PRINCIPIA PURPOSE

Winter '09

SUSTAIN *ability*

2009-2010 PRINCIPIA Coast-to-Coast Tour

Keep up-to-date with Principia! *Following a comprehensive strategic planning process, Principia's leadership is traveling in the United States and Canada to share news and updates about current programs at the School and College as well as a vision for Principia's future.*

Coast-to-Coast Tour Stops

Washington, DC	November 7, 2009
Phoenix, AZ	January 23, 2010
Tucson, AZ	January 24, 2010
Houston, TX	February 27, 2010
Dallas, TX	February 28, 2010
Toronto, Canada	March 6, 2010
Boston, MA	May 1 or 2, 2010 (TBD)

For more information and to register, go to www.principia.edu/coasttocoast

PRINCIPIA
PURPOSE
Winter 2009, Issue No. 361

The mission of the *Principia Purpose* is to build community among alumni and friends by sharing news, updates, accomplishments, and insights related to Principia, its alumni, and former faculty and staff. The *Principia Purpose* is published twice a year.

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From the Chief Executive

Dear Readers,

When I came to Principia last year, I often thought and talked about a desire for deeper, richer conversations. I think we have made significant progress in having meaningful discussions with one another, and I invite you to join that conversation through the pages of the *Principia Purpose.*

Mary Kimball Morgan, Principia's founder, captured the importance of true communication on important topics when she spoke at a parents' meeting toward the end of the 1935 school year: "Parents and teachers who live close to the young people in their care are given much food for thought in the type of questions stirring in the thoughts of youth today." She went on to say that students will talk freely with us of their problems "if they find in our response to their questioning something of sufficient value to feed them or if they find in us an honest, intelligent, sympathetic readiness to consider with them these fundamental problems of human experience" (*Education at The Principia,* p. 55).

This "honest, intelligent, sympathetic readiness to consider" will enable us collectively to define what Principia will look like over the coming decades. Please join us in embracing meaningful conversations about Principia's future. The *Purpose* is part of that worldwide conversation, and I invite you to take some time to converse with us through these pages. Then feel free to get in touch by writing a letter to the editor or sending a personal update. Let's keep the conversation flowing.

You'll see that we have taken steps in this issue to print and ship the magazine with less impact on the environment. Most notably, those who receive both the *Purpose* and *Connections* will notice that we have eliminated the magazines' plastic wrapper, opting instead to secure *Connections* inside the *Purpose*. In addition, we have used a slightly lighter weight paper in the latter. Also, all pages contain at least 10 percent post-consumer recycled material. Let us know what you think of these adjustments.

Now, dive in to the cover story's extensive discussion of sustainability, find out how the School and College athletic directors are working together in innovative ways, and get an in-depth look at the College's Education Department—one of the top three teacher-training programs in the state of Illinois.

Jonathan W. Palmer
Chief Executive

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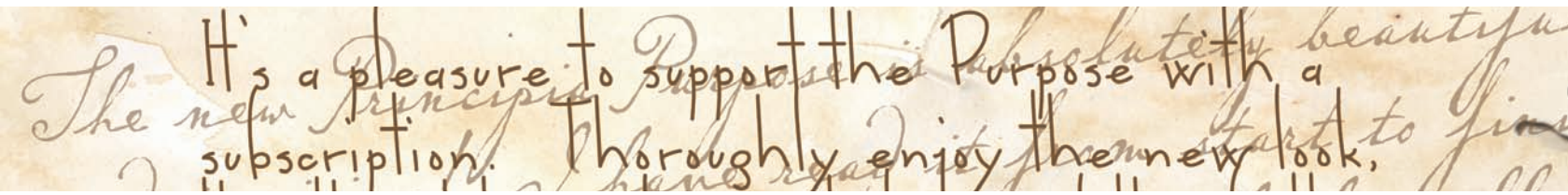


"The revamped *Principia Purpose* is very impressive. It emphasizes that Principia is primarily an academic institution, rather than a primarily social one. The reports on the professional activities of the professors in the Political Science Department were particularly encouraging. In addition to validating the academic work these faculty are doing in the classroom, these reports make it clear that they are respected by their peers and are well connected in their field."

~Celia Black Lowenberg (US'85, C'89)

"I wanted to tell you how pleased I am with the newly designed *Purpose*, both in appearance and in content. I'm especially pleased that alumni news has been separated from the *Purpose* itself. I love to read news of alums, but I do not feel it was professional to include news of weddings and the like in the *Purpose* itself."

~Louis Garinger

"The *Purpose* is fantastic, so full of inspiring articles! To make it 100% perfect for me, please consider a personal request. When you print on color, make sure the contrast is the best you can make it."

~Bud Olsen (C'49)

"It's a pleasure to support the *Purpose* with a subscription. Thoroughly enjoy the new look, the thought-provoking articles, and the better sense of communicating what Principia is all about!"

~Richard (US'45, C'49)
and Georgia (C'50) Dearborn

"The new *Principia Purpose* is absolutely beautiful and inspiring! I have read it from start to finish, have reread several of the articles, which really warm my heart and move me to action, and have put on my refrigerator door the lovely peace cover with the smiling children. Thanks so much for your outstanding work!"

~Elizabeth Dawn (C'63)

"My metaphysical study has been given a charge; I'm coming up with ways in my business and personal life that I can specifically apply the ideas about peace shared in the *Purpose*. I felt a sense of love and appreciation well up for my alma mater that I have not felt in years. I am thrilled to consider myself a part of such a strong movement of thinkers."

~Angela Sage Larsen (C'92)

"First, I want to say how much I enjoyed and am enjoying the new format for the *Principia Purpose* and *Connections*.

"Second, I'd like to share my experience regarding Prin abroads. On page 40, the *Purpose* says, 'One of the first abroads—as we think of them today—is Dr. Douglas Swett's 1966 trip to Mexico, the first time students traveled to their destination by car.' I participated in an abroad to Mexico with Dr. Swett the summer of 1955, and I know that was not the first one. We traveled from Elsah to Mexico City in station wagons, driving the whole way."

~Bobbi Lewis (C'58)

The Principia Purpose *welcomes signed letters to the editor. Letters will be published as space allows and may be edited for clarity and brevity.*

Please write to: Principia Purpose, *13201 Clayton Road, St. Louis, MO 63131. You can also e-mail us:* **letters@principia.edu.**

A RESPONSE FROM PRINCIPIA'S ARCHIVIST, JANE PFEIFER

I began my article, "How Principia Abroads Got Off the Ground," by explaining that the term first *can be defined in many ways because each trip was important to the development of Principia's international and off-campus programs, but we could not list every one.*

My statement that the 1956 abroad was a new experiment deserves more explanation. From reading the records and articles about this "new program," I feel it marks the point when Principia became committed to providing an ongoing yearly program of a full quarter's work. This programmatic shift is reflected in the 1955–56 Sheaf *on page 103, where the title "Prin Abroad . . . Pioneers" appears with a photograph of Edwin S. Leonard and the students who went on the 1956 abroad.*

The 1955 summer trip to Mexico is not listed in the School of Nations files on Principia abroads, nor are the Frank Parker trips. Hence, my second point that the definition of an abroad program changed over time. While there were several earlier trips to Mexico, not until the 1966 and 1967 trips were they a full quarter each, planned by the School of Nations program, and called a "Principia Abroad." The College did not title the earlier trips abroads.

Thank you for your passionate interest in Principia's legacy of international education! We welcome documentation of any sort on off-campus and international travel programs by Principians, and we especially appreciate clear images of students and faculty.

School News

Fall Athletes Excel

While all the School's teams deserve recognition this fall, three warrant special commendation. The football team had a stunning season. For the first time in School football history, the team won eight regular season games and beat Priory, John Burroughs, and Lutheran North in the same year. Principia's defense was ranked first in the ABC League, and the offense was ranked second. Additionally, Larry Patterson was named MVP for the League. The team advanced to the regional playoffs, losing there 14–12 to Maplewood. Head Coach Brad Warrick commented, "I can't speak highly enough of what these players accomplished. They played as a unified team that consistently expressed humility, courage, toughness, unselfishness, purity, joy, and leadership. This is a team of incredible character."

On the pitch, the boys' varsity soccer team qualified to play at the district level, where they won two games before losing to Whitfield 4–1 in the finals. Individual players' accomplishments include Evan Sperr's selection as an ABC League first team All-Star. In addition, Abi Carper and Christian Thomas were named to the League's Honorable Mention team. The team concluded its season with 9 wins and 11 losses, but as Travis Brantingham, head coach and School athletic director, explains, "The team's record doesn't reflect the amount of work and time the players poured into this season. We played a very competitive schedule in a very difficult league. Throughout it all, the team focused on its primary purpose—to grow spiritually."

In cross country, the girls' and boys' teams showed exceptional teamwork and determination. In district competition, the girls took first place with a decisive victory. For individual finishes, senior Stephanie Romero came in first, followed in second place by junior Sarah Winterroth. The boys' team took second place at districts with the help of senior Aean McMullin's first-place finish, which set a course record. Once at the State Championship, the girls placed 6th overall as a team and the boys 13th. Aean McMullin placed 11th overall, earning All-State status. Coach Jamie Bollinger summed up the season with wisdom relevant beyond the cross-country trail: "We all agreed that if we are to achieve excellence in athletics, schoolwork, church work, relationships, and so on, we need to talk less and demand demonstration. 'Just do it.'"

Second Grade Gardeners Honored

At this year's National Garden Clubs Convention, a national award was given for the partnership between Principia Lower School, the Forsythia Garden Club, and the Town and Country Parks and Recreation Department. Principia's role in the partnership results from Doug Hoff's work with the second grade.

For five years now, his classes have gone to Longview Farm Park near campus to learn about and plant native plants. Hoff notes, "It's an excellent, tangible way for the students to give to the larger community. And it's fun to return in the spring to see the fruits (literally) of our labor."

ANNOUNCEMENTS

ROB OSTENBERG—2009 ALUMNI AWARD WINNER

The Principia Alumni Association David K. Andrews Distinguished Alumni Award recognizes alumni who have rendered outstanding service to others in the spirit and example set by David K. Andrews. This year's award was presented to Rob Ostenberg (US'65, C'69) at the Upper School reunion.

After graduating from the College, Ostenberg enlisted as a private in the Army. He later completed Infantry Officer Candidate School and was commissioned as a second lieutenant, serving in Vietnam as platoon leader in both infantry and cavalry. Following active duty, he transferred to the Army Reserve. His awards include the Distinguished Service Medal, the Legion of Merit, the Bronze Star (Valor), and the Purple Heart. His final duty was as director of Reserve

A Reunion for the Record Books

October's Upper School reunion topped the charts for attendance, with more than 600 guests gathering to share memories and catch up on life since graduation, whether that was five or 50 years ago.

During the weekend, reunioners took part in an array of activities. Gold and blue were the colors of the weekend as alums, current students, staff, and faculty cheered on the athletic teams at an energetic pep rally and later at football and volleyball games. Reunioners also went on a variety of day trips led by Principia teachers and staff. One excursion, designed with the Upper School 50th Reunion group (classes of 1959 and 1960) in mind, included a tour of the old Principia Page and Belt campus and a luncheon at the Chase Park Plaza near Forest Park.

During the weekend, these two classes (pictured above) presented their 50th Reunion gift of $60,500 for the establishment of an endowed Upper School Student Aid Fund. Class representatives Ed Harper and Ronnie Cullom Jacobson expressed gratitude for the education they and their classmates received and shared their classes' hopes that their gift would provide current and future students the same opportunity they have cherished through the years.

Benefit Concert for H20

On November 16th, the Upper School Philanthropy class sponsored a benefit concert as part of their "H20 with Love" effort to raise funds—and awareness about the need—for clean water in developing nations. All proceeds went to H20 for Life, a charitable organization that matches U.S. schools with schools overseas that need drinking water and sanitation. The concert, emceed by Upper School house pop and former stand-up comedian Travis Thomas, was a rousing success. So far, over $3,000 has been raised through concert ticket sales, t-shirt sales, and ongoing donations. The class's goal is $7,000—half of the money needed to supply water for the Kinamba Primary School in Kenya. (A non-governmental organization will match this amount and implement the project.) DVDs of the concert, which included both dance and musical performances, may be purchased for $21.50 by sending a check (made out to Philanthropy Class) to Principia, 13201 Clayton Rd., St. Louis, MO 63131. For more information about H20 for Life, visit www.h2oforlifeschools.org.

Greg Mortenson's Visit Inspires Student Fundraising

Greg Mortenson, co-author of *Three Cups of Tea: One Man's Mission to Promote Peace . . . One School at a Time*, spent two days in October with Principia and the nearby community.

On the St. Louis campus, students at all levels engaged in an enthusiastic Pennies for Peace drive to raise money for schoolchildren in Pakistan and Afghanistan. Classes sold items ranging from homemade play dough to baked goods and plants. Pre-schoolers also participated in a Fun Run at the track, with family members sponsoring them for $1/lap. The night of his talk at the School, Mortenson was presented with $3,000 in donations, but students are continuing to raise Pennies for Peace.

Mortenson also spoke at the College, where his talk was open to the public. In addition, he addressed Alton-area schoolchildren. Alton Mayor Tom Hoechst used the occasion to kick off a City of Alton community service campaign called "Three Cups of Caring." The city also endorsed *Three Cups of Tea* as a community reading project, including it in the curricula of public and private elementary schools and Alton Junior High.

