Joseph and Victoria Cotchett

Education is the Initial Journey, Doing for Others is the End Result
Affirming the Vision

As we go to press with Cal Poly's 2003 Annual Report, California, The California State University and Cal Poly are in many respects at a crossroads.

The state is emerging from a serious budget crisis resulting in reduced enrollments and, for the first time ever, redirection of some CSU-qualified applicants to the community college system. The Governor's recently proposed budget compact would renew funding for higher education, with emphasis on meeting California's scientific and technical work-force needs, by increasing the number and quality of science and mathematics teachers and increasing university degrees in science and technology disciplines.

This forward-looking commitment is vital at a time when California's public universities are experiencing rising enrollment demand from a new and diverse generation of students. We are also experiencing a significant turnover in faculty, as the many faculty hired in the 1960s and 1970s reach retirement age. And the state's public education system is facing growing challenges in serving students, particularly in science and mathematics.

Cal Poly's efforts to meet the work-force needs of the state, by mentoring a new generation of students and faculty and supporting science and mathematics education, are central themes of the 2003 Annual Report.

Throughout the university's history, the faculty and staff's close involvement with students has been a hallmark of a Cal Poly education. Today, our faculty and staff continue to take pride in their role as student mentors. The Annual Report shares examples of their dedicated work.

Over the last several years, Cal Poly has hired 135 new tenure-track faculty members, nearly 20 percent of the entire 2003 tenure-track faculty. They are extraordinary in their quality, enthusiasm and commitment to Cal Poly. The Annual Report profiles several of these new professors and a few of the ways in which Cal Poly is mentoring them.

Finally, support from alumni is indispensable, as we implement Cal Poly's new campus Master Plan and expand and strengthen our capacity to serve students, particularly students in agriculture, architecture, engineering, science, mathematics and related fields so critical to the future of the California economy.

The Annual Report shares the story of an extraordinary, generous gift by Cal Poly alumnus Joe Cotchet (ENGR '60) and his wife, Victoria. They are helping the university increase the number of science and mathematics teachers it educates—especially teachers for the state's underserved urban areas.

We hope you will enjoy this second edition of Cal Poly's Annual Report, and we look forward to hearing back from you with comments and suggestions for future editions.
Mentor (mĕnˈtôr) n. A trusted counselor or teacher, especially in occupational settings.
Joseph W. Cotchett (ENGR '60) and his wife, Victoria, look at life as a series of journeys – education, discovery, giving back – that enrich the soul and lead to a higher destiny for themselves and others.

It is the journey to “give back” that has brought Joe Cotchett full circle to his alma mater, Cal Poly. The couple recently donated $2 million and bequeathed an additional $5 million to support science and mathematics teacher education initiatives at Cal Poly through the University Center for Teacher Education and the College of Science and Mathematics.

To honor them, the university has renamed its landmark “clock tower” building the “Cotchett Education Building.”

The Cotchetts have a long, distinguished history of community and civic involvement. The Hillsborough residents have spearheaded new community initiatives, contributing time and countless resources to numerous organizations throughout the state. The list of awards they have received for their “giving back” is extraordinary.

“When I first enrolled at Cal Poly, it was the start of an incredible journey, leading to a destination that allowed me to help others,” Joe Cotchett says. “Victoria and I want to give back so that others may experience this journey, to become part of the special academic arena of Cal Poly. Our goal is to help others less fortunate in the inner cities of our state to realize their potential as productive citizens.”

Joe Cotchett believes one way to ensure success is to support teaching, research, program development, student learning and outreach in teacher education at Cal Poly.

A portion of the gift to Cal Poly will fund the Cotchett Summer Institute for science and math teachers. The program aims to give K-12 teachers from urban schools the skills to enhance their teaching of science and math. The gift will also permit renovation of a University Center for Teacher Education science and mathematics teaching laboratory in the Cotchett Education Building, create a new professorship, and establish student scholarships and fellowships.

Being an advocate comes naturally to Cotchett, who is considered one of the best trial lawyers in the nation. In what he calls his “journey” of nearly 40 years in the legal arena, he has built a reputation as a relentless defender of the less fortunate and a crusader for ethics in the legal profes-
For the past dozen years he has been named one of the 100 most influential attorneys in the country by the National Law Journal.

San Francisco Chronicle and Los Angeles Times. USA Today described him as a "legend in legal circles."

His cases are consistently high profile, resulting in articles in such newspapers as The New York Times, Washington Post, Wall Street Journal, San Francisco Chronicle and Los Angeles Times. USA Today described him as a "legend in legal circles."

He is probably best known for winning a $3.5 billion jury verdict in the early 1990s for 23,000 plaintiffs, most of them elderly, who were bilked out of their savings in the Charles Keating-Lincoln Savings & Loan financial fiasco. In more than 100 trials in the past three decades, Cotchett has won at least $7 billion in court awards and settlements for his clients, most of them considered underdogs.

He is still at it today, leading the charge with a series of lawsuits across the country to make corporations and their executives accountable - to make them accept responsibility for what he calls "the meltdown in corporate ethics" at such firms as Enron, Worldcom, Qwest, Homestore and others. An author of several books on the law, he also lectures at schools across the country.

Victoria Cotchett studied painting at the St. Martin's School of Art in London for two years before earning her Bachelor of Arts degree in art history at Cal State Hayward. Also an author, she has written The Aesthete's Guide to London Museums and Art in Japan.

She has penned articles for several art magazines, including Artweek Magazine and Le Metier, and her byline as an art critic has appeared in several Northern California newspapers, including the Palo Alto Weekly and San Mateo Times.

She was appointed by President Clinton to the Advisory Committee on the Arts of the John F. Kennedy Center for the Performing Arts in
Washington, D.C. She also is a founding director of the Weigand Museum of Art at the College of Notre Dame in Belmont, California.

Her civic and community work includes having served on the boards of the San Mateo County Hospital Foundation, Women's Protective Services, Families in Transition and the Peninsula Humane Society. She also has been actively involved in assisting Bosnian refugee children, bringing a Bosnian refugee family to the United States, and sponsoring extensive medical care and education for refugee children.

Since his graduation from Cal Poly in 1960 with a degree in engineering, Joe Cotchett has never considered slowing down. To him, that is not an option. After leaving Cal Poly, where he was an ROTC cadet, he became an Army Airborne Special Forces officer, retiring as a full colonel in the U.S. Army Reserves. He attended Hastings College of the Law, where he earned a Doctor of Jurisprudence in 1964, shortly thereafter launching his own law firm.

"The thought that has stuck with me over the years, which I first embraced in my undergraduate days at Cal Poly, still rings true today," Cotchett says. "It is what should guide us all in the formal learning process of our youth, and it is something that is especially true at Cal Poly: Education is the initial journey, not the destination; doing in life for others is the end result."

According to Victoria Cotchett, Cal Poly graduates are seemingly blessed with a lifelong readiness to undertake new journeys of discovery, an attribute the Cotchetts' new program will tap into to help educate inner-city children.

"Inner-city teacher education is the point where our society comes to grips with reality as it looks to the future," she says. "We can think about a society that is moving forward, but we cannot do so without all boats rising. We cannot afford a split society of 'haves' and 'have-nots' in a grand order. We need to focus on the future."

---

**Gift To Support Science and Math Teacher Education**

Joe and Victoria Cotchett (center), with school children from Guadalupe, watch chemistry magic show. (Photo by Chris Greene/ImageWest)

Joseph W. and Victoria E. Cotchett's $2 million gift to the University Center for Teacher Education will fund important new programs in science and math teacher education.

The Cotchetts share Cal Poly President Warren J. Baker's conviction that California must invigorate its math, science and technology education programs for the K-12 level to reverse the decreasing numbers of students majoring in these fields. Specifically, their gift will fund:

- An endowed professorship
- Scholarships and fellowships for students
- Renovation of a classroom into a math and science teaching lab
- Program development for new and experienced teachers in math and science education.

The new programs will be administered by the University Center for Teacher Education in collaboration with the College of Science and Mathematics.

The initial contribution will be supplemented by an additional $5 million bequest to support math and science education, with a special emphasis on improving teaching in inner-city schools.

The Cotchetts' combined gift and bequest represent the largest gift from an alumnus in support of Cal Poly's Centennial Campaign.
Mentoring Students

A Fine Line Between Faculty Member/Faculty Mentor

There's no doubt that Cal Poly faculty members deliver a solid education and preparation for professional careers in all fields from archtecture to zoology. We have success stories and statistics to back that up. What they do beyond the classroom, though, as mentors, advisors and friends, is not so easy to quantify.

