was accomplished, the results were disseminated, and product runs were saved. Nice work, Jennifer!

Focus on Faculty: Harry Steudel

By Greg Kearsley

Harry Steudel teaches the Quality Engineering and Quality Management (QEQM) course which MEPP students take in their final Spring semester. He is a P.E. and has been consulting since 1974.

Harry has had the benefit of using the tools and techniques he teaches in the QEQM course many times in real-world settings. He explains, “Last month I finished helping a multi-site 700+ person manufacturing company in the Chicago area to implement and get certified an Integrated Quality and Environmental Management System based on the ISO 9001:2000 and ISO 14001 international standards. Since these standards require continuous improvement, many of the tools and concepts in the QEQM course were applicable.

“I did a similar project a few years back in Costa Rica, and have helped organizations in Canada, Chile, Mexico, and the USA to improve their quality systems. Doing a three-day management training seminar outside on a deck at the base of a volcano in a rain forest in Costa Rica was certainly a ‘memorable’ experience. My voice became hoarse trying to talk over the noise of the parrots, but the project was very successful for the client, allowing them to be the first certified company in the country.”

Regarding his MEPP teaching experience, Harry says, “There are so many things that I find rewarding in teaching the QEQM course. First and foremost, I really enjoy teaching the high caliber of students who collectively have great experiences in quality engineering and quality management, a topic I love. This creates a two-way learning environment rich in opportunities for both giving and receiving knowledge. It is especially rewarding to me when some students report back that their semester class project and the tools and process used to accomplish it have had a real benefit to them, the people they

Continues...
To learn more about Harry Steudel, see his faculty home page at [http://www.engr.wisc.edu/ie/faculty/steudel_harold.html](http://www.engr.wisc.edu/ie/faculty/steudel_harold.html).

The second annual MEPP Alumni Development (MAD) Series kicked off in December 2002. We invite all alumni to join us via Web conferencing for any or all of the upcoming sessions.

**January 14:** PLACEWARE AND BEYOND, Rich Berg and Milly Jones

**February 11:** ENGINEERING ETHICS, Sarah Pfatteicher

**March 11:** FACILITATING ENGINEERING TEAM PROJECTS, Bill Cesario

**April 15:** COACHING SKILLS, David Antonioni

**May 13:** OPEN DISCUSSION

All sessions are scheduled for Tuesday evenings, from 6:00-9:00 pm (Central Time).

**Access Instructions**

Meeting URL: [http://www.placeware.com/cc/wislineweb/P?id=Alumni&pw=Series](http://www.placeware.com/cc/wislineweb/P?id=Alumni&pw=Series)

Or [http://www.placeware.com/cc/wislineweb/](http://www.placeware.com/cc/wislineweb/)

On the “Enter Meeting” page that appears, supply this information:

- Your Name: (enter your name)
- Meeting ID: Alumni
- Meeting Key: Series
- Audio Information: 888-677-9189 or 265-1000 Code 0938#
- Trouble Number: 800-442-4614

For more information, contact Don Schramm by e-mailing schramm@engr.wisc.edu, calling 608-263-7757 or visiting the Alumni Forum in MEPP Community.
Feature: Evaluation in MEPP

By Greg Kearsley

As all MEPP students know, we do a lot of evaluation in the program. Every semester we ask students to complete evaluations for each course. Plus, there are the evaluations to do at the end of summer residencies. And at the end of the program (ya-hoo!), there is a program evaluation to complete. There is even a follow-up evaluation that we ask graduates, their coworkers, and bosses to do approximately six months after finishing the program.

The main purpose of all these evaluation activities is quality improvement. We look at the data for specific elements of courses, the program, or summer residency to see if they are satisfactory and getting better since the previous assessment. When the data indicates we have a problem, we take whatever actions are needed to address the problem. We are also looking for ideas about how to improve any aspect of the courses or program that we can. The comments that are provided whenever we ask for suggestions are reviewed carefully by faculty and staff. As the saying goes: “We get our best ideas for improvement from our customers.”