Forces for North American Aerospace Defense Command (NORAD) and U.S. Northern Command (NORTHCOM), Peterson Air Force Base, Colorado.

The values Principia reinforced for Rob at the School and College—loyalty, duty, respect, selfless service, honor, integrity, and personal courage—are the same values he stressed to his soldiers during his 39-year military career. He retired from the Army in late 2008 as a two-star general, but he continues to work as a civilian at Metropolitan Life, providing estate planning and pension guidance. Rob is active on several local boards and advises a non-profit that deploys humanitarian resources to Iraq and Afghanistan. Currently a member of the Principia Trustees' Council, Rob has also served as an Alumni Board member and Principia Club president.

College News

Solar Car Team Wins Coveted Safety Award

Principia's solar car, Ra 7, finished seventh in the 2009 World Solar Challenge, a grueling 3,000-kilometer race across the Outback from Darwin to Adelaide, Australia. Among the competitors in this six-day event were the University of Michigan, MIT, NUON Solar Team of the Netherlands, Sakaraya University from Turkey, and Cambridge University representing the United Kingdom. In total, 32 teams started the race (others were disqualified before it began), but only 10 teams completed it. The winning vehicle, built by Tokai University of Japan, was sponsored by Sharp Electronics. The No. 2 finisher, Nuna V, was sponsored by the European Space Agency.

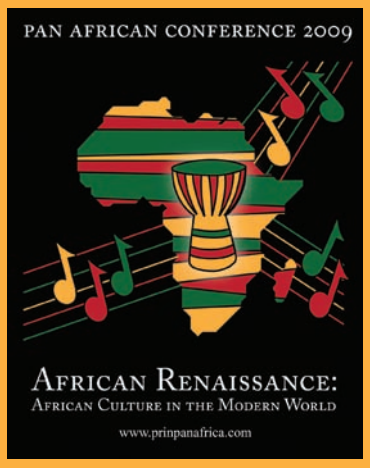
"Considering the level of competition, we were pleased and grateful to finish in the top ten," said faculty advisor and Assistant Dean of Academics Joe Ritter. "These are the best teams in the world. MIT and Michigan have more graduate-level engineering candidates than Principia College has students."

In addition to its strong finish, Principia's team won the much-coveted Safety Award (right). "That's a big deal," says Ritter. "This award is given for the most comprehensive and complete safety plan, submitted on time and implemented meticulously."

A variety of issues—dust storms, a shipping crate accident, emergency roadside stops, and other incidents—gave team members many opportunities to rely on God. Summarizing the race, Ritter said, "This may have been our most difficult race ever, but it allowed team members to apply their understanding of God and demonstrate excellence."

Pan-African Conference Celebrates Its Tenth Anniversary

Drawing a crowd of nearly two hundred, including off-campus delegates from as far as Chicago and Ohio, the student-run Pan-African Conference celebrated its tenth anniversary in October. As with past conferences, this year's program focused on topics of specific significance to Africa and widespread relevance to the rest of the world. But it was also quite different from previous programs, according to conference co-director Darline Akoth Ambugo. "Past conferences concentrated more on the problems of the African continent," she explains. "Our objective was to present the beauty and rich qualities of the continent—a topic too often sidelined. Our aim was to educate conference participants about an Africa devoid of wars, famine, and corrupt governments."



This year's topic, "African Renaissance: African Culture in the Modern World," examined oral literature, art, music, and textiles across a variety of African cultures. "We chose these four themes because they are uniting forces that exist in every culture," says Ambugo. Following a full weekend of talks, the conference closed with a reggae performance by Sudanese musician Dynamq Sudan.

Baseball Team Finds New Fans

After one of its best seasons ever, the baseball team is drawing cheers from a new set of fans. Since September, the team has been volunteering once a week at the Boys & Girls Club of Alton. Recognizing the value of giving to others, Coach Pete Paciorek fully expects this activity to benefit his players both individually and as a team.

Comments from players confirm that Paciorek hit a home run with this activity. Ron Meyer, a catcher, notes, "Getting involved in the community—especially working with kids—has added a whole new level of satisfaction to my Principia athletic career. Seeing these kids' faces light up every time the team walks in the door gives me hope that we are making a difference in their lives, because I know they've already made a difference in mine."

ANNOUNCEMENTS

College Football Program Discontinued

Since the suspension of the College football program last January, a thorough assessment of its continued viability as a varsity sport has been underway. Regretfully, we must now announce that the Principia College football program is being discontinued. This was a difficult decision to make, particularly given the tremendous contribution the program has made to the educational experience of so many alumni.

The inability to hire a qualified head coach and the insufficient number of potential student-athletes were the key factors that led to the decision to discontinue the program. The decision was not influenced by financial considerations.

The ongoing impact of Principia College football will always be recognized and appreciated. This decision does not in any way diminish the spiritual and character growth, life lessons,

St. Louis Schoolchildren Bike to the College

In November, junior high students from Compton-Drew Investigative Learning Center, a magnet school in St. Louis, rode bicycles roughly 45 miles from their school to the College. The children, who are members of Compton-Drew's Dolphin Bike Club, stayed overnight in the Crafton Athletic Center before riding back the next day. Principia's education majors hosted the Dolphins during their stay.

To participate in the Dophin Bike Club, students must be in good standing in terms of conduct and academic achievement, take bicycle education classes, and pass written and bicycle skills tests. Once they're members, Dolphins ride together twice a week.

The Club's trek to Principia is one aspect of a longstanding partnership between the College and Compton-Drew. Libby Scheiern, an education professor at Principia, notes the mutual benefits of the children's visit: "Our education majors benefit by planning and implementing a group activity . . . and by interacting with children from cultural backgrounds different from their own, which is important to developing competency as a teacher. They also share a college experience with students who have not yet visited a college campus, and they share a rural setting, which is different than would be experienced in downtown St. Louis." Joseph Lindell, who co-directs the Club at Compton-Drew, underscores this last point, noting that the visit "gives our students insight on how to be a college student and what it takes to be successful."

"Please Turn Off Your Cell Phones"

Until now, movies, talks, and concerts on campus always began *without* the customary request to turn off cell phones and silence beepers. But those days are over! In mid-November, the College's first cell tower began transmitting calls and syncing smart phones. For now, AT&T is the sole provider.

Since the tower's launch came so close to the end of Fall Quarter, there wasn't time for cell phone use to become ingrained in campus culture. Come January, however, cross-campus texting will surge, and the request to silence cell phones will become commonplace.

Softball Arrives on Campus

Principia College is pleased to announce the return of NCAA DIII varsity softball beginning with the 2010 season. The College will compete as a member of the St. Louis Intercollegiate Athletic Conference. Highly acclaimed and

longtime School softball coach Ken Leavoy will coach at the College during winter and spring, while continuing to coach at the School in the fall. Leavoy has coached the School program for ten years, winning Metro Women's Athletic Association Conference and Class 2 District 3 championships in 2007 and 2008. He has also served as an advance international scout for the Canadian Women's Olympic and National teams for the past seven years. In addition, he has coached men's professional Canadian teams, including many players on the 1992 World Champion Canadian National Team.

and camaraderie that have taken place for past football players at Principia College. We look forward to honoring and celebrating the special legacy of the program and its participants in several ongoing ways, including reunion events and Gold & Blue Athletic Hall of Fame activities.

To read the full announcement: www.principiacollege.edu/football

Nominations Welcome

The College's next homecoming weekend, October 8–11, 2010, will include a Gold & Blue Athletic Hall of Fame induction ceremony. Do you know a player, coach, or even an entire team whose contribution to College athletics deserves lasting recognition? If so, submit your nomination(s) at www.principia.edu/alumni.

PRINCIPIA COLLEGE
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RENEWAL
BALANCE

BEYOND ENVIRONMENTALISM *to* SUSTAINABILITY

by Trudy Palmer

If you think of *sustainability* as the twenty-first century term for *environmentalism*, think again. While the two are related, they're lifetimes apart. Imagine two photographs, one of a toddler and one of that child three generations later, a great-grandparent by then. The shape of the nose is the same, but the breadth of experience reflected in their eyes can't be compared. Environmentalism is the toddler that grew into sustainability. Sue (Hall, C'78) Oakes couldn't be happier about that.

Sue is married to an environmentalist, her mother was a botany major, and she has always loved and respected nature. Yet she's the first to admit that environmentalism, while a keen interest, never quite fit her because it didn't speak to other issues, like social justice, that were important to her. "It wasn't big enough," she says. Not so with sustainability. She's adamant about its reach: "When you're talking about sustainability, you have to look at the whole. If you put any term in front of it, you've missed the point because then you're only talking about economic sustainability or environmental sustainability or social sustainability, when you need to be looking at the whole. No one and nothing is left out of the discussion. No one and nothing is extraneous."

From two to the world

Sue's closest partner—both at home and at work—is her husband, Dave Oakes (C'78). At the College, where the two were married after their junior year, Dave double majored in education and sociology; Sue designed her own major in juvenile justice. Since then, Dave has earned a master's in science education with a focus on environmental education and a doctorate in educational administration with a focus on teacher training in environmental education. Dave has taught high school, directed a program at Goodwill for people with disabilities, and both Dave and Sue have taught college. After home-schooling their three children for many years, Sue is now pursuing a master's degree in Socially Responsible Business and Sustainable Communities from Goddard College.

As valuable as all that training and work experience are, nothing has had more impact professionally than their three years spent in Africa while Dave was coordinating an international teacher-training program in environmental education. The Oakeses lived in Botswana (with their then 3-, 5-, and 7-year-old children), but they also got a feel for the continent, traveling to 21 countries during their stay. As Dave explains, "Our

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time there changed our whole perspective about what we wanted to do with our lives. We saw some of the best and the worst experiences of our lives wrapped up in a three-year package. We walked out of that experience back to Maine with a very simple yet profound realization that this thing we call sustainability happens through community."

What's community got to do with it?

While in Africa, the Oakeses discerned the line of demarcation between the best and worst they were witnessing, and it came down to a single word: *community.* The worst resulted from shortsighted international aid efforts that threw money at the problem, leaving behind ideas and equipment ill-suited to the environment—a tractor rotting in the Kalahari Desert for want of parts and mechanical know-how, for example. The best, on the other hand, were "community initiatives, where neighbors came together to identify problems and work together to solve them," Dave explains. Sometimes outside aid played a role in these solutions, too, but not until community members had identified their needs and devised a plan of action.

The Oakes family, from left: Jonathan, Kateland (C'10), Sarah (C'12), Dave, and Sue. The Oakeses live off the grid in Hope, Maine.

Eventually, the Oakeses' realization that sustainability happens through community gave birth to the Center for Ecological Living and Learning (CELL), their non-profit educational organization, whose mission is "to inspire students (our future leaders) to bring creative, systemic solutions and environmental stewardship to their individual lives and leadership positions." CELL achieves this by providing college-accredited abroad programs focused on sustainability through community. So far, there are programs in Iceland and Central America, with plans to add East Africa and the Middle East. The Oakeses may also develop programs in the U.S. at some point, but for now, they're focused overseas in order to provide students "the opportunity to know themselves through another culture and become citizens of the world," Sue explains. All CELL programs, which are accredited through Lesley University in Cambridge, Massachusetts, include rigorous academic demands as well as experiential and service learning, exploration of the area's natural environment, and immersion in the region's cultures and communities.

Dave and Sue walk the walk when it comes to community. Instead of operating in isolation, CELL partners with like-minded organizations. In Iceland, CELL students live and learn in Solheimar, an eco-village of about 100 people who grow 80 percent of their food—at the 64th parallel, no less—and get 100 percent of their energy from renewable sources. In Central America, CELL partners with a broad array of organizations, including Heifer International.

"Hate and greed are not sustainable. Love is."

~Sue Oakes

Hungry for hope

While community is the top priority in CELL programs, hope is high on the list as well. CELL's curriculum emphasizes solutions, with only 10 or 20 percent of time spent studying the problem. "College students are hungry for hope," Dave notes, "and not just to read an article about it but to see it in action." That's one of the reasons CELL's programs include service learning. "Students are seeing solutions firsthand—and being a part of them," Sue explains. "Knowing there's something you can do that makes a difference is a big part of having hope."

Community- and hope-building are essential to sustainability, but they're also hard work! CELL students not only push themselves to grow but step up to support others' growth as well. "Our programs have a very intentional focus on how we live together," Sue says, "both in our own little CELL community and as a part of the larger communities and organizations we're living and working with. What comes out of that is a lot of soul searching and some pretty significant personal transformation." Here's how one student described his growth: "I [now] know with utmost sincerity that I have the power of good in myself to be part of a sustainable community and a steward of a holistic lifestyle. This experience has changed my life."

Anything is possible

Whether that student knows it or not, his recognition of "the power of good" was nurtured by the spiritual understanding that undergirds CELL, namely, Christian Science. Dave and Sue are practicing Christian Scientists, as are Megan Reehl (US'01, C'05), an instructor for both the Central American and Iceland trips; Jeffery Turner (C'77), who co-led the abroad just back from Iceland; and Debbie Hensley (C'77), who is working to incorporate art into CELL's curriculum. Having so many Christian Scientists among the CELL staff helps us bring "a message of healing," Sue says. "We're not explicit about Christian Science, but our sense of hope and confidence in the abundance of ideas is something everybody can respond to. It's easy for students to see that the cause of global warming isn't just oil; it's greed and selfishness and so on. Hate and greed are not sustainable. Love is. They understand that."