But when you listen to the students, it becomes clear that the faculty do much more than their job descriptions specify. Their steadfast dedication to helping students achieve academic, social and professional success helps meet Cal Poly's objective to "educate the whole person."

"Professor Jay DeNatale is all about his students," says fourth-year civil engineering major Kristen Salinas. "Not only has he helped me countless times to understand the coursework outside of class, he has also helped me with my senior project. On a personal level, he talks about life after Cal Poly. Students, like myself, who are lucky enough to have outstanding professors, get to experience an awesome learning environment unlike any other."

According to speech communication senior Melissa Garrison, Professor Bernard Duffy has been an instrumental part of her education and has opened the door to future career opportunities. She credits Duffy, one of three 2003 Distinguished Teachers, with "giving students the opportunity to better understand and discuss any questions or concerns about class, graduation or future endeavors."

"Mentoring students is one of the most effective ways faculty contribute to student success," Cal Poly Vice President for Student Affairs Cornel Morton confirms. "Cal Poly faculty understand the important role mentoring plays in student retention and satisfaction with their educational experiences."

A number of mentoring programs are available to students throughout the university. This past year the Student Affairs division collaborated with the Center for Teaching and Learning to offer workshops for faculty interested in student mentorship. The workshops were facilitated by faculty mentors. The following stories illustrate various programs and opportunities that help students gain a well-rounded education.
As White House officials struggle to democratize Iraq and Afghanistan, they might take a lesson from Political Science Professor Bud Evans and hundreds of college students around the world who are also strategizing – via the Internet – how to promote democracy.

A computer in Nigeria is giving Eshobode Bello a voice in world affairs he could not have even dreamed of a year ago. Now he is chatting daily with Muhammad Sabbir Al Fattah Khan from Bangladesh about such heady matters as environmental sustainability and war.

This “rubbing of the minds,” as one Nigerian student phrased it, is made possible by the Student World Assembly, a global network of hundreds of “wired” university students that is headquartered at Cal Poly.

“We are building a non-governmental world assembly to represent people, in much the same way that the United Nations represents governments,” explains Paul Raynault, president of the Raynault Foundation.

Fortune magazine, compares the idea for the SWA to the environmental movement, which “sprang from concerned individuals, not governments, and yet it has changed the world.”

The SWA was founded in September 2003 and was soon overwhelmed with e-mails from interested students. “Within two weeks, we were flooded with membership applications from students at 28 universities in 22 countries such as China, Costa Rica, Ghana, Nigeria, Tanzania and Venezuela,” says Cal Poly’s Evans, whose political science class in global political issues served as the initial springboard for the program.

Evans and Raynault expect the network to continue its logarithmic growth, with 25,000 students eventually talking to each other.

While the initial aim is to spread democracy via universities around the world, the long-term goal is to have a collective body “so influential that when it comes to a consensus on issues of global significance, governments around the world will not be able to deny the resolution,” says Lauren Batchelder, SWA student director of public affairs.

A number of students from around the globe will gather at Cal Poly July 18-24 for the first SWA international conference, where they will engage in face-to-face deliberations, hear expert testimony, and attend committee meetings and lectures on the state of democracy.

For more information on the SWA, visit its Web site at: http://studentworldassembly.org.

Students Promote Democracy Via the Internet
Encouraging young women to achieve their full potential as engineers and as leaders, Cal Poly’s Society of Women Engineers was named the outstanding national chapter in 2003, for the second year in a row.

"SWE’s mission is to create engineering opportunities, provide career and scholastic resources, and demonstrate the value of teamwork to all students of the university and of the community," says Women’s Engineering Program Director and faculty advisor Helene Finger.

"Being a part of SWE in college was a wonderful experience because as a female mechanical engineer I didn’t have many female engineers in my classes," claims Susan Chapman, (ME ’91). "I enjoyed SWE because I got to meet a lot of women from many disciplines. Women engineers share a common experience, which makes connecting to other women engineers easy.

"SWE provides a wonderful support system for female engineers that just can’t be duplicated. Its sole purpose is to help women get ahead in technology,”

Under Finger’s leadership, Cal Poly’s SWE won the 2003 Outstanding “large” Student Section award for an unprecedented second consecutive year. The group also received awards for Team Tech, Audio Visual Presentation and Membership, which recognizes successful and well-organized efforts to recruit and retain members.

"SWE is recognized as the source for knowledge for women in engineering at Cal Poly, as well as the source for personal development, networking and career education for all engineering students at the university,” Finger says.

While the group primarily reaches out to Cal Poly students, it also connects with younger audiences.

"Through Cal Poly SWE, I have been able to reach out and help other college students as well as elementary and high school students,” says computer engineering senior Heather Heimen, current president of the group. "It has been a very rewarding experience to not only encourage other women, but to also be encouraged by them.

"Helene Finger and other professional members of SWE have given me real-life advice that I would not have found anywhere else. Because of the people I have met through SWE, I now have a job and am prepared to become a professional.”

With 524 members, the Cal Poly group is the largest of the more than 300 student chapters nationwide, even though the next-largest SWE section has an engineering enrollment 65 percent greater than Cal Poly’s.

“The group’s successes can be attributed to the quality of its programming and the tremendous dedication of a team of phenomenal student leaders,” Finger says.
The Bod Squad

They measure the strength of your quadriceps, the intake of your oxygen and the percentage of your body fat.

They do it in the interest of learning more about human performance.

In research projects directed by Kinesiology Associate Professor Susan Puhl, students worked over the summer on three projects:

• One to determine how many calories are expended while walking on different surfaces, such as sand or grass
• Another to test the reliability and validity of the “Bod Pod,” a large space-age-looking appliance that measures lean body mass and fat mass
• And a third to see if aerobic and anaerobic measurements can be used to predict physical strength.

Much of the research is done by undergraduates in the university’s Webb Human Performance Laboratory, equipped with state-of-the-art lab equipment.

“The college-based fees have allowed us to bring the lab up to 21st century standards,” Puhl notes.

She has involved students in almost all of her research, going back to her earliest days of teaching at Penn State in 1986.

“It is a joy working with the students,” Puhl says. “Cal Poly students seem to know the difference between a friend and an instructor. They know what the line is, so you can get very close to that line. I can enjoy them as people.”

Puhl, who has taught at Cal Poly since 1999, also appreciates their motivation. “I’ve had students volunteer in our Polyfit program as freshmen and continue through their senior year. In the program, the students learn how to gauge physical fitness, conduct cardiovascular tests and measure body composition, flexibility and strength. The students volunteer as a way to learn people skills. It’s not a requirement, they’re not paid. Most of them don’t receive any credit for their time. They just get a T-shirt. But they volunteer year after year because they know they will learn the skills to be successful later in life.”

The students see the value in their research endeavors, as well.

“Working in a lab setting and performing real research is like placing the capstone on an education,” says kinesiology senior Eric Homestead, who worked on the caloric cost-of-walking team and is using the experience for his senior project. “It pulls the knowledge gained from classes into a real-life setting.”

There seems to be a benefit for everyone involved. “I find research to be a very philosophical endeavor. The students think it’s cool to work with the latest technology. They also like being part of a team, working in groups,” Puhl says.
For Derrick Lau (EE '04), the Cooperative Education Program did what it should. 

"Co-op was a great experience," Lau says. "I saw everything, from design to development to testing. I had to meet deadlines, and I had to do it within cost."

And it gave him the satisfaction of having played a part – small though he says it might be – in something important.

Lau worked during the second half of 2003 at St. Jude Medical in Sylmar alongside the engineers in the research and development unit of the company’s Cardiac Rhythm Management Division. He worked on a device – a logic analyzer interface board, to be precise – that’s used to test certain parts of pacemakers for cardiac patients.

“When I got there in July, another engineer was working on this,” he says. “It was his idea, but it had some problems. He asked me to design a new board. So I did a prototype, and it worked.”

Lau’s device reduces the electrical “noise” made when a pacemaker part is tested, making signals clearer so the tests are more accurate. St. Jude Medical is already using Lau’s device, and, with St. Jude’s support, he’s back on campus refining two designs of the test interface board as his senior project.

One design is completed. The second will be done before Lau graduates.

Lau’s device reduces the electrical “noise” made when a pacemaker part is tested, making signals clearer so the tests are more accurate.

St. Jude Medical’s Electrical Development Engineering Group is impressed with the results, says the group’s leader, Chris Sorensen. “It reflects well both on Derrick and on Cal Poly’s engineering program.”

Lau himself wasn’t all that sure about the value of his engineering program until he got into his co-op.

“I remember in a lab whining that I needed a lab manual to get a project done. The teacher told me, ‘There are no lab manuals in the real world.’ When I got to St. Jude and saw how engineers get together and throw ideas around, I thought, ‘Wow, that’s how it is. What my teachers said to me really makes sense now.’ Now I understand why I needed all those different courses.”