The data collected from the program and graduate follow-up evaluations is especially important in terms of convincing our constituency (i.e., employers who sponsor students, the University and College of Engineering) that the program is effective and achieving its goals. Underwriting the tuition or operating costs of MEPP is a significant financial investment and people want to be assured they are getting good value. So far, the data indicates that MEPP works well and is worth the money!

Summaries of each evaluation are distributed to MEPP staff and faculty for review and discussion. We also share them with the MEPP Advisory Board members as part of our program status reports. We plan to publish results in future editions of this newsletter, too. Keep in mind that all data is recorded and reported anonymously, so the confidentiality of individual respondents is ensured.

Overheard on the Forum

We will be using this column to share with you some humorous or otherwise interesting recent postings to the discussion forums in courses or MEPP Community. For our first installment, we are borrowing a few postings to Conrad Fung’s course, Engineering Applications of Statistics. In one of Conrad’s forums, he and current students share famous quotes about statistics. Here are a few of the gems from Fall 2002.

“Statistics are like a swimsuit. What they reveal is suggestive, but what they conceal is vital.”
Aaron Levenstein

“People commonly use statistics like a drunk uses a lamppost - for support rather than for illumination.”
Mark Twain

“If you took all the economists in the world and laid them end to end, they wouldn’t reach a conclusion.”
Conrad Fung

An engineer, a physicist, and a statistician were moose hunting in northern Canada. After a short walk through the marshes they spotted a HUGE moose 150 meters away. The engineer raised his gun and fired at the moose. A puff of dust showed that the bullet landed 3 meters to the right of the moose. The physicist, realizing that there was a substantial breeze that the engineer did not account for, aimed to the left of the moose and fired. The bullet landed 3 meters to the left of the moose. The statistician jumped up and down and screamed “We got him! We got him!”
Author Unknown

“Prediction is difficult, especially about the future.”
Yogi Berra

“Management means decision-making without information.”
Conrad’s first boss

“42.7% of all statistics are made up on the spot”
Steven Wright

Thanks to Conrad and the Class of 2003, whose observations have a margin of error of 4.36%.
MEPP students and alumni have lived through and have lived with a number of changes in the “platform,” which supports workflow and communications in the program. On the server side, we have had changes in WebCT and Placeware as well as the addition of Docushare, Zoomerang and the “My UW” portal. On the client side, the software has settled down pretty well, but the operating systems issues hit a new all-time high this year with the introduction of Windows XP. We’re not done with that one yet and expect that students and staff will have to invest considerable time in upgrades in the coming year. We will continue to post relevant information on this topic at MEPP Community.

What’s on the horizon is, however, even more interesting. DocuShare V 3.0 provides real workflow management, more user control, an improved client and integrated Web publishing and a number of other features. We will try this out in the spring and introduce it with Network Skills, next summer. The user interface is not much different, so that second year students will be able to catch up with a little practice during residency. We are also trying a new communications tool called “Sparrow Web” [http://www2.parc.com/istl/projects/sparrow],” which sits on top of DocuShare and provides Web-logging as well as user editable Web pages. This looks like a good replacement for those endless strings of e-mails we endure in the course revision cycle and we’ll let you know how it works. I think that there is a lot to be said for Web-logs in the business world and there have been a number of news stories on this topic lately. Do a little searching and you will be amazed what you’ll find.

We’re also looking at decision support tools, such as “Groupsystems” and a more robust testing and survey tool, such as QuestionMark. Finally, the university system is evaluating competitors to WebCT, including Blackboard, LearnWise and Desire2Learn. WebCT may still be the winner, but there will be close examination of the competitors. If it were up to us, I think we would prefer to simply use the “My UW” portal to support individual tools. That way we

could pick the threaded discussion, gradebook or quizzing tools that we like best and integrate them through the portal.

If you want to hear more about any of these topics, post a message at MEPP Community or send an e-mail to smithtw@engr.wisc.edu. With PlaceWare, we can do some demonstrations and have a little fun with the tools.
Announcements

**Name the Newsletter Contest**
Help us find a name for this newsletter and give it a personality. Post your suggestion in the Newsletter Forum in MEPP Community. The newsletter committee will review your suggestions and award the submitter of the winning name a Bucky Cross pen.