Sue recalls a Christian Science practitioner once telling her, "There's no incurable problem because there's no incurable point of view." That means anything is possible. "Thought can move," Sue says. "And ideas are infinite," Dave adds, "so solutions are infinite, too. Our students see people of all faiths, all backgrounds, all convictions who not only believe that anything is possible but are demonstrating it."

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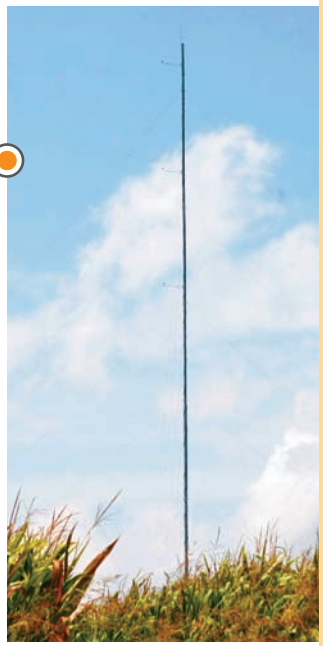
Children in a remote Nicaraguan village where CELL students helped install a solar electric system—the first electricity brought to the village

Sustainability through community

As a way of committing to what's possible, each CELL student designs a sustainability action plan, which he or she then implements with a community back home—a dormitory, campus club, or church group, for example. Plans have ranged from starting an organic garden on campus to creating pedestrian- and bike-friendly roads to encouraging boaters to run their instruments on solar power. These action plans not only ease students' transition from the CELL community back to the larger society but also pave the way for their lifelong commitment to sustainability.

There's no denying the complexity of the issue here. To sustain life on the planet, we need to move in many different directions at once, while at the same time considering the impact of our actions on every aspect of existence. The enormity of the task threatens to paralyze progress, yet action is imperative. Each of us has a part to play—working together in community. P



Results from the College's 198-foot meteorological test tower indicate that a wind turbine on the same site could provide roughly one-third of the campus's electricity. Feasibility studies are being conducted to determine the impact on bird and bat migration patterns.

TO LEARN MORE . . .

Center for Ecological Living and Learning (CELL)
www.cellonline.org

CELL's partner in Iceland

Solheimar Eco-Village: www.solheimar.is

A few of CELL's partners in Central America

Heifer International: www.heifer.org

Grupo Fenix: www.grupofenix.org

Sustainable Harvest International: www.sustainableharvest.org

Future CELL partners in the Middle East and the U.S.

Janessa Gans and the Euphrates Institute:
www.euphratesinstitute.org

Sandy Wilder and the Educare Learning Institute:
www.educarelearninginstitute.com

CELL's Growing Partnership with Principia

If it seems like a Principia/CELL partnership would be a natural, you're right! Already, a handful of College students have participated in CELL programs. And recently the Oakeses submitted a proposal to the Abroad Office to collaborate with College faculty on an Iceland abroad exclusively for Principia students. As with CELL's existing Iceland program, students would live and work in Solheimar's self-sufficient eco-village, along with studying the area's hydropower and geothermal energy sites. If approved, the trip would be offered in the 2011–12 school year.

In addition, Principia and CELL are exploring other opportunities for collaboration based, in part, on their shared recognition of "the critically important leadership role that higher education institutions have in teaching and modeling not only the principles of sustainability, but also the community building and leadership skills needed to effectively implement sustainability initiatives."

While this budding partnership with Principia is new, CELL has a longstanding connection with individual Principians. In particular, Dave (C'49) and Margie (Griggs, US'45, JC'47) Griswold stood by the Oakeses in the beginning stages of CELL's development, providing moral and spiritual—as well as financial—support to the fledgling non-profit. The Oakeses said recently in an e-mail, "We are forever indebted to the Griswolds' ongoing generosity and belief in what we are trying to accomplish."

Similarly, the Griswolds can't say enough about CELL's accomplishments thus far, and they're eager to witness its continued development. As early supporters of the College's solar car teams, they're especially excited about CELL's growing partnership with Principia. P

STUDENTS *for* SUSTAINABILITY

Ask the faculty and staff involved in the College's many sustainability efforts where the hustle to go green comes from, and they'll point to the students—"Generation E." That's what Andrew Revkin of the *New York Times* has dubbed young adults around the world working on behalf of the environment. According to Revkin, this generation's wide-ranging efforts fall into four broad themes: environment, energy, equity, and enterprise.

Principia's Gen E'ers aren't by any means alone in their efforts. The faculty and staff are working to green the campus as well, but the students are the ones pushing for results *now.* Fortunately, they're ready to roll up their sleeves and work for those results.

College junior Lauren Powers (below) co-directs the Energy Coalition, one of the student groups focused on sustainability. The Coalition boasts an eclectic mix of projects: on-the-air infomercials for Principia Internet Radio (PIR), campaigns to reduce food waste, and an upcoming film festival focused on the environment. For Powers, an art major and business minor, that kind of eclecticism proves that no single set of issues—or type of person—has a corner on the sustainability market. "The media has so politicized green issues that people are burned out on the subject," she notes. "One of my goals is to keep the Energy Coalition from being a liberal, leftist, extreme group and to involve everyone instead."

The College's eco-heads form another hub of sustainability-related activity. This year's all-campus eco-heads, sophomores Austin Kingsbery and Amber Dahlin (above), serve on Student Government, plan campuswide activities, and support the work of each house's eco-head. Like the Energy Coalition, the eco-heads tackle a wide range of issues. With support from Admissions, they gave all incoming freshmen reusable water bottles filled with information about the adverse environmental impact of bottled water. And just before Halloween, they hosted a showing of *Chocolate Country,* a documentary about the beneficial effects of Fair Trade on a cocoa farming community in the Dominican Republic. While supplies lasted, the eco-heads distributed Fair Trade chocolate as well.

Kingsbery and Dahlin, like Powers, work hard to embrace the entire campus. To help with that, they're "re-branding" their activities in order to counter the notion that "the eco-heads are an unorganized group of hippies," as Kingsbery puts it. "We're creating more order within the group and using more attractive promotional materials. We also designed a logo that goes on everything we do so that people know we're responsible."

On 10/24/09, students at the College took part in 350 Day activities, a worldwide call for action. Measured in parts per million, 350 is considered the acceptable upper limit for carbon dioxide in the atmosphere. The current level of CO_2 exceeds 385.

Recently, their re-branding efforts got a boost from the top. "I'd like to give a shout-out to Dr. Palmer," Dahlin says. "He contacted us at the beginning of the quarter and is very supportive and willing to play a part in our initiatives."

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GREENING the COLLEGE CAMPUS *and* CURRICULUM

To be sure, the College's concern with sustainability predated President Jonathan Palmer's arrival. The wind test tower went up before he got to campus, and a wide range of relevant courses—Sustainable Development among them—was already well established by the time he arrived. Still, many at the College would agree that Dr. Palmer has quietly shifted sustainability efforts into a higher gear. He did that in part by asking Dr. Mike Rechlin, the College's Roy W. Johnson Distinguished Professor of Biology, to identify a group on campus interested in the topic. The group began meeting over lunch and eventually a smaller subset submitted a proposal to become the Sustainability Tiger Team, charged with exploring the feasibility of an interdisciplinary minor and a center—both focused on sustainability. Composed of four faculty members and three students, the team devoted full time to the project for a week during the 2008 winter break, emerging from their work together with proposals for both a center and a minor.

Launching the Center for Sustainability

The Principia College Center for Sustainability (PCCS), which was officially launched last spring, has a twofold mission: "to promote and coordinate campus greening efforts" and "to inspire Principia's students, faculty, and staff to become more responsible local and global environmental citizens." Whenever possible, the Center will treat its projects as teachable moments, reflecting the College's commitment to experiential learning. For example, plans are in place for the Center's office to be a test site for sustainable design ideas ranging from LED lights to furniture made from renewable sources.

The Center will also work with campus partners (such as Facilities and Dining Services) to assess Principia's environmental performance and incorporate sustainability into its planning process. Dr. Rechlin, interim director of the PCCS, is also looking beyond the campus's borders. With his characteristic good cheer and unlimited sense of

From fertilizer to fluorescents: the delicate balance of greening facilities

Improving infrastructure is one of the most significant—and costly—strides a campus can take toward sustainability, but it's rarely fun or flashy, and it doesn't give you that good-deed afterglow that comes from planting trees or picking up litter. Yet, bringing the often-invisible infrastructure of buildings and systems up to green standards ensures that other, more obvious improvements have a solid foundation to stand on.

All too often, Steve Fulkerson, facilities director for both the School and College, finds himself in a scrimmage between "the day-to-day demands of keeping buildings safe, warm, and dry" and the need to create long-term, sustainable spaces. On bad days, he's the football tossed between the two, trying to decide whether to make extensive—and expensive—improvements to a building that might be better off razed and rebuilt according to LEED (Leadership in Energy and Environmental Design) standards. On good days, he persuades Team Sustainable to play with Team Day-to-Day, like the time he authorized a campuswide switch to CFLs (compact fluorescent light bulbs).

To complicate matters even more, Fulkerson recognizes the risks of moving too quickly towards innovation. "There are some wonderful, promising technologies available," he explains, "but they don't yet have a proven track record for maintenance, longevity, or life cycle, so I'm cautious about investing in them. I want to be a good steward not only of the Earth's resources but of Principia's revenues."

Above: Students in Dr. Mike Rechlin's spring '09 Sustainable Development class retrofitted this truck to run on oil that's been used to cook French fries. When running, it smells like a barbecue on wheels.

possibilities, he hopes the Center will "position Principia as an activist for sustainability in higher education."

Student support for the PCCS is strong, evidenced by the $6,000 gift to the Center from the class of 2009. In addition, current students are active both in the Center and on the Sustainability Council, which is the Center's governing board.

Preparing students for a green economy

The Tiger Team also explored the feasibility of creating a sustainability minor based on current faculty members' expertise. Team members—including faculty from art, biology, chemistry, and economics—studied other colleges' programs and settled on a multi-disciplinary minor that would provide a broad exploration of the topic. Here's what the proposed minor would include:

Two core courses

- Interdisciplinary introductory course
- A 400-level interdisciplinary project course

Four electives—one from each of the following clusters:

- Ethics, Culture, and Human Behavior
- Economics and Policy
- Production Systems and the Built Environment
- Ecology and Environmental Stewardship

Community service

Pending approval from the Curriculum Committee, the sustainability minor will launch when the College switches to semesters in 2011.

As part of the College's land management strategy, goats are rotated throughout the property, tasked with eating honeysuckle—an invasive species they consider to be a delicacy.

Saving Green by Buying Green

Although Bruce Alioto, Principia's contracts officer, works behind the scenes, his recommendations have enormous reach. Alioto authorizes the procurement of everything from contracts for construction, architectural, and engineering services, natural gas, construction supplies, and electricity to food service and technology. Among the many factors he considers when deciding what to purchase, cost and environmental impact are top priorities. Whenever possible, he secures the best deal on both counts. Alitoto's recommendation that the College move from coal- to green-powered electricity is a perfect example. That switch was doubly green, earning the College an environmental award while also saving it considerable money.

Alioto's sphere of influence isn't limited to Principia, however. By factoring vendors' corporate sustainability practices into his selection process, he pushes for products to be produced with as little harm to the environment as possible and for them to function efficiently. For example, he recently leased a Canon copier that was produced using sustainable processes and is Energy Star-rated. In short, Alioto is holding those courting Principia's contracts to the same high standards he holds himself: "wisdom, economy, and brotherly love" (Mary Baker Eddy, *Manual of The Mother Church,* p. 77). "We need to care for what we've been given," he notes. "It comes from God."

Alioto appreciates the distance Principia has traveled toward sustainability in the eighteen years he's been on board, but he sees room for further progress—and he intends for procurement to play a part in that progress.

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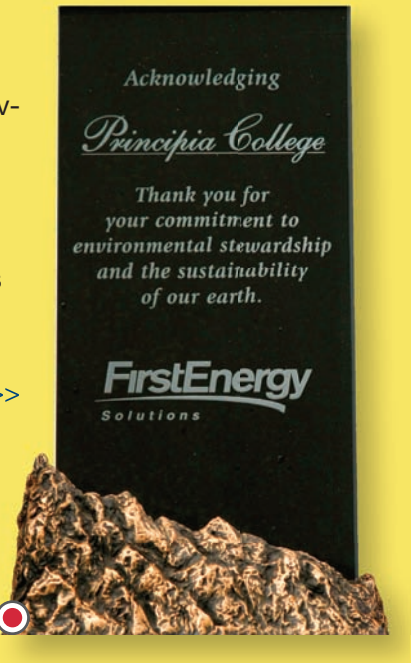

This award honors Principia's provision of 100 percent green-powered electricity to the College campus. Called "mixed green," the power comes from hydro, wind, and solar sources.

LETTING NATURE LEAD the WAY

For Upper School science teachers Froggi VanRiper (C'03) and Preston Larimer (C'75), the most important teacher isn't the one standing at the front of the class or meeting with students during conference period. It's nature.