The Sacramento resident lived his first 10 years in his native Hong Kong. He hopes to go directly into the work force after graduation, and he wants to keep designing.

“I really enjoy design, constantly improving things. It’s the accomplishment. Like my project. They’re actually using what I did. And what I worked on is important. My co-op was a very rewarding experience,” he says.
Perhaps the students in Professor Lisbeth Ceaser’s upper-division education class believe in the philosophy of author Esther Maynell: “Books, to the reading child, are so much more than books – they are dreams and knowledge, they are a future and a past.”

Maybe the students are simply dedicated to the mission of service learning, which has become an important initiative of The California State University and Cal Poly.

Or possibly, they just like reading to children.

For whatever reason, the students in Ceaser’s class on reading methods for grades 4-8 spend two hours a week tutoring younger local students. Ceaser, a faculty member in the University Center for Teacher Education, and her students are part of a growing movement in education that links community service with academic learning.

Ceaser also sees this service-learning experience as an opportunity to advance the California Reading Initiative, a program to improve the reading skills and literacy levels of the state’s students.

“Reading is essential to success in the complex world of today and tomorrow,” Ceaser says. “The ability to read is highly valued and is important for personal, social and economic well being.

“Knowledgeable teachers who provide quality instruction are crucial to helping children and adolescents become successful readers, and these teachers must be available to all students in California.”

Cal Poly is helping to meet the growing need for teachers. Those who are new to the profession must know how to communicate, coordinate and consult with other educators about the reading process. Ceaser’s students learn all about that.

“The course focuses on presenting research-based knowledge of best practices for reading instruction, and practicing assessment and instruction of reading skills in a variety of intermediate- and middle-school grade levels,” Ceaser says.

“Students must demonstrate the knowledge and skills to deliver effective reading instruction based on the results of ongoing assessment; present a balanced, comprehensive reading program; and show sensitivity to the needs and social context of all students,” she adds.

In addition to tutoring, her students attend lectures two hours a week, keep reflective journals, write a case-study assessment of one child’s literacy development, and demonstrate effective classroom lessons.

According to Ceaser, every Cal Poly student who has practiced the guided instructional activities for reading in a “real” classroom situation has enjoyed a remarkable and meaningful learning experience.

“For every lesson I taught, I probably learned 10 lessons myself,” one student confirms.
As the baby-boom generation reaches retirement age, Cal Poly finds its longtime, tenured faculty members retiring in greater numbers, making it more important than ever to attract and retain a new generation of faculty.

More than 50 full-time, tenure-track faculty members were hired in calendar year 2003, compared to a decade ago when just nine were added. During the past three years, 135 new tenure-track faculty members came on board, representing nearly 20 percent of the university's 2003 tenure-track faculty.

“This is a watershed period for Cal Poly,” says Interim Provost Bob Detweiler, “a time when a new generation of faculty members accepts the challenge of sustaining the quality of academic disciplines all across the campus.”

Helping all faculty members be effective teachers is the mission of Cal Poly's Center for Teaching and Learning, led by Special Assistant to the Provost and Computer Science Professor Joe Grimes.

The center provides the resources to enhance teaching skills, promotes cross-discipline collaboration, sustains an interactive community of faculty and staff learners, encourages awareness of issues that affect both the academic community and its disciplines, and provides professional development assistance.

The Center for Teaching and Learning offers a variety of workshops, classes, learning communities, grant opportunities and personalized assistance. “This is extremely important because the academy – and particularly the faculty of the academy – have a tremendous responsibility for shaping our graduates and, by extension, the world we all will live in,” Grimes says.
Positively Psyched!

Psychology Professor Jennifer Teramoto Pedrotti lists “positive psychology” as one of her top research interests.

Pedrotti describes positive psychology as the study of the enhancement of human strength and optimal functioning, and she appears to know of what she speaks: While working on her master’s and doctoral degrees in counseling psychology at the University of Kansas, she earned straight A’s. Optimal functioning, indeed.

The relatively new field of positive psychology focuses on quality-of-life characteristics such as hope, coping and resilience. She used that interest as the basis for a new class, offered for the first time to Cal Poly students in spring 2004.

“Psychology has traditionally spent a lot of its time focusing on pathology,” Pedrotti says, “but positive psychology balances that viewpoint by allowing us to appreciate human strengths as well. I think it’s important for students to be able to see both sides of the spectrum.”

To the Concord native, the study of psychology was a natural choice.

“My dad is a microbiologist and my mother’s a teacher,” Pedrotti says. “To me, psychology was sort of a marriage of these two disciplines — the study of developing individuals in a scientific paradigm.”

While working on her Ph.D., Pedrotti conducted her clinical internship at the Topeka, Kansas, Veterans Administration Hospital, where she treated mostly Vietnam veterans with post-traumatic stress disorder.

“I saw a lot of people in a lot of pain,” she recalls, “but it was nice to work there and to help. The Topeka VA hospital is one of just a few that still offer an inpatient 90-day treatment program for veterans with PTSD. The patients there are very motivated and work hard at their program.”

Pedrotti, who began teaching at Cal Poly in fall 2003, appears right at home on a college campus, looking a bit more like her students than her colleagues.

“I have always loved the classroom,” she says. “I love to work with college students, and I enjoy research as well. I fell in love with the Central Coast when I was here for my interview, and I was really impressed by the learn-by-doing philosophy at Cal Poly. Plus, I knew it was a great school because my siblings are graduates.”

Pedrotti’s sister, Amy Teramoto, graduated in 1998 with a degree in business administration, and her brother, Joe Teramoto, earned a biological sciences degree in 2002.

“Jennifer is a wonderful and valuable addition to the Psychology and Child Development Department, bringing with her an expertise in the cutting-edge field of positive psychology and the ability to teach a wide range of courses in the major,” says Department Chair Don Ryujin.

“She is already getting wonderful teaching evaluations from her students and is a gracious and helpful colleague who is much appreciated within the department.”
George Ramos spent 31 years in daily journalism, 25 of them as a three-time Pulitzer-Prize-winning reporter for the Los Angeles Times. But in 2003, he came back to where he started his journalism career: Cal Poly’s Mustang Daily.

Ramos joined the Cal Poly Journalism Department faculty as its chair in September 2003 and immediately took on the job of Mustang Daily advisor.

Though he’s now in more of a mentoring and advisory role than a direct writing and editing one, some of his “daily” reporting habits are hard to break. “Every afternoon at 3:30, I find myself looking up at the clock and thinking, ‘It’s 90 minutes to deadline—what’s my lead? What’s my story?’ Old habits die hard.”

But those journalism habits—sticking to daily deadlines, getting things right, quoting people accurately, writing readable stories without fear or favor—are what Ramos is intent on teaching the current crop of journalism students and his Mustang Daily staffers.

Ramos proudly points out that the Daily’s student staffers in April took home a statewide third-place award for general excellence from the California Newspaper Publishers Association.

“After 31 years, I think I have something to tell these kids, and I think they’re listening,” Ramos says. “I tell these kids, and it’s true, ‘You are much smarter than I was at your age.’ I try to encourage them; I try to give them the sense that they can do it. I have an open-door policy, and kids are in my office all the time,” Ramos says.

His role model is former Mustang Daily Advisor Brent Keetch. “I was the editor-in-chief of the Mustang Daily in 1968. Keetch, who went on to head Cal Poly’s English Department, was the student newspaper’s faculty advisor. He could walk on water, as far as I’m concerned. He had all this experience—he’d been at the Salt Lake Tribune. He encouraged me, and I hope to do the same thing for today’s students.”

In his first year as a Cal Poly faculty member, Ramos has moved ahead on several goals. “The No. 1 priority, of course, is to get the department accredited. That is awfully important, to show everyone that we have that kind of peer recognition for the Journalism Department’s academic program,” he says.

He’s also working on other changes for the department, such as improving the studio facilities for radio station KCPR. The department is drawing ever more students into its public relations concentration. “Sixty percent of our students are now PR students, and we need to serve them,” Ramos says.

So far, Ramos, 56, is relishing his return to Cal Poly, and tackling his goals. “We need to continue to do a better job in all these areas, so when our kids get out in the real world and launch their careers, they are ready to go.”
Thanks to cable television and the World Wide Web, which deliver news around the clock, 365 days a year, the demand for educated and experienced journalists is likely to be greater than ever.

No problem, says Journalism Professor John Soares, who teaches Cal Poly’s broadcast journalism courses and whose experience in industry and academia give students the best of both worlds.