**MEPP Open Houses**
MEPP is conducting open houses for potential applicants via Webconferencing at the dates and times listed below.
- January 21, 2003
  - 11:00 am–12:30 pm Central
- January 22, 2003
  - 7:00–8:30 pm Central
- February 17, 2003
  - 7:00–8:30 pm Central
- February 20, 2003
  - 11:00 am–12:30 pm Central
- March 12, 2003
  - 7:00–8:30 pm Central
- March 14, 2003
  - 11:00 am–12:30 pm Central

Please let colleagues know about these opportunities. More information and online registration are at [http://mepp.engr.wisc.edu/](http://mepp.engr.wisc.edu/)

We can also conduct an information session exclusively for engineers at your company via Webconferencing or in person. We've already scheduled presentations for John Deere, Waukesha Engines, GE Medical Systems and the US Air Force. Please contact Tom Smith at 800-462-0876 to schedule a session.

**Academic Dates to Remember**
- Spring semester begins January 21, 2003
- Commencement May 16–18, 2003
- Summer semester begins June 16, 2003
- Residency 2003 August 17–22, 2003

**MEPP, The Next Generation**
Congratulations to the following MEPP students who have recently added to their families. [Hmmm, I wonder if they were they taking notes in the session at residency with tips from second-year students? ;)]

- Kathy Suchoknand
  - Savanna Arrie Nalamliang, May 25
- Jennifer Culp
  - Keegan Dale, May 18
- Ganesh Iyer
  - Aaina, June 5
- Brian Pearlman
  - Laura Rose, July 17
- Steve Heuer
  - Jacob, October 17
- Corey Honl
  - Allison Rose, October 24
- Dave Schoff
  - Micah David, November 19
- Andy Archer
  - Addyson Michelle, December 5

**MEPP Promotions, Job Moves**
**Chris Byrne** (02) has decided to bring an end to his 12 year career on the International Space Station Program, and join a new Boeing organization called Homeland Security & Services. The current project is the Explosive Detection System for US airports. Boeing has the overall integration contract for these systems. Chris will be taking a systems engineering position, where he plans to use all of his MEPP training to help lead the way.

**Larry Flowers** (02) has accepted a new assignment as the Division Operations Manager for ISG-Hennepin, in Hennepin, Illinois. ISG (International Steel Group) is a recently formed company composed of five independent steel producing facilities. Larry will be responsible for the day-to-day operation of a 1.2 MM ton per year, flat rolled cold strip finishing facility.

Continues...
**Mike Joiner** (02) has transferred from the Boeing Renton facility to the Everett facility where he will work on the new Sonic Cruiser program.

**Jim Miller** (02) has been promoted to Manager of Power Transmission Systems Engineering at Dayco Products (MarkIV Automotive). He acknowledges that what he learned in MEPP helped in getting this promotion.

**Bob Satori** (04) has been promoted to Engineering Manager for the Structural Design and Analysis group at Manitowoc Cranes, Manitowoc, Wisconsin

**Jim Shoemaker** (01) has been accepted for a position of Staff Engineer at Deere’s Corporate Technical Center in Moline, Illinois. The job qualifications required an MS with a Ph.D. desirable, but he says MEPP has afforded him this opportunity.

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**MEPP in the News**

MEPP has been featured in several publications and at conferences during 2002.

“Mid-career engineers connect with master’s via UW online program”
April 12, 2002, The Business Journal

“Engineers choose a degree of distance”
May 2002, NSPE Engineering Times

“MEPP: A Case Study in Online Education”
Article by Greg Kearsley in The Technology Source, an online journal

“Designing a Web-Based Graduate Degree Program Optimized for Adult Professionals Learning at a Distance”
Chapter by Wayne Pferdehirt in Using Distance Education Technology: Effective Practices, University of Wisconsin-Extension, 2002

“Support in a Distance Education Environment”
Article by Karen Al-Ashkar in eLearn Magazine, Fall 2002

“In the Online Classroom: Teaching Communication for Technical Leadership”
Paper presented by Paul Ross and Gisela Kutzbach at the October 2002 ASEE Regional Conference held in Madison, Wisconsin.

PDF versions these and other articles are available in the “MEPP in the News” folder in DocuShare at MEPP Community.