VanRiper teaches Biology, a junior-level class. Larimer teaches two senior electives, Marine Biology and Man, Ecology, and the Environment. All three courses take nature as their model. "We talk a lot about biomimicry," VanRiper says. "Nutrient cycles in the ecosystem are perfect examples of the way things need to be reused, used wisely, and conserved."

But for students in an electronic age, that's not a lesson easily grasped. Larimer explains, "The hardest thing to get them to see is that we live pretty much by the same rules nature does. The rules that break an ecosystem down or make an ecosystem sustain itself are the same things that make a business break down or sustain itself."

Illustrating this point in a variety of contexts reinforces its truth, so the teachers constantly draw parallels between nature and society. "We look at businesses, homes, populations, all kinds of topics throughout the year," Larimer notes, "but I'm always bringing them back to the same fundamental processes." Exams provide another opportunity for students to make the connection through questions like this one from VanRiper: "If you were a video game designer, how would you utilize the principles of natural selection to keep your company operable over the long term?"

The solar panel outside the Lower School supplies electricity for the computer lab. A software program allows science classes to monitor the output of power.

Getting nature on the radar screen

Of course, nature takes the lead most effectively when students get outdoors, so both teachers include as much fieldwork as possible in their curricula. This text message sent to Larimer last summer illustrates the impact of those projects: "I just saw goldenrod! I wouldn't have known it without you."

Pre-schoolers crush cans before recycling them.

VanRiper tells about a group of girls stopping to pick a mushroom one of them spotted as they drove by. After making spore prints from it, they arrived at class the next day, eager to show her their prints and share their adventure. "Before this, mushrooms wouldn't even have been on their radar screen!" VanRiper exclaims. Getting nature on students' radar screens is good news for planet Earth, since noticing something is an essential first step to sustaining it.

Preston Larimer teaches Upper School science and leads a spring-break trip to Belize.

Poster for a benefit concert sponsored by upper schoolers. The students are raising money to build a well for a school in Kenya.

Out of limitation, prosperity

In some cases, students come to class not only with nature on their radar screens but with alarm bells about its destruction going off in their heads. VanRiper addresses that directly. "This isn't Sunday School," she says, "but it is a school for Christian Scientists. And while it's important to understand what others are saying about a problem, we also need to remind students of the truth about God and man."

Larimer concurs, sharing highlights from class discussions he's had over the years: "If it comes up that we're running out of oil, for example, we might talk about how Jesus fed the multitudes with a limited number of resources—and wound up with abundance. I also use the example of rainforests and coral reefs. Both are extremely limited in nutrients, yet they're two of the most abundant and productive ecosystems on earth. The question comes down to whether limitations on resources really affect productivity."

Those same issues are central to the Belize trip that Larimer and his wife lead every other year during spring break. Along with twenty or so juniors or seniors, they look at rainforests, coral reefs, and Mayan culture, discovering in all three cases that limited resources needn't preclude prosperity. P

Biology teacher Froggi VanRiper (left) and members of the Upper School Roots & Shoots Club. Associated with the Jane Goodall Institute, Roots & Shoots groups around the world engage in service learning activities that benefit animals, people, and the environment.

Celebrating Sustainably

The day before winter break, most teachers trade in lesson plans for Christmas parties. VanRiper does, too, but with a twist. "Nowadays," she says, "with disposable plates and packaged foods, you can throw together a party and clean it up in twenty minutes on either end. But that's not sustainable." Instead of taking that route, VanRiper breaks each class into groups to plan the most sustainable party possible—within a budget, of course.

The group in charge of dishes and flatware considers the pros and cons of washing dishes versus getting biodegradable items. Another group investigates local and dried foods as a way of reducing the party's carbon footprint. Others talk about napkin options, packaging, buying bulk, and so on.

"Throughout the process," VanRiper explains, "they're weighing the alternatives and making informed choices. Is it better, for example, to go with packaged and organic or choose bulk and non-organic?" Once the groups have made their decisions, they give VanRiper a shopping list. Students also make placards for the table, explaining the choices they've made, and each student invites at least one adult from the Principia community to the party.

When guests arrive, students describe the planning that went into the party, pointing out the information on the placards. It's a busy day for VanRiper, who hosts five such parties, but she doesn't mind the extra effort. "It's really fun—and important," she says. "The thing we can't have anymore if we want to live a sustainable life is the complete and utter thoughtless ease we've become accustomed to in the developed world. The next time these students put together a party, even if they think of only one of the factors we've considered, that will make a difference." P

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SUSTAINABILITY

SEPARATE PATHS *to a* COMMON

Brothers Asa (C'02) and Joshua (C'04) Foss took different routes through the College—Asa majored in physics, Joshua in fine arts—but they both wound up in the green building industry, committed personally and professionally to making sustainable living commonplace.

Majoring in physics changed Asa's view of the world. "The philosophical implications of what you learn in physics are really profound," he explains. "That shaped my appreciation for the entire universe. It's so intelligent and well thought out. As you begin to understand that, you can't help but respect the Earth."

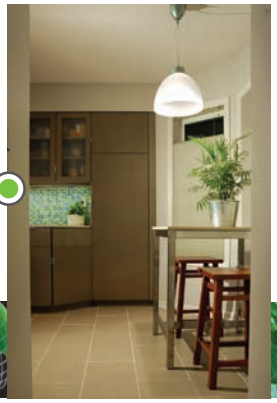
Upon graduation, Asa packaged that respect along with many summers of work with a master builder and headed into the then-fledgling field of green construction. While supporting a variety of government programs, he promoted best practices among industry professionals and educated consumers about the long-term advantages of green renovations. In 2004, Asa attended Stellenbosch University outside of Cape Town, South Africa, where he earned an MPhil in Sustainable Development Planning and Management at an accelerated pace, completing the two-year program in only a year. Soon after that, he worked with the U.S. Department of Energy and the Home Depot Foundation to

Joshua majored in studio art, getting what he describes as "a very well-balanced creative background," including sculpture, graphic design, and painting. In addition, he completed almost enough units for a minor in biology with classes focused primarily on the environment.

That breadth of experience plays a key role in Joshua's current work as the founder and principal of Thrive Design Studio. With offices in Minneapolis, Minnesota, and Boulder, Colorado, Thrive consults on a wide range of issues from green renovations to sustainable business strategies. As the website explains, "Our experienced professionals envision a sustainable world where buildings and business function in harmony with the natural environment."

Joshua credits his studies at the College with the creative approach that drives Thrive. "The strength I pulled from my fine arts major," he explains, "was an understanding of the creative process, of taking a blank sheet or empty space

Thrive's interior renovation of this townhome included a counter made from recycled paper and bamboo, a recycled-content ceramic floor, formaldehyde-free cabinets, and low-VOC paints.



PASSION

encourage green rebuilding in the areas hit by Hurricane Katrina.

Since July, Asa has been at the LEED® Department of the U.S. Green Building Council. The LEED certification program is a rating system for environmentally sound building design, construction, and operation that focuses on five key areas of sustainability: site development, water savings, energy efficiency, materials and resources selection, and indoor environmental quality. Rating systems exist for both commercial buildings and homes with four different levels of achievement—certified, silver, gold, and platinum.

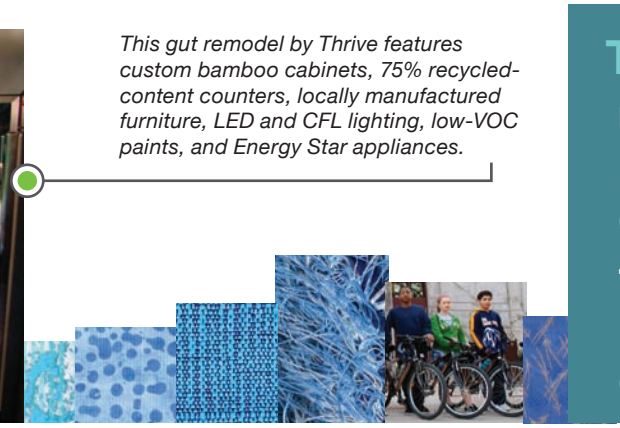
As LEED Homes technical development manager, Asa is improving and streamlining the current rating system as well as developing one for mid-rise (4–6 level), multifamily dwellings. The need to green already existing homes can't be understated. "We can't build our way out of the problem," Asa notes. Moreover, there's no guarantee that a new home will be an efficient one. "A lot of bad homes are getting built," he says. "We need to raise people's expectations."

For Asa, high expectations are the name of the game. He uses the terms *green* and *quality* interchangeably, and his concern with efficiency extends far beyond environmental issues. As he puts it, "I have this thing against waste. I want things to be done efficiently. Why would you want to waste anything ever—time, money, resources, whatever? If there's a best way to do something, let's figure it out and get it done!"

and refining your thought until you can turn it into something tangible, creative, and powerful. I approach every project as though it's a blank piece of paper. Then I apply the different laws of design and art I learned in the studio to physical spaces."

For Joshua, a big part of the creative process comes in gathering the right combination of people and ideas. He sees the sustainability movement as "more about sharing than hoarding expertise," and he describes his role as a "communicator and connector, pulling innovative and progressive people together to create a network of minds ready to tackle any task." In addition, Joshua has a strong background in carpentry, so he often manages the construction side of Thrive's projects, even doing some renovation work himself.

Striving to lead by example, Joshua advocates for sustainable living at trade shows and on television, and he blogs—with lively humor—on everything from hypermiling to dual-flush toilets. Committed to achieving carbon neutrality, he offsets his carbon emissions from travel, owns a smart car, and bikes to work. Through his personal and professional life, Joshua hopes to prove that going green is not only attractive but affordable, not an all-or-nothing proposition but a step-by-step journey. With each step, he comes closer to his ultimate goal: "to create a new model that will make the old, destructive model obsolete."



This gut remodel by Thrive features custom bamboo cabinets, 75% recycled-content counters, locally manufactured furniture, LED and CFL lighting, low-VOC paints, and Energy Star appliances.

TO LEARN MORE . . .

U.S. Green Building Council: www.usgbc.org

Building Science Tech: www.buildingsciencetech.com
(Asa Foss's new company)

Thrive Design Studio: www.thrivesustainability.com

MetroHippie: www.metrohippie.com
(Joshua Foss's blog)

Coach Lee Ellis congratulating a player

Strengthening IS the NAME *of t*

Sit down with Principia's athletic directors—Travis Brantingham and Lee Ellis—and the connection between them is immediately obvious. Beyond the similarities in their jobs and their involvement with soccer, they simply enjoy each other. Their shared laughter leaves little doubt about that. During a recent interview with the *Purpose*, a round of joking prompted Brantingham to explain, "We get a lot done in an hour. It doesn't come across that way initially, but we do." Without skipping a beat, Ellis added, "And we have a good time doing it."

Ellis is the College athletic director and head coach of the women's soccer team; Brantingham (US'94, C'98) is the School athletic director and head coach of the varsity boys' soccer team. Neither of them is new to Principia, but each was just named athletic director in 2008. Almost immediately, they began collaborating, and they plan to continue doing so.

"... our student-athletes are encouraged to grow in character, foster their competitive spirit, and commit themselves not only to academic achievement but to serving others."

~Lee Ellis

Purpose: The Athletic Departments on both campuses are working together more closely than ever before. Why is that?

Lee: Travis and I have been looking for new ways to maximize our strengths. We both have great athletes and great coaching staffs, and we realized there are three sports where we can share coaches because tennis, soccer, and softball happen in opposite seasons for Upper School girls and College women. So, now we have two coaches—Ken Leavoy (softball) and Carole Griggs (soccer)—who are working at both the Collesge and the School.

Travis: The kids immediately identified this as a really cool idea—and their enthusiasm is an extremely important part of the equation. Also, Lee and I really want to see each other excel. That positive symbiotic relationship moves us forward.

Lee: It makes so much sense to get people doing the things they're best at and to utilize those talents across the board. There've been little hiccups along the way, but we both have such a strong desire to see Principia succeed that we figure out how to make it work.

Travis: Underpinning it all, we want what's best for the kids. From the beginning, that was our motive. All of our discussions start with how to provide students the best possible athletic experience.

Upper School softball player at the plate

Character of the GAME

by Phebe Telschow

Purpose: What's your vision for Principia's athletic program?

Lee: At the College, we've got an acronym that summarizes our vision of SUCCESS. We view athletics as the ultimate learning environment, and success as both an athlete and an individual is our goal. This is how we define what success looks like: Spirituality Underpinning Character, Competitive Excellence, Scholarship, and Service. Inspired by the study and practice of Christian Science, our student-athletes are encouraged to grow in character, foster their competitive spirit, and commit themselves not only to academic achievement but to serving others. We celebrate the fruits of this effort in the various recognition and award programs we've established in Hay Field House, like the Profiles in Character, the Jackie Tindall Moser Academic Award, and the Hall of Champions.

Coach Travis Brantingham huddling with his team

Travis: At the School, we're focusing on discipline, courage, and honesty. I'm always asking, "Am I creating a disciplined atmosphere? Am I creating an environment where students can be courageous and adventurous within that disciplined structure? Are students learning how to be more honest in their activities?" That's key because, as Mary Baker Eddy says, "Honesty is spiritual power" (*Science and Health with Key to the Scriptures,* p. 453).

Purpose: Can you talk a bit more about character?