When he arrived at Cal Poly last fall, Soares began to revitalize the broadcast curriculum. While CITV has been around awhile, it received a real boost in 2003 with funding from the College of Liberal Arts and the Student Academic Fee initiative.

The production-newsroom and studio, where students now deliver live 30-minute broadcasts weekdays, underwent a major refurbishment in spring and summer 2003.

“A new anchor desk and news set, control room, lighting grid and air conditioning are some of the major improvements that created a professional work environment with broadcast appeal,” Soares says.

Student fees allowed the department to begin purchasing sorely needed equipment to improve the production value of the newscast and prepare students for industry standards, he explains.

“We now have a great learn-by-doing lab, which replicates the operational realities of broadcast news, from time pressures and deadlines to getting it right the first time and correcting it when you don’t.”

The results have been amazing. “When I arrived at Cal Poly, our first production was ‘live-to-tape,’ and it was a train wreck. It wasn’t for lack of effort – just that our students had never produced a live-to-tape broadcast with no starts or stops,” he recalls.

Soares is happy about the progress made to date. “It is such a great team, it’s almost a culture,” he says of his students.

The students write the stories and learn production and editing techniques – the whole gamut. Broadcast news is all about problem-solving – how to anticipate, foresee and correct problems to put out a good product, he says.

Soares brings a wealth of knowledge and experience to Cal Poly and his students. He currently produces the weekend newscasts for KCOY-TV in Santa Maria. Before he moved to the Central Coast, he served as an assistant professor and director of the Marlin Fitzwater Center for Communication at Franklin Pierce College in Rindge, N.H., where he was voted Outstanding Faculty Member for the academic years 1999-2000 and 2001-2002.

In addition to his work in the classroom, studio and newsroom at Cal Poly, Soares helped organize the first Cal Poly student chapter of the Radio and Television News Directors Association, the world’s largest professional organization devoted exclusively to electronic journalism.

Student members are connected to the business even before they are in the business, he says, which helps them land internships and even jobs. They have held internships at local television stations and stations in Los Angeles, San Francisco and San Diego, as well as with Fox News and “20/20.”
W hen Elsa Medina (B.S. MATH '94, M.S. MATH '96) moved from the Mexican state of Zacatecas to Oxnard, Calif., she was a 17-year-old senior in high school who could barely understand a word of English. Even so, she graduated from Oxnard High School.

"I always liked school and learning," Medina says. "But I didn’t want to continue with school because I felt so lost. My idea was to return to Mexico. My parents’ idea was to show me how hard they worked their whole lives."

Her parents were farm workers, so Medina worked for a few months picking strawberries in the fields of Oxnard. "I got the point," says Medina, now a professor in the College of Science and Mathematics teaching math to future math teachers. "It was a very good learning experience that made me stop and reflect about my possibilities, which were much better in the United States. So I decided to stay."

Although her ability to speak and understand English was still very limited, she enrolled in community college, where she found her calling.

"I couldn’t understand a word in my geology or history classes," she smiles, "But ‘X’ and ‘Y’ sound the same in any language. I soon fell in love with math." She went on to earn a bachelor’s and master’s degree in mathematics from Cal Poly and a doctorate from the University of Northern Colorado in 2000, the same year she returned to Cal Poly to teach.

"I knew that I wanted to be a teacher from the time I was a kid in elementary school," Medina says. "I always admired my teachers. When I first arrived in the United States, I couldn’t speak English well, but I could easily explain math. So I thought, ‘I could do this! I could teach mathematics.’"

"The faculty in the Mathematics Department at Cal Poly believed I could go on and continue my education in math. They encouraged me first to get a master’s degree. I received a pre-doctoral grant that allowed me to go to a conference. While there, I met the chair of the Mathematics Department at the University of Northern Colorado, and he invited me to enter the Ph.D. program there."

In addition to teaching future teachers, Medina coordinates the mathematics credential program, supervises student teachers in K-12 classrooms, and co-directs the Cal Poly-Bakersfield Math Project, the local arm of a statewide effort that offers professional development workshops and opportunities to K-12 teachers.
Kate Riley: Part of Equation to Educate Math Teachers

Among the new faces on campus is a mathematics education professor whose former K-12 teaching experience helps her prepare future teachers for the rigors of the classroom.

Kate J. Riley joined the Mathematics Department in fall 2003, after teaching for 12 years, mostly at an award-winning National Blue Ribbon high school. After completing a master's degree in mathematics and a doctorate in mathematics education from Montana State University, Riley is now pursuing her goal of teaching future mathematics teachers.

She was drawn to Cal Poly because of its academic reputation and commitment to science and mathematics education.

“Cal Poly believes that science and mathematics are central to the polytechnic curriculum and further believes in recruiting students who can develop into highly qualified math teachers to serve California and beyond,” Riley says.

“Cal Poly believes that science and mathematics are central to the polytechnic curriculum and further believes in recruiting students who can develop into highly qualified math teachers to serve California and beyond,” Riley says.

“I really appreciate its learn-by-doing philosophy, and I was very interested in the fact that the university is pursuing the Center for Science and Mathematics,” she adds.

The proposed 250,000-square-foot structure will be one of the largest science and mathematics buildings in the California State University system and is expected to have a profound influence on teaching and learning. The center will support partnerships of the faculty, staff and students in creative activities through undergraduate research.

It will be the ideal environment for Riley’s teaching style, which incorporates a great deal of activity, technology and interactive mathematics. Using technology such as the Geometer’s Sketchpad, Riley brings a new dimension to the study of mathematics.

“The software program enables students to explore and comprehend mathematics in ways that are not possible with traditional tools. Visualization is very powerful in allowing students to understand and discover mathematics concepts,” she explains.
Architectural Department faculty member and solar design expert Robert Peña practices what he preaches.

A relative newcomer to Cal Poly, but not to higher education or the principles of ecological design and sustainable building, Peña is passing on his knowledge to the next generation of architects and engineers – particularly to students on the Solar Decathlon team.

Cal Poly’s team was one of 19 chosen from around the world to compete in the 2005 Solar Decathlon. The teams, from the United States, Puerto Rico and Spain, are to design and build small solar-powered dwellings that generate enough energy to power a household, operate a home-based business, and run an electric vehicle.

Peña was part of a faculty team awarded a $5,000 grant from the competition sponsors, the U.S. Department of Energy and the National Renewable Energy Laboratory, to get the project started.

“The Department of Energy has been eager to get Cal Poly involved,” Peña says, “because of our reputation as a hands-on, technically and professionally oriented school.”

Peña serves as advisor to the Renewable Energy Club, the student group that will build the house and compete in Washington, D.C. He traces his interest in solar architecture back to the first Earth Day in 1970.

“I grew up in Los Alamos, N.M., where the National Laboratory had a group working on passive solar energy prototypes,” Peña says. “As a junior-high student, I saw that architecture – which is responsible for a large share of our ‘environmental burden’ – could be less burdensome by using the sun as a way to heat, cool and power buildings.”

Peña has spent his professional life as both teacher and practitioner, going from one to the other “as a way to walk my talk.”

“I’ve had the good fortune to work with leading ecological designers and solar architects,” he says. “Academia gives me a chance to explore and learn about ecological design in a way that professional practice doesn’t.”

Residing and working on the Central Coast allows Peña to live in a way that is closer to his values.

“I don’t have to drive anywhere,” he smiles. “Previously I was driving 50 miles a day from Berkeley to my office in Sausalito and making frequent trips to Berea College in Kentucky, burning copious amounts of jet fuel, to work on a project ironically called Ecovillage.”

At Cal Poly he enjoys the encouragement of colleagues who are supportive of solar architecture and ecological design, among them Architecture Professor Sandy Stannard and Mechanical Engineering Professor Jesse Maddren, who are members of the faculty team leading the Solar Decathlon project. The decathlon project will be built and tested by Cal Poly students on campus, deconstructed and transported to Washington, D.C., where entries will be reconstructed on the National Mall in fall 2005.

“We would like the project to be used as a kind of prototype to address particular housing problems in California,” Peña says. “It could be used as a model for migrant farm-worker housing or as a more environmentally friendly alternative to mobile housing.”
Graphic designer Kathryn "Katie" McCormick comes to Cal Poly's Art and Design Department with degrees in design and architecture from one of the nation's top design schools.

McCormick's bachelor's degree in design and master's in architecture were both earned at the University of Cincinnati, where she also taught in both disciplines. Her cross-discipline approach helped fuel her professional success as a freelancer and a designer for Adidas America, where she served such clients as the New York Yankees and Los Angeles Lakers basketball star Kobe Bryant.

McCormick's courses at Cal Poly range from a large design history class to a small, informal undergraduate seminar course. She also teaches typography, symbology, corporate identity, and package and editorial design. And, it seems, she's never taught a class she didn't like.

"The design history class was one of the most challenging courses I have taught," McCormick recalls. "Preparation for a course like that was somewhat different from what I was used to in the studio, but I learned so much. Helping the students bridge past work with their situation today - and questioning them about where the field is going - was really exciting."

The Ohio native also enjoys teaching studio classes, where students critique each other's work and approach problems the same way designers do in a professional studio - as one big team. "Also, in the studio classroom, you can experience the students 'getting it' and watch their work progress through the project and throughout the quarter," she says.

"As a designer, you're a problem-solver. Focusing on one project is fine, but a student should view the world as wide open and realize there's nothing he or she can't design," McCormick says.

The upper-division seminar course is fun, too, because the students are older, and you can talk about the big issues, McCormick says. "Everybody brings something to the table. It's another example of me learning from them."

McCormick tries to boost students' confidence and pride, although this is not part of the formal curriculum. "In the design profession," she says, "those qualities are as important as your portfolio. As a designer, you're a problem-solver. Focusing on one project is fine, but a student should view the world as wide open and realize there's nothing he or she can't design."
Bright Lights From Watts

Odessa Jenkins

Back in Watts, in South Central Los Angeles, 12-year-old Odessa Jenkins (SOC '02) couldn’t imagine life outside the ghetto.

"Growing up in Watts was tough," remembers Jenkins, one of four children of a single mother.

"There was a lot of pressure on me ‘to be more.’ Everyday at 5:30 a.m., I’d walk to the bus stop with my backpack, waiting for the two-hour commute to Waite Middle School in Norwalk. That’s where I learned I could be more. I couldn’t see that in Watts, where it’s so hard for some to realize their vision. Unless someone shows you, it’s impossible to see what you can be – to see the future."

Jenkins remembers her 10th grade math teacher challenging her when she needed it. "She forced me to take honors calculus. She really pressed me to find my breaking point mentally and physically and push beyond that."

In 1991, Odessa’s mother told her that her brother had been murdered. "She asked me, ‘What are you going to do with your future?’ From then on it was straight Ns. It was winning on the basketball court. I was tenacious," she recalls.

Ron Cooper

Chemistry senior Ron Cooper (CHEM ‘04) also grew up on the mean streets of South Central Los Angeles, one of nine children. His parents were divorced. Cooper learned he could be more from his fifth-grade teacher.

“He saw that the work was too easy for me. He had me come in after school for special assignments. He challenged me and opened my eyes to make me realize how well I could do in school.”

Fast forward several years.

Jenkins, now a Cal Poly assistant basketball coach, came to Cal Poly on a basketball scholarship. "I came to educate myself. I played basketball. I met people who changed my life. Cal Poly changed my life," Jenkins says, eyes shining. "I had teachers tell me I could be something I couldn’t even see myself."

Now in a position to help young-adult athletes succeed, she tries to influence her students by showing "strength, power and ferocity."

“They know my background, and they know that I expect no weakness when faced with adversity. They feed off my inner strength and find their own confidence. They become successful when they eliminate their inner limits."

About the future, Jenkins encourages her students to do what they love, to follow their hearts, “because when you get older, your mind takes over. I want my athletes to remember every time they were told they couldn’t, and they did. I want my athletes to remember the work they put in and to be proud of the program they created."

Cooper came to Cal Poly in 1998 on a football scholarship. After he graduates this spring, he plans to enroll in the Cal Poly teacher credential program. After that, he says, he wants to teach high school chemistry and mathematics where he grew up, in South Central Los Angeles.

Cooper met Jenkins in a class during his freshman year. They are planning an August wedding.

Jenkins and Cooper now see clearly life’s many possibilities, including the possibility of returning to the inner city to teach – and reach – children, to tell them about the larger world outside the ghetto. The desire to be role models is strong.

"Whatever I do, I am going back to the city," Jenkins says. "I want to open doors for kids who don’t have visions of the future. We want to show kids how to use their power – how to express it. We want to show them the sky is the limit.”
Learning by Teaching: Computer Science and Internet2

For Michael Haungs, teaching is a continuing education. “There’s the old saying: ‘The best way to learn a topic is to teach it,’” Haungs says. “By teaching, I get to interact with students to facilitate their learning, and I grow right along with them.”

The 34-year-old computer science professor joined the Cal Poly faculty last year. After earning his doctorate at UC Davis, he taught there for a year specifically to see if he wanted to make teaching a career.

“That year, I discovered how enjoyable teaching could be and decided to pursue employment at a teaching university. I am also very active in research and wanted to find a university that could accommodate both my interests. Cal Poly’s reputation for teaching excellence, research and industry ties seemed a natural fit for me.”

His specialty is computer systems research, and these days he’s working on operating system functionality to improve Internet application performance – and helping his students get into the real thing themselves.

“The classes I teach have a lab component where I can apply the learn-by-doing approach,” he says. “There is only so much I can tell a student. I find experimenting with and changing real systems to be an invaluable part of teaching.

“For example, I have students modify, change and measure the Linux operating system. This not only reinforces the theory taught in class, but also gives the students practical experience they can put on their resumes.”

He is supervising eight seniors in their senior projects and advising seven master’s program students. Their projects involve such nitty-gritty reality-of-the-art as network programming, operating system optimization, software to help programmers conduct experiments over a network, and delivery of large amounts of “geospatial” data over Internet2.

That last project gives Haungs a unique opportunity to combine research and teaching. He and two graduate students are studying the factors that limit computers’ capacity to deliver the massive sets of data involved in transmitting aerial images that are processed to account for the curvature of the earth. He’s hoping to expand the ability of researchers and students everywhere to use the detailed images to study any location in the United States.

To begin the project, Haungs and his students are looking at how Cal Poly’s BioResource and Agricultural Engineering Department can use the images to study various agricultural points of interest. They’re also working with a department at Oklahoma State University.

That project and the others are journeys the young professor enjoys making with his students.

“I find it particularly rewarding to see a student’s knowledge progress on a topic through a quarter and know that I had an impact,” Haungs says. “I find it particularly rewarding,” he says, “to see a student’s knowledge progress on a topic through a quarter and know I had an impact.

“I got into teaching because I love learning,” Haungs says – and in his teaching at Cal Poly, he gets to do both at once.
Centennial Campaign Surpasses $225-Million Goal
One Year Ahead of Schedule

The university surpassed its original $225-million Centennial Campaign goal one year ahead of schedule, bringing in a campaign total of more than $227 million before the close of 2003. “Reaching our goal ahead of schedule is a testament to the strong commitment of our stakeholders, whose generosity has helped establish Cal Poly as one of the finest public universities in the country,” says Vice President for University Advancement William G. Boldt.

The Centennial Campaign, the first of its kind for Cal Poly, is the largest campaign among public master’s institutions in the country. During January through December 2003, Cal Poly brought in nearly $52 million in gifts and pledges and a record-setting 29,365 gifts, bringing the total number of campaign gifts received to more than 161,000. The university also reached its highest level of total planned-giving activity. Alumni and friends contributed $15,204,226, and donations from corporations and foundations totaled $13,780,594.

Additionally, the Cal Poly Fund set an all-time high in 2003 for the number of gifts – 24,500 – and raised a record-breaking $2.4 million. The Cal Poly Fund is the university’s central fund-raising unit, soliciting annual donations from alumni, parents of students and friends for various academic programs.

Significant progress was made in the five areas targeted for support through the campaign: supporting students, supporting faculty and staff, enhancing learning, developing campus facilities, and improving technology and the library. The campaign has brought in more than $22 million in scholarship support.

Private gifts, such as the $7-million gift from Joe Catchett (ENGR ’60) and his wife, Victoria, will fund scholarships and educational initiatives to ensure Cal Poly remains a leader in training students for careers in science, technology, engineering, mathematics and education. (See story, page 4.)

A $5-million bequest from Isaac Barpal (EE and MATH ’67) will support the Electrical Engineering Department and fund student scholarships.

Alex Spanos (AERO ’42) and his wife, Faye, donated $1.5 million to help fund the renovation of the H.P. Davidson Music Center and the newly named Alex and Faye Spanos Theatre. The couple also established a $100,000 scholarship endowment last year in memory of Harold P. and Rosalie Davidson.

A $7-million gift from a major private foundation is helping to bring the Center for Science and Mathematics closer to reality.