Lee: Basically, we're setting up an environment of respect for ourselves, our teammates, coaches, competitors, officials, and even the sport itself. One of the ways we do this is with thorough training and practice. Principia athletes also express respect by warmly welcoming officials and competitors. At the same time, there's an expectation that there will be a high level of intensity and competition. In a game like soccer, things naturally become physical. If you're a Principia athlete who knocks someone down, I expect to see you offering a hand to help the person right back up. And if you get knocked down, that's just part of the game. It's not personal, and we refuse to take it that way.

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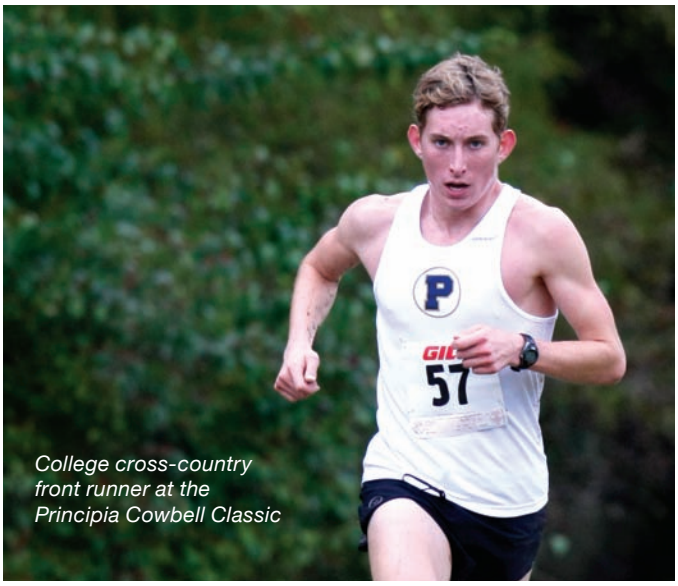
How we carry ourselves and present ourselves in the heat of competition speaks volumes. That's where most people expect the lowest level of behavior, but that's where we're looking for the best. We're looking for people who are willing to rise to that level, and not only for themselves but as representatives of Principia and the Christian Science movement.

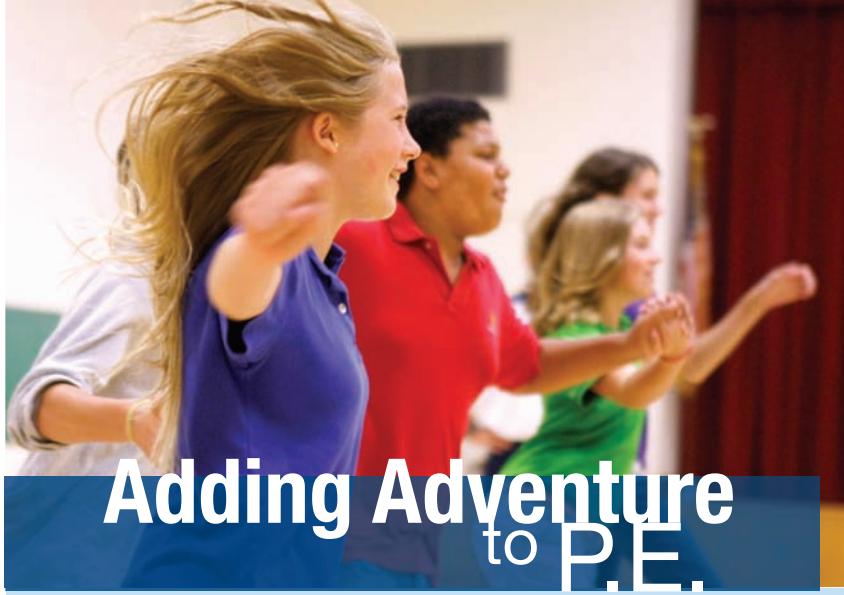
Travis: It all comes back to Christian Science. Athletics are a great vehicle for teaching life lessons—especially moral and spiritual lessons—because you have immediate assessment opportunities. We prepare our thought in advance of a practice or game, and then we put that thought into action. Every moment gives athletes a chance to examine their thinking. The minute they make contact with a person or fall on the ground, we expect them to be asking themselves, "How was I thinking? How was I controlling my thought? How did I handle that metaphysically?" That kind of mental and spiritual training is invaluable.

Lee: And we should demonstrate the effectiveness of that training by winning! You can't control wins and losses—you can only control your attitude and how you play—but why not put ourselves in a situation where more often than not we get the *W* on the scoreboard as well? There's a lot to learn from winning—including the difference between winning and progressing. You have to keep progressing even when you win.

Success is insidious. It's easy to let it go to your head. That's why so few teams win championships two years in a row, but it doesn't have to be that way. Take Anson Dorrance, the women's soccer coach at North Carolina. In 30 seasons, he's won nearly seven hundred games and lost fewer than 40. His teams keep winning *and* they keep progressing. That's what I want for us.



College cross-country front runner at the Principia Cowbell Classic



Adding Adventure to P.E.

Project Adventure programs, recently added to the Lower and Middle School P.E. curricula, place top priority on character education. An international not-for-profit group founded in 1971 by former instructors from the Outward Bound School, Project Adventure designs activities that help children learn movement concepts, responsible personal and social behavior, effective interpersonal and decision-making skills, goal setting, risk taking, and problem solving.

Lower School P.E. teacher Peter Martin (US'72, C'76) knew the value of Project Adventure activities from his experience directing Camp Owatonna. So when the group developed a school curriculum, he knew he wanted to move his classes in that direction. In particular, Martin likes the program's blend of fun and character education. He explains, "Adventure refers to the way things are done—it means we include an element of something new or surprising in an activity so that there's opportunity for self-discovery." The curriculum also allows Martin to create an intentional community where students can determine and agree to a code of conduct, and then learn to cooperate, communicate, and resolve their problems within the framework of that code. Some days, that process in and of itself is an adventure!

Travis Brantingham and Head of School Marilyn Wallace are enthusiastic supporters of Project Adventure. "It takes education from the theoretical and hypothetical level and puts it on the ground floor, making it applicable right where the kids are," Brantingham explains. "Maybe they were initially afraid of an activity that requires them to take risks physically, but we set them up to be able to safely and successfully face those fears. Bottom line, the experiences provide very practical, hands-on opportunities to learn more about how to use Christian Science."

Above: Middle School students during a game of blob tag, where collaboration is key to success

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The Art and Enterprise of Teaching

By Marla Sammuli

Principia prepares the next generation of teachers

Remember the question, "What do you want to be when you grow up?" Whatever your answer, there's a teacher somewhere who helped you get there—someone who pushed and pulled, challenged and cajoled, and most of all, kept the faith.

What's the key to this act of faith called teaching? Is it an art or a science? And what's the best way to prepare for it? Questions like these prompt lively discussion in the Education Department at Principia College, where training the next generation of teachers is a solemn trust, a true calling, and a great deal of fun.

Teaching the Teachers

Although there's "wide agreement that good teaching is the most crucial factor in raising student achievement," there isn't much agreement about how to elicit good teaching, or even how to provide the best possible training for those entrusted with young people's minds and hearts ("Teacher training: what's the best way?," *Christian Science Monitor,* March 27, 2009). In fact, there's often an ideological chasm between policymakers and teacher educators regarding the best way to teach teachers.

Many experts believe the roughly 1,200 traditional university programs that educate four out of five of America's 3.9 million teachers should be improved to the level of providing quality training relevant to today's diverse students. Others staunchly advocate alternative teacher certification models that accelerate

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exceptionally motivated or well-prepared candidates into the field. Either way, it's increasingly clear that the success of students, schools, and entire districts lies primarily in the hands of individual teachers, not with administrations, curricula, or budgets.

The chief criticism of traditional teacher training programs is that they're too theoretical. They emphasize university coursework instead of—and often at odds with—the reality new teachers confront when they step into the classroom. Moreover, these programs provide scant preparation for the wide variety of children teachers encounter—those with second language needs, special physical and learning needs, socioeconomic challenges, or cultural barriers to traditional modes of learning.

On the other hand, some argue that alternative programs, which tend to focus heavily on practical experiences, leave teacher candidates without an anchor in the storm, with no philosophy or research to ground their teaching. Arthur Levine, former president of Columbia University's Teachers College, suggests a combined approach: "Universities tend to be too theoretical, and a lot of alternative programs are too practical. It would be really nice if we could meld the lessons of both."

Professors Brian Johnson and Libby Scheiern of Principia College's Education Department agree that a blend of the models is best. Ensuring that teacher candidates have a solid philosophical foundation, a deep understanding of the needs of learners, as well as a variety of practical classroom experiences enables Principia to consistently turn out highly effective, confident beginning teachers. What's more, the program considers the moral and spiritual dimensions of teaching so often overlooked.

"To a degree shared by only a few other occupations . . . education rests precariously on the skill and virtue of the people at the bottom of the institutional pyramid."

~ Tracy Kidder, Pulitzer Prize-winning author

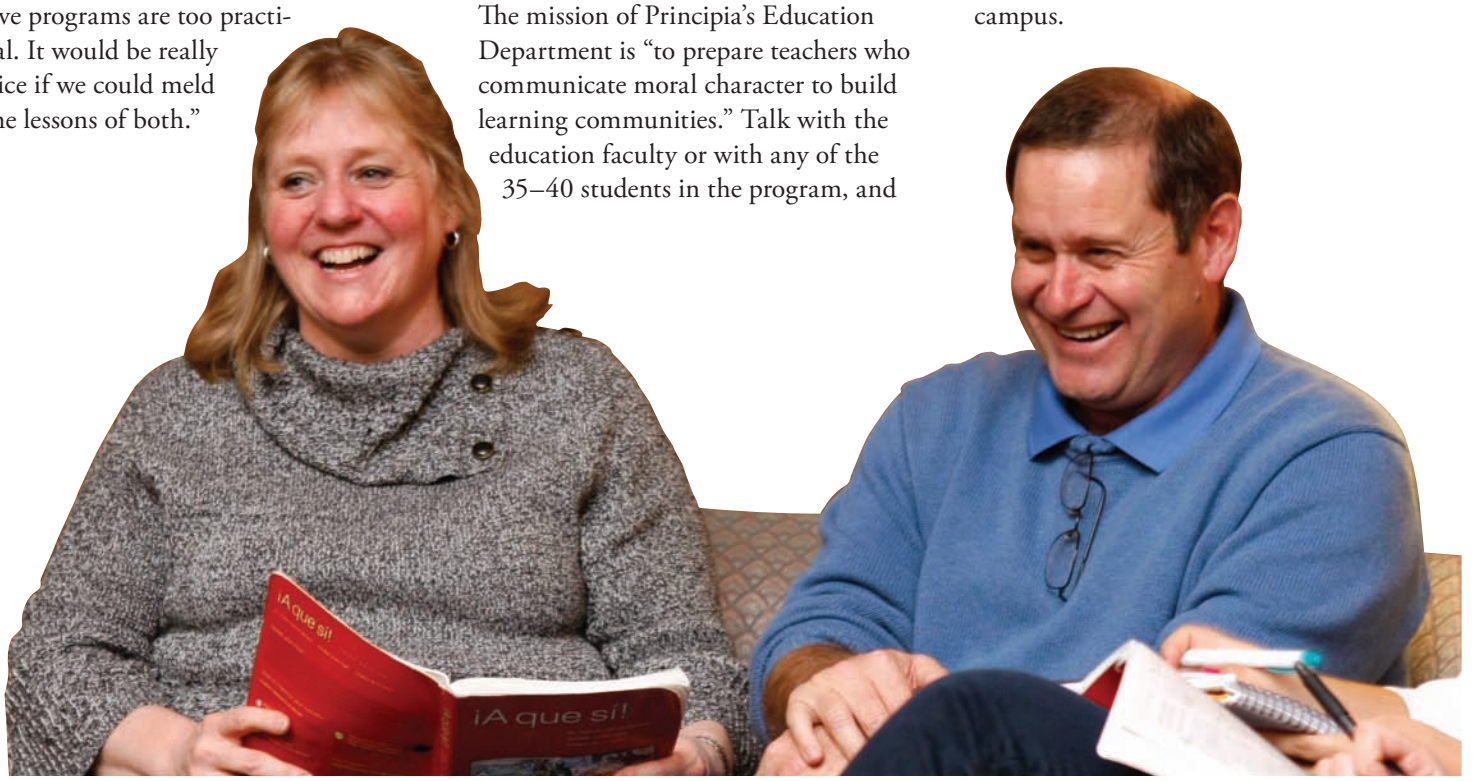
Focusing on Character

The mission of Principia's Education Department is "to prepare teachers who communicate moral character to build learning communities." Talk with the education faculty or with any of the 35–40 students in the program, and that mission comes to life with animated examples and impassioned ideas. This department is on fire with a sense of purpose.

The program features several unique structural components, but the essential quality that comes across is love—love for teaching, love for one another, and love for mankind. Scheiern expresses it best: "The critical thing [for our students] is the passion and love of teaching in order to better humanity. It's a calling for all of us—professors and student-teachers. We really care about making a difference." Three key distinctions help Principia's teacher-candidates make an impact, wherever they wind up.

Distinction #1: Learning to build community

Imagine not only living with your closest friends and classmates but also spending quality at-home time with your professors. This is the community living environment in Williams House at the College during students' beginning and intermediate blocks (portions of their sophomore and junior years). Then, for part of their senior year, student teachers share an apartment on the St. Louis campus.