Since the campaign’s inception, Cal Poly has funded a total of 16 academic chairs and professorships, which help attract and retain outstanding faculty who dedicate time and resources to mentor our students. Securing funds for additional endowed and term professorships and chairs, scholarships and the Cal Poly Scholars Program all remain high priorities.

continued on next page...
Centennial Campaign Surpasses $225-Million Goal

Program endowments are key to Cal Poly's educational mission and are vital to maintaining its learn-by-doing instructional advantage, Boldt says. “Private funding for endowments enriches each student’s academic experience.”

The campaign seeks further funding for the Center for Science and Mathematics, as well as several other major projects, including a new building for the College of Architecture and Environmental Design, and a wine and viticulture center. At the heart of the Centennial Campaign is the goal of preserving Cal Poly's standing as one of the country's best public undergraduate universities. “Private support is more important than ever if we are to expand and strengthen our polytechnic mission,” Boldt says.

Every dollar raised helps maintain our margin of excellence, distinguishing Cal Poly from other institutions of higher education and reaffirming that the university's hands-on, practical approach will continue to produce the state's next generation of engineers, architects, agricultural specialists, scientists, teachers, business leaders and professionals.

Cal Poly Foundation Endowment Nearly Triples During Campaign

One of the strongest indicators of the success of the Centennial Campaign has been the rapid increase in the value of the university's endowed funds. Since 1998 the endowment has skyrocketed from $40.5 million to more than $118 million. “This phenomenal growth, which has taken the endowment to the highest level in the California State University system, is a tribute to the generosity of the Cal Poly family, as well as an example of the excellent financial stewardship provided by the Cal Poly Foundation,” says Mike McCall, director of planned giving and endowments.

The Centennial Campaign has provided a wonderful opportunity for alumni and friends to make permanent investments in Cal Poly through the Cal Poly Foundation Endowment, McCall adds.

Endowed gifts provide vital resources for sustaining Cal Poly's tradition of excellence into the future. Although other funding sources may fluctuate, the long-term focus of the endowment helps stabilize strategic growth.

In the mid-1980s, the university partnered with the Cal Poly Foundation to establish the Cal Poly Foundation Endowment as a vehicle for administering and investing endowed gifts. “This pool of permanent funds was designed to achieve efficient and economic investment across a diversified mix of assets, based on a long-term investment horizon,” McCall says. “Nearly 500 individual endowed funds are currently being managed in perpetuity for the benefit of the university.”

The original gift or “corpus” is never distributed, with only a portion of the income from those assets dispersed annually. The goals of the Cal Poly Foundation Endowment are to provide a stable, predictable flow of income to the university, to defeat inflation over time by maintaining the purchasing power of those funds, and to preserve the principal of the original gift.

“These additional resources, made available through private gifts, will be especially helpful in light of recent cutbacks in state funding for the university,” McCall says.

<table>
<thead>
<tr>
<th>Year</th>
<th>Endowment Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998</td>
<td>$45,342,000</td>
</tr>
<tr>
<td>1999</td>
<td>$54,228,900</td>
</tr>
<tr>
<td>2000</td>
<td>$61,989,000</td>
</tr>
<tr>
<td>2001</td>
<td>$79,042,400</td>
</tr>
<tr>
<td>2002</td>
<td>$97,716,500</td>
</tr>
<tr>
<td>2003</td>
<td>$118,619,000</td>
</tr>
</tbody>
</table>

Foundation Endowment Totals
Calendar Year 1998-2003
Centennial Campaign Donors

Thanks to the following donors who made gifts and/or pledges of $100,000 or more from January 1, 1998, through February 29, 2004

*Deceased

- Anonymous Donors (4)
- Agilent Technologies Inc.
- Agricultural Education Foundation
- AJR Investments LLC
- Aldec
- Analytical Graphics Inc.
- Ivar E. and Tennie V. Anderson
- Carol A. Andrews
- M. Richard and Joyce J. Andrews
- Anritsu Company
- Applera Corporation Foundation
- Applied Materials Inc.
- Allyn E. and Concettina T. Arnold
- Artwork Systems Inc.
- Robin and Barbara Baggett
- Baileyana Winery
- Aaron A. and Lyn C. Baker
- Robert P. Balles
- Bank of America Corporation
- *John O. Barber
- BARCO Artios
- Richard W. and Jeanne E. Barnes
- Isaac R. and Margaret L. Barpal
- Bartleson Ranch & Nursery
- Jan and Stuart A. Bartleson
- Bayer Corporation
- Estate of Margaret Baylis
- Harlan W. Beck
- Donald E. Bently
- Bently Nevada Corporation
- Bently Pressurized Bearing Company
- Peter H. and Ida Mae H. Berg
- Estate of Robert R. Blackburn Jr.
- Gary L. and Judy Bloom
- The Boeing Company
- Paul R. and Sandra K. Bonderson
- The James G. Boswell Foundation
- James G. Boswell II
- James W. and Suzanne A. Boswell

- William V. and Margaret A. Botts
- Richard J. and Margaret M. Bradshaw
- Gunilla Ramell Brennan and
  *James E. Brennan
- Estate of Dorothy S. Brown
- Susan Pfeifer Brown and
  Robert F. Brown
- Richard L. and Barbara L. Burkharter
- Cadence Design Systems Inc.
- CAiCE Software Corporation
- Cal Poly Alumni Association
- Cal Poly Foundation
- California Association of Nurseries
  and Garden Centers
- California Community Foundation
- California Dairy Research
  Foundation
- Everett M. and Arlene B. Chandler
- Clifford W. Chapman and
  Gene A. Shidler
- ChevronTexaco Corporation
- Cisco Systems Inc.
- The Citrus Research Board
- College of Architecture &
  Environmental Design Foundation
- Community Foundation of
  Silicon Valley
- Conexant Systems Inc.
- Albert E. and Gloria R. Copeland
- Joseph W. and Victoria E. Cotchett
- Cotchett, Pitre, Simon & McCarthy
- Richard D. and
  Adelle Louise Crawford
- Creo Products Inc.
- Jaret P. and Joseph P. Cristiano
- L. Byron and Donna Culver
- Dairy Institute of California
- Dassault Systems of America
- Judith E. and Thomas S. deRegt

- Dow AgroSciences LLC
- Debbie and Glenn Drake
- DSP Development Corporation
- Dunn-Edwards Corporation
- Estate of Elmer W. Eade
- Eastman Kodak Company
- Kenneth N. Edwards
- Ernst & Young Foundation
- Estate of Delores T. Estrada
- Estate of Alonzo F. Farrow
- Flextronics International Ltd.
- Bert E. and Candace M. Forbes
- Forbes Family Fund
- Format International Inc.
- Foster Farms
- George P. and Sue Foster
- Jeffrey P. and Theresa Foster
- Foundation for the Performing
  Arts Center
- Harold R. and Diana D. Frank
- Winton H. and Adele H. Frey
- Karyn M. and Thomas J. Gallo
- Ken and Gay Gerlack
- Granite Construction Inc.
- Guidant Foundation Inc.
- Haas Automation Inc.
- Estate of Mary Ellen L. Hartman
- Harold R. Hay
- The Hearst Foundation Inc.
- William Randolph Hearst Foundation
- Heidelberg USA Inc.
- J. D. Heiskell & Company
- Hewlett-Packard Company
- Conrad N. Hilton Foundation
- Frederick T. and Judi A. Honore
- Richard C. and Julie M. Hood
- Daisy J. Hudson
- IBM Corporation
- Indigo America Inc.
Cal Poly continued to garner national recognition in 2003 for academic excellence, outreach to prospective students, and even the beauty of the campus.

- For the 11th consecutive year, Cal Poly was rated the best public largely undergraduate university in the West.
- Cal Poly's College of Engineering also earned a top spot in the magazine's Best Undergraduate Engineering Programs - for schools whose highest degree is a bachelor's or master's - ranking as the No. 3 program at a public school.

**Carnegie Communications (www.carnegiecomm.com)**
- Cal Poly has been named the best regional university in the West in a survey by Carnegie Communications. The rankings, which included public and private universities, were based on a 2003 survey of nearly 4,000 college-bound U.S. students.

**Hispanic Outlook in Higher Education (www.hispanicoutlook.com)**
- Cal Poly was included in the 2003 "Publisher's Picks" list of colleges and universities that the publication regards as offering strong educational opportunities for Hispanic students. The standings are based on formal and informal inquiries, as well as data from the National Center for Education Statistics.

**Design Intelligence (www.di.net)**
- For the second-straight year, a national poll of practicing architects ranked Cal Poly's architecture program as one of the top in the nation among bachelor's degree programs. The No. 3 ranking was based on a survey of partners, principals and personnel directors at more than 1,000 U.S. firms.

**Kaplan Publishing (www.kaplan.com)**
- High school counselors around the nation consider Cal Poly one of the country's most beautiful campuses, according to a national survey by Kaplan Publishing, best known for its preparation books for national entrance exams. Cal Poly was a top school in the category "most beautiful campus in a suburban or rural setting" in The Unofficial, Unbiased Guide to the 328 Most Interesting Colleges.
New Scholarship Helps Students Blossom

Two budding environmental horticulturists are flourishing with the help of a scholarship established in 2003 to "nurture future talent to support the development and management of public gardens."

The M.H. Sherman Co. established the scholarship in honor of founder Arnold D. Haskell. The scholarship is paying all the costs – from fees and books to board and personal expenses – for the 2003-2004 school year for environmental horticultural science students Matthew Maggio and Amanda Clanton.

The two students were selected on the basis of academic achievement, community involvement, personal interviews and an essay on their educational and career goals.

Maggio and Clanton will have the opportunity to work in a paid, six-week internship program at Sherman Library and Gardens in Corona del Mar in summer 2004, gaining experience with propagation, planting, maintenance, feeding, grooming and the gardens' computerized inventory.

"Earning the Haskell scholarship affirms my honest belief that hard work and determination seldom go unrewarded," Maggio says.

"The Arnold D. Haskell Scholarship Fund was created to advance environmental horticulture education in California," said a company spokesperson. "Cal Poly has an excellent reputation, and the College of Agriculture is one of the premier undergraduate agriculture programs in the nation."

The Sherman Library and Gardens is an educational and cultural center. The library houses a research center devoted to the study of the Pacific Southwest and contains a specialized collection of rare books, photos, maps and papers from the past 100 years.

The horticultural display gardens represent 2,000 species of plants from all over the world.

"It has been a great honor to be chosen to receive the Arnold D. Haskell Memorial Scholarship," Clanton says. "It makes me feel like all of my hard work has paid off. The scholarship has made a huge impact on my life. It has eliminated my many worries concerning paying for my education. I'm extremely excited to do the internship at the Sherman Library and Gardens and learn more about public gardens."

"Cal Poly's philosophy is learn-by-doing, and these internships definitely support that premise, preparing students for their future," said Sherman Gardens Director Wade Roberts (OH '66).

"I was overwhelmed with the generosity and vision of the Sherman Co. in making this commitment," said Jennifer Ryder Fox, head of Cal Poly's Horticulture and Crop Science Department. "This investment in the future of horticulture is significant, and the Haskell scholarships will truly make a difference in the lives of these students, enabling them to continue their education without financial worry."
Today's "Blackboard" bears little resemblance to the blackboards of the past, those that conjure up images of yellow chalk and dusty erasers.

Today's Blackboard uses the Internet and the latest technology to help a new generation of faculty members effectively organize and deliver course content, giving students access to it any time, from any Internet connection.

A Web-based learning management system, Blackboard allows instructors to enhance their one-on-one relationship with students by providing online handouts, course materials, syllabi, study tools and discussion threads online, according to Instructional Designer Luanne Fose of Technology and Learning Services at Cal Poly.

"TLS implemented the Blackboard Courseware Development Program in 2003 to improve teaching and learning and to increase the success of Cal Poly's newer faculty members in implementing technology in the classroom," says Tonia Malone, ITS information technology consultant.

Claudia Cremasco, who teaches beginning Italian, noticed a marked improvement in the overall performance of her class with the use of Blackboard courseware.

"Learning Blackboard has been a very important experience for me," she says. "It provided me with the opportunity to create a site where the students could be exposed to the Italian language through authentic material and where they could review material used in class. I found it really useful for keeping track of my students' work and progress and for providing immediate feedback to them. Comparing the results of this year's final exam with those of last year, I found considerable improvement overall."

Architectural Engineering professors Vicki May and Pamalee Brady sought the help of TLS for a hybrid course on timber structural systems they co-taught fall quarter. In this course, Brady lectured on campus while May delivered her sessions online from an out-of-state location.

"Since both instructors were already quite familiar with distance learning techniques," Fose says, "TLS primarily assisted by serving in a consultation capacity and by creating a Flash animation, which visually illustrated three-dimensional architectural structures through an interactive learning environment that the students could manipulate in a variety of ways."

"I found the discussion board was very valuable and allowed for diverse opinions and awakenings for some students," Brady says.

The staff members in TLS also created a Blackboard application for Kinesiology Professor Kristine Jankovitz, who wanted help managing a lecture course with about 200 students every quarter.

"Jankovitz wanted to make her course content more pedagogically sound and more accessible to her students," Malone explains. "Blackboard provided a central depository for her students to access files and articles. Every lecture was posted before the class meetings, and students were responsible for printing the outlines and bringing them to class."

The approach saved the Kinesiology Department money in printing costs and encouraged the students to take more responsibility for their education.

"I do like the opportunity to be able to post lecture-note outlines during the quarter, as opposed to having it all in print at the beginning of the quarter," Jankovitz says. "This allows me to make 'in-flight' modifications as necessary to keep pace with instruction or changes to the course calendar."
Building on the success of an earlier project that expanded and strengthened the agribusiness research materials in the Kennedy Library, Business Librarian Frank Vuotto was given a second $35,000 from the Agribusiness Department’s 2003 student fee increase to build world-class collections - both digital and print.

“It’s a win-win scenario,” says Vuotto, who came to Cal Poly in 2002. “Students win by gaining hands-on experience with such key business databases as Factiva, TableBase, Business & Industry, and Global Market Information Database, making themselves more desirable – and hirable – in today’s tough job market.

“Industry wins by hiring new graduates who can conduct high-level research, an essential skill in a very competitive business landscape,” Vuotto continues.

The student fees also helped build specialized collections, such as Produce Category Management, Wine and International Trade, which would have been cost-prohibitive without the fee allocation.

For more information on the Student Fee Allocation project and a detailed list of expenditures visit http://macabra.lib.calpoly.edu/staff/fvuotto/35k/.

In May 2003, the Agribusiness Department, along with Vuotto, secured a $5,000 grant from The California State University Information Competence Project to design and implement a subject-specific information-competence Web site.

The Business & Agribusiness Information Competence Web site (http://multisweb.lib.calpoly.edu/Agbusine ss/index.html) is a comprehensive, tutorial-driven, digital guide that teaches students how to master basic information-literacy skills. In addition, students learn fundamental business, agriculture and economics competencies, while gaining hands-on experience using key agribusiness and business databases.

“The Web site is the most comprehensive, subject-driven, information-competence Web site in the United States,” Vuotto says. “The scope, content and instructional design are unmatched in academe.

“The Web site was created to deliver business-related research support, teach general and subject-specific information-competence skills, and provide remote access to high-end databases and digital research guides 24/7,” Vuotto says.

The Web site is part of the Business Research Portal (http://macabra.lib.calpoly.edu/staff/fvuotto/) that was developed to provide students and faculty easy access to a wide range of business resources through the Kennedy Library, including digital research guides, resource updates, new-product alerts, specialized collections, course research guides and new business books.

“The Business & Agribusiness Information Competence Web site was developed in response to the student success strategy at Cal Poly and to create a digital environment where learn-by-doing comes to life,” Vuotto explains. “The Web site embodies the ideals set forth by Cal Poly’s Council on Student Success by teaching real-world business research skills that students will need in the competitive business arena.”
Cal Poly was home to several major construction projects in 2003 — including the first new student housing built on campus in 20 years and a new engineering building.

Cerro Vista, a $36.7-million apartment-style student housing complex designed for upperclassmen, opened its doors in September 2003, on schedule and in time for fall quarter.

The complex is the first phase of Cal Poly’s plan to ease the housing crunch facing students in San Luis Obispo. Cerro Vista provides 800 beds in furnished four-bedroom units and a smaller number of two-bedroom suites that add up to some 160,000 square feet.

Each four-bedroom suite is 960 square feet, and the six-acre hillside location at the base of Poly Canyon Road offers plenty of residents million-dollar views of the campus and Bishop Peak. Students, faculty and staff watched the project rise in 2002 and early 2003, and students responded enthusiastically. So enthusiastically, in fact, that the university’s Residential Housing and Student Life department held a lottery to choose Cerro Vista’s first crop of residents — because applications outnumbered available beds.

Another major construction project that dominated the campus in 2003 was the Engineering III Building. The $14.5-million construction project is rising on the site of the old baseball field, between the new Advanced Technologies Laboratory and Highland Drive.

The new multistory building will offer some 41,000 square feet of classroom, office and laboratory space arranged around an outdoor work yard. The new building will be home to Aerospace Engineering, Civil and Environmental Engineering, Materials Engineering and Industrial and Manufacturing Engineering.