Education professors Libby Scheiern and Brian Johnson

Besides providing a wonderful place to call home, the residential component of the program builds a strong learning community based on mutual respect. "The students learn to work together, solve problems, and take care of each other like a family," says Scheiern. "We help our students learn to communicate—to listen and give feedback. Unless our community is safe, trustworthy, and allows students to take risks, learning won't occur in the most effective way. We also know that education is a democracy. We're all teachers and we're all learners. We teach and interact the way we want our students to teach and interact."

The education professors don't live in Williams with the students, but they spend quite a bit of time there at night and on weekends. "In the evening, we have seminar time to talk about issues and ideas from the day," Scheiern explains. "The program is so much more than taking classes and going through a certain sequence to get a certificate. It's a one-on-one, personal, and handwrought experience that will shape how our students create their own classroom communities and care for their students."

"What the teacher is, is more important than what he teaches."

~ Dr. Karl Menninger, recipient of the Presidential Medal of Freedom

Distinction #2: Learning to teach by teaching

Within the first six weeks of the program, students begin thinking and acting like teachers. By the end of it, they've been in the classroom more than 50 percent of the time, with professors observing their work and giving feedback. Johnson explains, "We believe that teachers need to be reflective practitioners. Together, we set goals for the week and review them at the end of the week. Having the same professors teach the courses and observe students in the classroom is very significant and different from most other programs."

Beginning block poses one essential question: "What's required to be an effective teacher?" Students not only explore this in their classes, but they take it to the field in Chicago, where they visit inner-city communities and schools. In both cases, they look at all the pieces required to be an effective teacher—theory, content, management, learning models, moral development, curriculum, and assessment. During the intermediate block (usually junior year), students focus on methodologies

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An A+ for Principia College

The College is one of three programs in the State of Illinois to receive a perfect score on its National Council for Accreditation of Teacher Education (NCATE) review between 2002 and 2008; the next review will occur in the fall of 2011. This means that, among the 74 teacher certification institutions in the state, Principia has met all NCATE standards with no need for improvement, making Principia a model institution for teacher certification in Illinois.

Teacher Training Models

Traditional

University undergraduate programs (most common)

Students graduate with a bachelor's degree and a teaching certificate

University graduate (MAT) programs

Students complete coursework and receive practical classroom experience, typically at the end of the program

Alternative

Urban teacher residency

Students take courses in the summer and teach in an urban district during the school year, earning a stipend in return for a multiyear commitment

New Teacher Project and Teach for America

Top-notch college graduates and midlife career changers take a summer "crash course" in teaching and commit to working in high-needs schools for a specified period

American Board for Certification of Teacher Excellence

Current classroom teachers with a bachelor's degree but no teaching credential earn certification through a rigorous independent study and testing program

Principia's Teaching Excellence Center: Building Collegial Communities

In the works for some time now, the College's Teaching Excellence Center (TEC) was officially launched last year, with Sheiern as director. TEC's mission is "to promote and support excellence in the classroom." Specific objectives include helping faculty develop excellence in pedagogy, learning theory, teaching methodology, assessment, and character education—all with the goal of enhancing student learning and spiritual growth.

This year, TEC is supporting faculty members in the following ways:

- Working with individual teachers at their request
- Providing workshops on topics of interest
- Conducting weekly lunches to discuss classroom practices
- Organizing faculty learning communities that support collegiality
- Promoting the scholarship of teaching campuswide
- Encouraging faculty participation in professional education conferences

Scheiern's enthusiasm for the project is boundless. "I absolutely love thinking about ways to build community and help our students succeed," she says. "Many teachers come in to talk at six or seven in the evening. I also visit classrooms, do observations, and give feedback. The Center is all about each of us growing and doing the very best we can for our students."

for teaching specific content—reading, math, science, and so on—and spend 5 weeks teaching in a rural public school. The final year, "advanced blockers" spend a full 14 weeks teaching in a school setting of their choice—rural, urban, or suburban; private or public—applying everything they've learned. Although they're still students themselves, they feel comfortable taking over the full duties of teaching and are well on their way to managing classrooms of their own.

Distinction #3: Learning from a spiritual perspective

Principia's approach to character education is one-of-a-kind. Professor Johnson draws the distinction: "We're different because we're coming from Mary Baker Eddy's perspective on education as a moral and spiritual culture that lifts one higher. When we're this close to the students, we can work daily on the dispositions that lead to this higher culture." Adding that Mrs. Eddy said teachers should be chosen for their morals and character, Scheiern notes, "Students are continually bringing Christian Science into their teaching work and striving to look at themselves and their students through a spiritual lens as multi-dimensional individuals with a whole range of abilities."

Looking to the Future

What's next for Principia's teacher training program? Johnson and Scheiern are full of ideas. First on their wish list is a master's degree program with dual tracks—one in which current teachers could receive credit for their classroom expertise while expanding their knowledge through graduate courses (MEd), and one that allows individuals who are not currently teachers to earn a master's degree and teaching certificate (MAT).

Another exciting addition would be an education abroad, perhaps a trip to Puerto Rico as part of the requirement for bilingual teaching certification, or an abroad to Australia to work with teachers at Huntingtower School, an institution with a Christian Science heritage. And definitely, Johnson adds, we need more time and opportunities for scholarship on the enterprise of teaching. Although none of these projects is in the development stage yet, Scheiern speaks confidently about them: "These things are more within our reach than ever before. It's very exciting."

Exploring the World of Teaching —Beginning Block

Kristine Cline, Jordan Milner, and Randi Slusher are all "beginning blockers," sophomores who began the education program this fall. Although it's only been a few short months, they already see themselves as teachers. Jordan's always wanted to be a teacher and credits the education program's "one-on-one

communication with professors and sense of community" with bringing her to Principia College. Kristine has also always dreamed of having her own classroom where she could "give back to others and make the world better." For Randi, who originally had another career in mind, this fall has been an unexpected journey. She explains, "After meeting Libby and Brian, learning about the program, and seeing how amazing and supportive it is, I thought, 'This could be the career for me!'"

When asked what they've enjoyed most so far, the conversation gets animated. "The classes have been life-changing," Kristine says. "At first, the idea of taking five classes in six weeks was daunting, but I've never learned more about who I am and what I have to offer society. I can't imagine doing anything else." Randi agrees, "The classes laid the foundation for me to be an effective teacher. I really felt equipped to walk into the classroom"—which the students did after only six weeks of instruction! Jordan was also enthusiastic about doing fieldwork early on: "Being in the schools this soon helps us form questions to explore as we continue the program. It's very effective."

No one has been more surprised by their growth than the students themselves. Jordan says, "The challenge for me was taking in all that knowledge and wondering if I'd remember it when I got in the classroom. I did! I just knew what I needed to know." Randi concurs, "I was surprised that everything we learned really applied to the classroom. Once the students came in, what I'd studied came out naturally. I thought to myself, 'I could be in this classroom teaching on my own, and I'd be fine.' It's amazing what the program has been able to do in six weeks."

Preparing for a Career—Advanced Block

Tracey Jackson, Kaitlin Roseman, and Andrea Silcox relax on the couch after a challenging day of teaching in their respective classrooms at The College School. These seniors are in the midst of 14 weeks of student teaching, daily applying all they've learned since sophomore year. Although it's been a long day, they're eager to share what brought them to this point. Andrea was intrigued by her first year experience (FYE) course entitled The World of Children. Kaitlin found the Education Department coursework the most fascinating. "The work was so challenging, and the teachers gave you so much feedback," she says. "You could feel yourself growing academically." For Tracey, the education professors made the difference: "They're so supportive and push you to do your best. It's motivating to have such strong role models."

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Andrea Silcox, Kaitlin Roseman, and Tracey Jackson

All three women tout the program's structure—teaching several grades at three different schools—as key to their success. That experience prepares them to work with diverse populations and a wide range of learning needs and styles. Even so, the women, while confident, are realistic about entering the job market and having their own classrooms. Kaitlin asserts, "We're prepared, but I know new things come up every day when you're working with kids." Andrea agrees, "I know what I have to do and how to do it, but I'm still expecting it to be hard. It's a challenging job."

Life as a Beginning Teacher—Putting it All Together

When Paulina (Pau) Santos was growing up in Mexico, she always assumed she'd go to college, major in business, then come back and work for a big company in Mexico City. Instead, she's teaching Spanish for the second year at Principia Upper School, often teaming up with her friend and mentor, Diana Penick. It's not the first time they've worked together, though; Señora Penick supervised Pau's senior project—her first taste of teaching—when the latter was a student at the Upper School.

During her freshman year at Principia College, Pau took a basic education class and loved it. "I said, 'This is it!' The department helped me plan my program and customize it to fit with a double major—education and foreign languages, both Spanish and French." Both women agree that Principia has a tough but excellent program that really prepares you to teach. For Pau, that rigor paid off immediately. She felt comfortable teaching mock lessons during interviews, and "if the principal asked me to write a lesson plan, I could do it in five minutes, no problem," she adds.

When Pau came to the Upper School for her final stint of student teaching, Diana was thrilled. "Pau's terrific," she exclaims. "As a second-language learner herself, she knows what the students are experiencing." Later, when Señorita Santos was hired at the Upper School, both women jumped at the chance to team-teach. Diana elaborates, "Pau and I understand each other so well. We have a mutual respect for the same components of teaching—language immersion, the love of students, and a conviction that everyone can learn. Working with Pau has reinforced my belief that to be a really good teacher, you have to have the passion for it. Teaching comes from the heart." P

Paulina (Pau) Santos and Diana Penick

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By day, they're faculty, staff, students. But after hours and on weekends, you'd be hard pressed to guess what they're up to. From judging barbecue contests to winning cutting horse competitions, Principians are pursuing unusual hobbies. We spoke with a few them.

What's My Line?

by Caleb King and Trudy Palmer

Kayse Crandall

Upper School Junior/Figure Skater

Like many little girls, Kayse's favorite Olympic event was figure skating. She remembers telling her mom, "That's what I want to do!" Unlike many, however, she's gone on to skate competitively and win medals, albeit not in the Olympics. Kayse began skating at age nine in her hometown of Spring, Texas, winning several gold medals over the next few years. She's especially proud of the gold she won at age 12 in an artistic event at the statewide Blue Bonnet competition for a program she'd choreographed herself. (She also won gold medals for two other events at that competition.)

Kayse took a break from skating during her early teen years, but when she and her family moved to the St. Louis area in 2008, her love of skating moved with her. After settling into the Upper School, she told her mom she wanted to find a coach in St Louis. As she puts it, "I wanted to feel that sense of freedom again and to know that I was expressing God and the gift He'd given me."

Kayse now works regularly with a local coach, putting together new programs for upcoming competitions. She also practices on her own, often before sunrise. Adding long hours of practice to an already full high school life requires considerable dedication and sacrifice. Even so, Kayse is thrilled to be back on the ice. "Skating is going great for me," she says, with a smile as full of grace and exuberance as her axels.

Bob Yeates

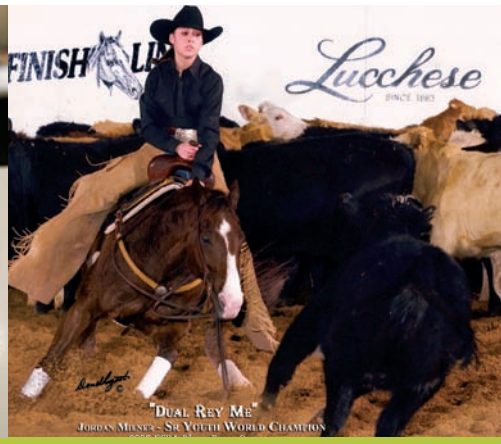
Upper School Teacher/Barbecue Judge

A ten-year veteran barbecue judge, Bob has judged contests small and large, including state championships in Georgia, Missouri, and Illinois. He was even in the judges' booth at the American Royal in Kansas City, which he says is "the granddaddy of all contests and the largest of them all, with 550 contestants from all over the United States and Canada." Trained and certified by the Kansas City Barbecue Society, Bob bases his assessments on appearance, taste, tenderness, and texture.

The edible benefits of being a barbecue judge are obvious, but Bob's not in it just for the food. "Barbecue is Americana," he explains. "I love the atmosphere of contests. I love the wholesomeness of them, the friendship, the sincerity. Everyone is equal; social barriers drop away on the contest circuit."

Nevertheless, competitions are serious business, with prize money in the thousands and marinades, sauces, and dry rubs kept as closely guarded secrets. Even Bob, who's known for his generosity, refused to share his personal recipes. But he did pass along the name of his favorite barbecue joint: Cooper's in Llano, Texas.

Bob's license plate



Joshua Van Horsen

Senior Graphic Designer/Baker

Josh has been cooking since he was a child, but last year, wanting to expand his repertoire, he enrolled in a baking class. Captivated by cakes, in particular, he went on to take a semester-long cake decorating class. By the end of it, the teacher admitted that he had far surpassed her abilities. Josh's final project for that class was a wedding cake, which his samplers (grateful colleagues in the Marketing Department) unanimously agreed was not only delicious but gorgeous.

A cake commissioned for former Chief Executive David Anable's going-away party

Josh believes baking should excite both the taste buds and the eyes. "If I'm creating a cake," he explains, "I want it to taste as good as it looks, and look as great as it tastes. And while taste is the most important part of my cakes, I absolutely love the decorating process."