During winter quarter, Cal Poly completed the first phase of the Engineering III Building, which broke ground in summer 2001. Phase two includes building a jet-propulsion laboratory, finishing the interior construction, adding landscaping, and outfitting the building with $2.29 million worth of new equipment.

The Engineering III project will also include a $1.2 million extension of California Boulevard to Highland Drive, creating a complete two-way traffic loop around the campus core and enhancing pedestrian and bicycle safety along the route.

The final phase of Engineering III will begin in early summer 2004 and should be completed by December. The first classes are scheduled for winter quarter 2005.

Also largely completed in 2003 was Cal Poly’s Telecomm Project. The $8.9-million project is upgrading telecommunications and technology capabilities in all Cal Poly academic buildings for voice, video and data transmissions, including two-way videoconferencing, improved computer networking and technology instruction.

continued on next page...
Several smaller but significant renovation projects were also completed in 2003. They include upgrading seating in the Alex and Faye Spanos Theatre to current standards for disabled persons and adding multimedia and distance-learning facilities in five laboratories.

On a final note, Cal Poly, along with the rest of the Central Coast, shook, rattled and rolled through the Dec. 22, 2003, San Simeon earthquake, centered some 40 miles north of campus. Only a handful of faculty and staff members were on campus that day, and no injuries were reported. University facilities suffered only minor damage during the 6.5 magnitude earthquake, according to Facilities Director Mark Hunter.

Kennedy Library suffered a broken window facing the interior courtyard and fallen books on its two top floors. The quake also cracked windows in Mott Gym, where they were quickly replaced. Although the quake damage appeared minimal, seismic consultants were brought to campus during the winter break for thorough inspections – and gave the campus a positive report.

---

**Fratessa Memorial Fund Established**

As head of the Architectural Engineering Department, Paul Fratessa focused primarily on his students. Through the generosity of others, his personal legacy of focusing on students continues even after his death last September.

He came to Cal Poly in 1965 to teach, after earning wide professional respect as a registered structural and civil engineer in 38 years of practice and service on numerous statewide boards. He quickly earned the respect of the faculty and students.

Every year he personally guided students in coordinating the Structural Engineers Association of California Structural Forum. Sharing with them the experience gained in almost four decades of practice, he guided them in selecting a theme, laying out an agenda, and organizing, for the first time in their lives, a major professional event. He put them in touch with leading-edge professionals and helped them gain expertise in communicating with those practitioners.

Fratessa served as a primary faculty advisor to students building structures for their senior projects – a bridge at Lopez Lake and the recent Tensile Structure in Poly Canyon, for example. He coached them on how a typical engineering firm would lead a project, from funding and materials through public scrutiny to completion – a glimpse into their future professional careers.

To continue her husband’s legacy, Fratessa’s widow, Mary-Jo, provided the initial donation to establish the Paul F. Fratessa Memorial Endowment, and with additional contributions from family, friends and colleagues the student-focused fund has grown to $20,000.

Proceeds from the endowment will directly benefit students through scholarships, field trips and learn-by-doing projects such as designing and building structures on and off campus.

“Tangible improvements that Paul brought to the department during his tenure are surpassed in their benefits only by the level of collegiality, optimism and enthusiasm that he generated in the faculty, staff and students,” said Interim Department Head Abe Lynn. “His vision left an imprint on the department. He will be long remembered and deeply missed.”
Professor’s Study Shows Cal Poly’s Impact on Local Economy

Cal Poly has a $1 billion-plus annual impact on the local economy, according to a study by Orfalea College of Business Finance Professor Kenneth Riener.

The report, based on research gathered and analyzed throughout 2003 by Riener and business senior Robert Rendler, is the latest in Riener’s series of studies on the university’s impact on the economy in San Luis Obispo city and county.

The finance professor’s ongoing research reviews the university’s economic impact in a variety of forms, including spending by faculty, staff and students, as well as university expenditures for locally procured supplies, services and construction.

His latest study also includes the impact of the many visitors the university draws to the area. And it takes into consideration the “multiplier effect” that results from these dollars being re-spent locally. The report concludes that the combined impact of these expenditures alone on the San Luis Obispo County economy is more than $637 million annually.

Riener and Rendler’s research also considered such influences as university payroll, university purchases, student spending, retired staff and faculty spending, visitor spending, local capital expenditures, and the increased earning power of local Cal Poly graduates.

Not only does Cal Poly contribute a large proportion of the county’s economic activity, it serves as a major stabilizing force in the economy because of the relatively low variability of employment, the report concludes.

The $1.12 billion overall impact of Cal Poly on the local economy means that more than $1 of every $9 earned or spent in San Luis Obispo County is due directly or indirectly to Cal Poly, Riener said. The university now also supplies roughly 10 percent of all jobs in the county.

The report is available online at the Orfalea College of Business Web site, www.cob.calpoly.edu.

Ozzie Smith Makes a Triple Play at Cal Poly in June

June 14, 2003, was a busy day for Cal Poly alumnus Ozzie Smith, the greatest shortstop in the history of baseball. The day marked his return to his alma mater to deliver keynote addresses at morning and afternoon commencement ceremonies, receive an honorary Doctor of Humane Letters degree, and speak to a standing-room-only crowd at the dedication of the Ozzie Smith Plaza.

Known in baseball as “The Wizard” for his amazing defensive play at shortstop while fielding for the San Diego Padres (1978-1981) and the St. Louis Cardinals (1982-1996), Smith was the sole inductee into the National Baseball Hall of Fame in Cooperstown, N.Y., in 2002.

Osborne Earl “Ozzie” Smith is less well-known for his equal dedication to working with young people. In recognition of his community service, he was awarded an honorary Doctor of Humane Letters degree by Cal Poly and the trustees of The California State University, becoming the only 10th person in the university’s history to be granted such a degree.

At the afternoon plaza dedication ceremony, a three-quarter-life-size bronze statue of Smith was unveiled. In addition, a scholarship endowment for Cal Poly baseball has been created to honor him, with a limited number of statue miniatures available for donors.

At the dedication, Smith spoke to a crowd of some 500 faculty members, students, staff and Central Coast baseball fans, calling his career and return to Cal Poly “a dream come true.”
The gift came as a surprise even to those close to Cal Poly custodian Delores Estrada (BUS ’75), but there it was: a $100,000 bequest to the Performing Arts Center San Luis Obispo.

The $100,000 gift from the Delores T. Estrada Living Trust came to Cal Poly near the end of 2003 as attorneys and friends settled the estate of the 20-year Cal Poly employee.

Estrada willed her entire estate to three Central Coast charities: one-third to the Performing Arts Center, a partnership between Cal Poly, the City of San Luis Obispo, and the Foundation for the Performing Arts Center; one-third to the Prado Day Center for the homeless in San Luis Obispo; and one-third to the San Luis Obispo chapter of the American Red Cross. Each received a gift of $100,000 in the closing months of 2003.

“It’s quite an extraordinary gift, embodying the whole spirit of philanthropy,” says William G. Boldt, Cal Poly’s vice president for university advancement.

Estrada was 51 when she died in 2002 after a battle with cancer. Beloved by students, faculty and staff, she had been named one of three Outstanding Staff Members in 1999.

“Delores Estrada, campus celebrity,” the Mustang Daily wrote that year in a profile of Estrada and her award. “Everywhere she goes, Estrada is greeted by smiling faces.”

During her years as a custodian, she was assigned to the Performing Arts Center and then the top floors of the administration building — including President Warren J. Baker’s office.

She was also an energetic participant and fund-raiser for the university’s Service Awards Committee, the PAC’s Youth Outreach for the Performing Arts Center program, the campus Emergency Response Training program, and the now-defunct Cal Poly Staff Council.

“She was a great person, in terms of an employee. She set a standard in all the work she did,” remembers Ron Regier, managing director of the Performing Arts Center. “She was always bringing ideas to me or to our committees for improvements for our patrons, for their safety and convenience. She was always trying to make things better.”

But while she was well-known, she was quiet about her personal life. The fact that she graduated from Cal Poly in 1975 with a degree in business administration was not widely known.

“She was a very humble person, and she didn’t share her personal life with very many people,” says Nancy Cochran, theater operations manager at the Performing Arts Center.

Estrada was single and spent much of her time caring for her aging and increasingly ill father. “She was a very devoted daughter, scheduling her day around taking care of him,” Cochran remembers.

Currently, the Performing Arts Center is determining how to use the $100,000 bequest from Estrada, Regier says. As the news about her bequest spreads around campus, those who knew her say it’s typical of Delores Estrada, campus celebrity.

“She was,” Cochran says, “just a selfless, generous person.”
Change Service Requested

Parents, please note: If your son or daughter is no longer at this address, please send his or her current address to alumni-info@calpoly.edu.