It's no surprise, really, that a graphic designer would care about his cakes' appearance, but we wondered whether his cakes also inspired his graphic designs. In short, yes, it's a two-way street. "As far as baking impacting my professional design work, I like to think it helps keep me fresh," Josh says. "On the other hand, acute attention to detail is fundamental in graphic design, and I carry that into my cake decorating. My wife still teases me about the time she caught me applying sprinkles to a cupcake with a pair of tweezers."

Jordan Milner

College Sophomore/Cutter

Jordan is a third generation cutter, an equestrian sport she pursues in her home state of Texas. Both her grandparents have been non-pro world champions many times, and her father was non-pro reserve world champion twice. Jordan, herself, won the world competition in the youth division in 2005 and was in the top ten world standings in both the youth and the non-pro novice divisions for six years.

Still wondering what cutting is? Jordan explains its origins: "The sport of cutting started because ranchers needed to gather cattle and sort them. Once a herd is rounded up—not an easy task in the rough and brushy country of the Southwest—mounted cowboys circle the herd to keep it contained on the roundup ground, while other riders hold the culled cattle in a separate group."

In cutting competitions (which take place all over the world and earn the winners hefty sums), riders separate at least two calves from a herd, one of whom must come from deep within the group. Once a calf is separated, the rider loosens the reins, and it's up to the horse to keep the calf from returning to the herd. Horses receive extra credit for their skill, style, and the exertion used to keep the calf under control. That's a lot to accomplish in the two and a half minutes allotted to horse and rider!

"Every horse has a different style," Jordan points out. "My job is to feel the horse and get him to trust me. I have to show him that I care about him." Passionate about the sport, she adds, "I love cutting and wouldn't trade the experience for anything. I enjoy the rush of going down to the herd!" P

THE COLLEGE'S FIRST SOLAR CAR TEAM: Where Are They Now?

by Phebe Telschow

The idea of building a solar car began to distill at Principia College in the early 1990s. Just four years later, the goal of qualifying for Sunrayce 1995 was in high gear. Now called the North American Solar Challenge (NASC), Sunrayce challenged North American colleges and universities to design, build, test, and race solar-powered vehicles in a road rally across hundreds of miles of public roads. The 1995 race covered 1,600 miles from Indiana to Colorado. Much of the groundwork for today's solar car program was laid as team members prepared for that race.

While that first car, better known as Ra I, didn't end up qualifying to compete, the team's experience preparing for and participating in the race (though not as a contestant) was undoubtedly a victory. In the course of the 1994–95 school year, many students worked on the car—some only briefly, others for the entire year. Come race time, however, a team of only five students went to Indiana to put Principia's first solar car up for competition.

Recently, we spoke to all five of those alums individually, so even they might be surprised to find that they gave identical answers to two questions. When asked if, from the very beginning, they believed building a solar car was achievable, all five said, "Absolutely!" And when asked about the most important and enduring lessons learned from the experience, they all put teamwork at the top of their list. Those two answers explain a lot about the remarkable feat they accomplished together.

Today, these alums have a wide range of fascinating experiences and careers that all include significant measures of invention and innovation. Here's a glimpse of them then and now.

Harold Simpson (C'95)

After graduating from Principia in 1995 with a BS in chemistry, Harold went on to Lamar University in Beaumont, Texas, for a master's degree in the same field. His thesis was a study of organic molecules with a specific response to light waves described as hyperpolarizability; applications for these molecules include lasers, telecommunications, and photonic computers.

Since then, Harold has worked as a chemist, first at Ashland Chemical and then at Masterfoods, which is owned by Mars, the maker of such popular brands as M&M's, Twix, and Snickers. While at Mars, Harold worked in the chocolate research department and was also involved in projects to develop foods

Harold with his wife, Liza

with high-density nutrition as well as nutritional supplements that prevent sleep deprivation.

These days, Harold works for IN/US Systems/LabLogic, which designs highly sensitive radioactivity detectors for use in the petrochemical, energy, and pharmaceutical industries, among others. In late September, he left for India to help with the installation of a new system at the Institute for Himalayan Research, an ISRO site where they study native plants such as tea. This was his fourth trip to India. When he's not traveling for work, Harold lives in New Jersey with his wife, Liza Smith.

Along with the value of teamwork, Harold spoke of learning how to get along and communicate through the course of a very complex project, and about how to stay on task, on deadline, and within budget. Then he added, "With the solar car, we had to teach ourselves and solve problems by ourselves. That was great preparation for my work. I've never had a job where there was very much training. I've always had to teach myself and invent my own solutions."

Melanie Shedd (C'98)

Melanie was a freshman in 1994–95. She says working on the solar car gave her the opportunity to develop confidence tackling large projects that seem almost impossible. "I really appreciated that our advisor, David Cornell, never expressed a sense of limitation," she notes. "Here we were, four or five non-engineering students, building this solar-powered car from scratch with almost no budget over the course of a single academic year. And we were competing against huge schools with multimillion-dollar budgets where one of the graduation requirements for their engineering students was to work on their solar car. Needless to say, on the Prin team, we had to work fast and wear a lot of hats."

Melanie with her daughter, Coraline

Melanie fondly recalls designing a steering system and also comparing adhesives by riding in the bed of a pick-up truck going 55 mph along the River Road, holding up parts that had been glued together to test them in the wind.

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Elias behind the wheel

Melanie making on-the-road repairs

Principians at the 1995 solar car race, from left: Dr. David Cornell (C' 59, physics professor and solar car team advisor), Seth Hieronymus, Arno List (C'94, staff member who drove the truck carrying the solar car), Elias Williams, Melanie Shedd, Harold Simpson, Bud Hardman (former staff member who volunteered with the team), and Loraine Lundquist

Ecstatic team members, from left: Loraine, Elias, Melanie, Seth, Harold

"We started with nothing. . . . It just proves what a few dedicated people can do."

~ Seth Hieronymus

"One of the most memorable moments for us," she says, "was the scrutineering process. Race officials had inspected every inch of the car from top to bottom and confirmed that it was safe and roadworthy. Then we had to prove that our car could reach a sufficient speed. Elias was driving. Using the banked turns on an oval track to his advantage, he milked that track for all it was worth. When they told us we had reached the right speed, I jumped for joy! It was an amazing feeling—like we had done the impossible."

After graduating from the College with a BS in chemistry and a BA in music, Melanie worked for a subsidiary of DuPont researching soy protein and its application in food products in 23 countries. From there, she worked as an admissions counselor for international students at the College. Now she teaches chemistry at the Upper School and is pursuing a master's in science education for grades 6–12.

Seth Hieronymus (C'98)

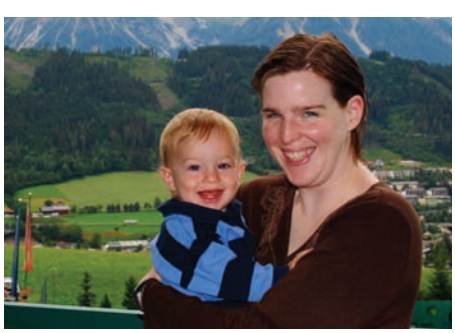
Currently president of Hieronymus Technologies, Seth graduated from the College with four majors and two bachelor's degrees: majors in math and physics for his BS, and majors in history and business for his BA. He went on to earn an MBA from the University of Denver and a master's in aerospace engineering from the University of Colorado, Boulder. The latter led to his development of GPS-related software for defense contractors in the aerospace industry. More recently, Seth wrote a computer program with an algorithm that advises about the purchase and sale of energy.

Seth with his fiancée, Ellie

Seth recalls: "It was a tough first year for the solar car because we didn't really know what we were doing, and that made it hard to stick with it. We kept burning up motors and bending wheels, mostly due to our inexperience. It was, of course, a big disappointment not to actually qualify for Sunrayce, but working as a team and staying focused on our motives for being there kept us open to travelling with Sunrayce as an inspiration car to help promote discussions about solar power. It was an amazing time for all of us. We started with nothing, and in the end, we had a car that was competitive and very nearly qualified. It just proves what a few dedicated people can do."

Loraine Lundquist (C'98)

A physics and math major originally from New Mexico, Loraine Lundquist joined the 1995 team toward the end of her freshman year and went on to be the team leader for the 1997 solar car race. Following graduation, she earned a PhD in physics with a concentration in solar physics from the University of California, Berkeley. After grad school, Loraine worked as an astrophysicist at the Harvard-Smithsonian Center for Astrophysics. In 2006–07, Harvard sent her to Tokyo for a year to work as the U.S. point person on an astrophysics research satellite named Hinode, a joint project between NASA and the Japan Aerospace Exploration Agency (JAXA). Upon her return to the States, Loraine taught physics at the College for two years. She now does occasional consulting work but has shifted her focus to being a stay-at-home mom for her one-year-old son, Jonah.



Loraine and her son, Jonah, with the Austrian Alps in the background

Loraine continues to benefit from her experience with the solar car: "What I learned about teamwork, leadership, fundraising, and project management has been invaluable to me both in graduate school and in my career—with the satellite mission I worked on in Tokyo, for example. I've also appreciated the spiritual lessons that everyone has a purpose and that 'setbacks' (such as not qualifying for the race in 1995) can be blessings in disguise. We served a public outreach need for the race as a whole. Because we weren't competing, we got to stop and talk with everyone in the small towns along the way and showcase our car. It was a wonderful lesson in humility, and it taught me that everyone has a purpose and an important place to serve."

Elias (Williams) Shedd (C'98)

Elias was raised on a farm in Indiana. He says, "When I was a kid, we bought a go-cart from my cousin for $50, and my brother and I drove it hard every day until it broke. So, every day we'd have to fix it. After all that experience, the idea of building a car that ran on an electric motor seemed completely plausible, even though we really didn't know how it would all come together. We didn't even have any real idea how to start. By the end, I felt a little bit like we'd gone to the moon. It shaped my perspective that people can do anything. It may take us a while, but we really can do anything. We just need to take the first steps, and then, if we don't stop taking steps, we'll get there."

Elias with another mode of alternative transportation: the skateboard

These days, Elias, who graduated from Principia with a BA in philosophy, is a tower crane operator. That is, he operates cranes mounted on top of big towers used in large construction projects.

Reflecting on the team's accomplishment, Elias notes Principia's role in it: "Some of the other schools that didn't qualify in '95 didn't have the support of their school to participate along the route like we did. But Principia saw the value of what we were doing and supported our participation." Then he adds, "The solar car project at Prin has always been about breaking limits. In the last 15 years, over 200 people have worked on the project, and each team has thrown off more and more limits every year. At Principia, it was always assumed we would succeed. Failure was never really a part of our thought process, and therefore it hasn't been a part of our experience."

After working together on the solar car for four years, Elias and Melanie were married. This year, they welcomed their first child, Coraline.

"It taught me that everyone has a purpose and an important place to serve."

~ Loraine Lundquist

The College's first solar car during scrutineering in Indiana

Awards and Achievements

BILL SIMON HONORED BY MISSOURI COACHES

The Purpose *went to print prior to this activity.*

On December 11, longtime coach **Bill Simon** (US'54), known as "Willy K," will be inducted into the Missouri Track & Cross Country Coaches Association (MTCCCA) Hall of Fame at a luncheon ceremony in Columbia, Missouri.

Simon started at Principia as a house parent and coach in 1961, and he's still coaching today! He has worked extensively with athletes in a variety of sports, including soccer and football, but the lion's share of his time has been with track and field and cross country. In the course of his nearly 50-year coaching career, he has received a dozen or more Coach of the Year awards—proof of his peers' respect for him.

In state-level competition, Simon has coached one girls' and three boys' track and field championship teams as well as one boys' and three girls' cross-country championship teams. Many other teams have placed close to the top in state meets, and individual athletes have earned state championships under his coaching as well, including cross-country runners Mark Whalley in 1976 and 1977, Gwen Williams in 1991, and Ben Glass in 2000. In track and field, Bill deserves credit for over 35 individual boys' state championships and over 15 individual girls' state championships.

In district competition, Simon has coached twelve first-place track and field teams and seven first-place cross-country teams. And in the ABC League, the oldest in the country, Simon's teams won a dozen championships between 1970 and 2007.

During his decades at Principia, Simon has served as a house parent in the boys' dormitory, as dean of boys, and briefly even as dean of girls. In 1976 he became dean of students, a post he held until his "retirement" in 2003.

Many people wrote in support of Simon's nomination to the MTCCCA Hall of Fame, including coaches from competing teams. Within this outpouring of support, Simon's unflagging appreciation of students' progress—even when that progress was far from record-setting—came up repeatedly. Susan (Morey, US'79) Thomas wrote, "In an age when girls athletics were practically non-existent, he always made us feel great about our accomplishments and improvements. No matter if you were first on the team or the back of the pack, he always rejoiced about the progress you made."

The endorsements for Simon also emphasize his impact as a character educator. Joe Gleich, associate headmaster and head cross-country coach at St. Louis Priory, commented, "Bill is one of the finest individuals or coaches that I have come to know in my 35 years of coaching cross country. He modeled sportsmanship for his athletes, while focusing on helping them achieve excellence. His charges were winners whether or not they finished first in a race. What a wonderful person to have coach your son or daughter!"

Some say Simon's induction into the Hall of Fame is long overdue. In a way, though, the timing is perfect. Being recognized now, with his 50th year of coaching on the horizon, vividly underscores the lifetime contribution Simon has made to generations of Principians.

STUDENT AWARDS

This fall, the College selected senior **Chelsea Kendrick** (C'10) of Bethesda, Maryland, to receive the 2009 Lincoln Award for Principia. The Lincoln Academy's Student Laureate Medallion is given each year, along with a $150 honorarium and a certificate of achievement, to one distinguished senior at each of Illinois' four-year colleges and universities, as well as to one student from each of the state's community colleges. Kendrick was selected based on her overall excellence in curricular and extracurricular activities.

A history major minoring in religion, political science, and Asian studies, Kendrick has attended Principia for four years as a Trustee Scholar, the highest academic merit scholarship granted by the College. She is a Phi Alpha Eta inductee and a Theta Alpha National Honor Society for Religious Studies designee. As a junior, Kendrick traveled to Puerto Rico to present a paper at the Midwest Association for Latin American Studies, earning a second place prize for best undergraduate paper. She has completed internships at the Smithsonian Institution's National Museum of American History and at the Mary Baker Eddy Library in Boston. In addition, she has served as executive director of the College's Public Affairs Conference, vice chair of the campus's Christian Science Organization, and captain of the lacrosse team. She's currently student body vice president as well.

"I couldn't have asked for a better experience," says Kendrick. "I have loved the high level of engagement and dia-

logue within my classes and the close interaction with professors. Principia College has provided me with so many opportunities." Before she graduates in June, Kendrick will study in Vietnam on a Principia Abroad Program and will complete her history major capstone on the socioeconomic, political, and cultural context of the cities from which the apostle Paul wrote. Her goal is to identify what effect, if any, these factors had on the appeal his message held for converts and on early Christians' practice of their faith.

This fall, Upper School seniors **Clayton Harper**, **Brian Ritter**, and **Jamie Poley** were named National Merit Scholarship Program Commended Students. They are among approximately 34,000 commended students selected from the 1.5 million in the U.S. who took the 2008 Preliminary SAT/National Merit Scholarship Qualifying Test.

All three of these talented students are focused in their pursuit of academic excellence, while successfully balancing other educational opportunities and interests. Clayton Harper is interested in art and design and has played soccer all four years at the Upper School. He was also a member of the track team for two years.

Jamie Poley is a key member of Principia's soccer and wrestling teams and plays French horn in the band. He has earned distinction for performances in district and state music competitions and plays with the St. Louis Symphony Youth Orchestra.

Brian Ritter, a multisport athlete, balances the demands of a rigorous academic load with a commitment to football, tennis, cross country, and wrestling. He also traveled to Costa Rica with Principia's Spanish program, refining his fluency and expanding his cultural awareness.

ALUMNI

Don MacKenzie (US'74, C'78)

In August, Don MacKenzie's restaurant, Donnie Mac's Roadside Cuisine, was featured on the *Diners, Drive-Ins, and Dives* television show. The Boise, Idaho, restaurant features an eclectic menu, ranging from SpaghettiOs to espresso—fare it describes as "creative casual, industrial, shabby chic cuisine."

Sarah Perkins (C'76)

Earlier this year, Great Rivers Land Trust honored founding member Dr. Sarah Perkins with the Gladys Levis Allen Award, the highest honor bestowed by the Trust. The Trust's primary mission is to promote the preservation and improvement of natural resources in the watershed of the Mississippi River. Founded in 1992, it originally focused on protecting the area along the River Road from Alton to Grafton, Illinois.

Karen Eckert (C'80)

Sea turtle expert Dr. Karen Eckert is one of 29 nominated for the 2010 Indianapolis Prize, the world's leading award for animal conservation. The winner, to be announced in mid-2010, will receive a $100,000 award and a Lilly Medal, an original piece of art signifying the winner's contributions. Eckert directs WIDECAST, the Wider Caribbean Sea Turtle Conservation Network.

Ward Patterson (C'82)

Effective this fall, Ward Patterson became head coach of the University of Connecticut's men's rugby team. Prior to this, Patterson was head coach at Middlebury College from 1997–2007, during which time his teams won two New England Division II Championships. In 2007, Middlebury also won the Division II National Championship.

Jason Anderson (C'88)

Miller Buckfire & Co., LLC, an independent investment bank, recently welcomed Jason Anderson to the firm as managing director. Anderson holds an MBA in finance from the J.L. Kellogg Graduate School of Management at Northwestern University.

Kimberly (Hoyt, US '91, C '95) Smith

Kimberly Smith launched her third company, AvenueWest Global Franchise, this year and was inducted into the 2009 Class of the Denver Business Journal's 40 Under 40 in recognition of her business successes and her commitment to her community. Smith's first company, AvenueWest Corporate Housing, has been noted for its rapid growth, and her second company, Corporate Housing by Owner, was featured in national newspapers and on NBC's *Today Show*.

Christina Speer (US'05, C'09)

Just months after her graduation from the College, Christina Speer began playing volleyball professionally in Europe. Recruited by Alemannia Aachen, a first-rank team in the northwestern part of Germany, she plays in the middle block position, wearing jersey No. 11.

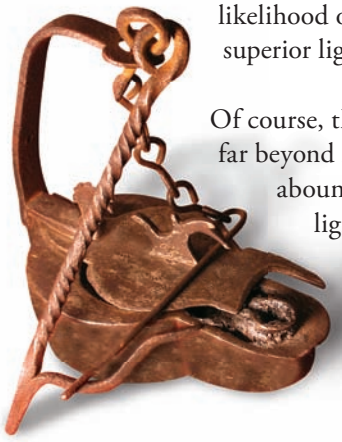
Lamps Shed Light on Long Ago

by Nancy Boyer-Rechlin

In 1927 Principia benefactor Hazle Buck Ewing endowed the Principia School of Nations Fund to promote an awareness of world affairs, an understanding of world cultures, and a readiness to promote peace among nations. Developing a museum collection of cultural objects representing the diversity and unity of mankind was an early and natural offshoot of this work.

Each piece in the now-extensive School of Nations Museum collection (with galleries on both campuses) has its own story to tell, insights to reveal, or puzzles to pose. The collection of early lamps and lighting devices is a perfect example. A time machine for the imagination, the lamps carry one across centuries and millennia to a period when homes were only dimly lit and nights truly dark. Picture yourself lighting a slice of darkness with the flame of a shell-shaped oil lamp like this one from our collection that dates to 1600 BC. Or imagine yourself in ancient Rome cradling a hand lamp as you move around your home.

The great variety in the museum's lamp collection hints at people's determination to light their way with increasing efficiency. Rush lights had clamps to hold fat-saturated rush piths. Betty lamps, popular both in Europe and the Colonies, featured a cover that minimized smoke and reduced the likelihood of fire. Whale oil lamps gave a superior light, but the oil was expensive.



Of course, the significance of light extends far beyond lamp design. Lamp metaphors abound in literature, and references to light fill the Scriptures. Lamp artifacts also shed light on Scriptural metaphors. Small Palestinian lamps in our collection add visual punch to Jesus' parable of the virgins awaiting a bridegroom's midnight arrival. These lamps and the vessels that held extra oil are strikingly small—just a few inches across. No wonder the lamps of the less vigilant virgins went out!

The museum's antique lamps were gifts from several donors. In 1938, Mrs. Angie Cox made a large donation. In 1979, Mrs. Stratford Lee Morton donated 70 pieces from her husband's extensive collection. Another group of 50 lamps, donated in 1967, had belonged to Irving C. Tomlinson, one of Mary Baker Eddy's personal secretaries.

Before reaching Principia, these lamps were given to Tomlinson's friend Lt. Col. Robert Ellis Key, a British military officer, Scotsman, and poet who served a term as Reader at The Mother Church in Boston. Two of Key's poems, which use the imagery of light, are set to music in the *Christian Science Hymnal* (Nos. 233 and 311). At Key's passing, these lamps were presented to Principia, along with a book on colonial lighting that had been given to Tomlinson by his wife, Elizabeth, in 1923. The book's cover, embossed with the outline of a Betty lamp, is inscribed, "To my dear husband, whose light does shine." P

The Roman lamp on the right, shown larger than its three-inch length, was donated in 2000 by Mr. and Mrs. David B. Duncan. The group of Roman lamps (above right) is from the Tomlinson collection. Far left is a Betty lamp, a name thought to be derived from the German word besser, *which means better.*

Ancient Artifacts Meet Tablet Computers

Upper School freshmen studying Homer's epic poem the *Odyssey* have often prepared for the unit with a visit to the School of Nations Museum, where each student chooses an artifact as a prompt for a creative writing assignment about ancient times. This fall, English teacher Jodi Fielding continued that tradition—with a twenty-first century twist. Instead of penciling notes, students used their newly issued tablet computers to record their observations, do on-the-spot Internet research, and photograph their artifacts (including ancient lamps) with their tablet webcams.

Acting as curators, students looked carefully at their own artifact, noting intriguing or puzzling details. Through their research, they learned about the materials and methods used to create the piece, its function, and the cultural significance of its decorative elements. For the culmination of this hands-on, interdisciplinary activity, students wrote from the point of view of a person living in their artifact's time period, describing their interaction with the artifact and explaining its significance to them.

To foster students' use of descriptive language, Fielding required them to write about their artifact without actually naming it. Below is an excerpt from Georgette Hoffmann's description of a lamp:

> **My hand connects with something rough and cool. There it is, my way to deceive the darkness! I clutch the means of escape in my palm as my fingers eagerly move along the dais in front of me, searching for the intertwined fiber that will bring an end to the darkness. My fingers close around the thin strands. After a few moments everything is prepared. I reach into my pocket for the thin piece of wood I know will be there. Kneeling on the ground, I uncover the dying embers, which momentarily flare to life only to return to lifeless pieces of coal. But it is enough, enough to ignite my world of darkness.**
>
> **I am now surrounded by a dim, but comforting, blanket of light. I raise the burning shard to the thin strands of fiber. Radiance from my small inferno chases away the darkness, obliterates the gloom, and brings day to the horrors of night.**

Having imagined themselves in the ancient past, the students were ready to join Odysseus in the *Odyssey*.

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Meet Deedie, Charter Member of the 1898 Legacy Society

by Ned McCarty

Alaska is a long way from Elsah, but for Deedie Pearson of Kodiak, Alaska, Principia is never far from her thought. She first learned about Principia as a Sunday School student in Anchorage, Alaska, where she was taught by a graduate of the College. As Deedie recalls, this woman "served as a beautiful example of a young Christian Scientist. The background she gained from her studies at Principia contributed to my growth in Christian Science. Principia has been in my heart ever since."

Though Deedie was never able to enroll at Principia, she was always curious about it. When her nephews began attending, she learned more about the School; then she started contributing financially when they were in the Upper School.

PACE Participation

Finally, in 2000, Deedie had an opportunity to experience Principia firsthand. She explains, "When I retired, I started attending PACE (Principia Adult Continuing Education) Summer Sessions at the College. The classes are fantastic, and the atmosphere is wonderful. I just love being there!"

Hungry for more, Deedie also attended a PACE Autumn Session, held when students are on campus. "That really impressed me," she says. "The caliber of the students and the interest they showed in Christian Science stood out. I sat with the solar car team, some soccer players, and a few writers and editors from the College newspaper. All the students were so articulate. They expressed themselves intelligently and were comfortable as public speakers. It was so impressive and encouraging."

Staying Connected

Deedie regularly travels to the "lower 48" to connect with Principia in person during Summer Sessions. But she stays close to Principia all year long by listening to Principia Internet Radio (PIR), reading communications from the campuses, and sending contributions to them. "Seeing up close the tangible results of this unique educational experience has inspired me to name Principia in my will and to allocate a percentage of my IRA to the institution," she explains. "I really appreciate the opportunity to contribute directly from my IRA so that the full value is used. It's a tax-efficient way to give that lets me spend my tax dollars the way I want them to be spent."

Deedie's current support of Principia makes a difference in students' lives today. But it's her provision for Principia in the future that qualifies her as a charter member of the 1898 Legacy Society. Established earlier this year, the Society honors those who have included Principia in their long-term giving plans.

A Thank-You Now, for Later

Since Principia's founding, thousands of alumni and friends have made a philanthropic commitment to Principia through planned giving. In far too many instances, however, we didn't learn about the gift until it was too late to acknowledge it. We hope creation of the 1898 Legacy Society will enable us to say "thank you" now to the many friends of Principia whose gifts we'll receive in the future.

If you have named Principia in your will or trust, or have included Principia as a beneficiary of your retirement account or insurance policy, please let us know so that we can welcome you as a charter member of the 1898 Legacy Society. Membership involves no dues or obligations, and any specific estate information shared with us is treated confidentially. (We're also happy to honor requests for anonymity.) Membership benefits include invitations to special events and updates, and other expressions of gratitude for your generosity. For more information about the 1898 Legacy Society or planned gifts, please e-mail **ned.mccarty@principia.edu** or call 314.514.3114.

Ned McCarty is a senior development officer and director of the 1898 Legacy Society.

Where on the Web Is PRINCIPIA?

By Jonathan Hosmer and Trudy Palmer

The short answer is "All over the place!" People are learning about and connecting with Principia on a wide variety of social media sites, including flickr, Facebook, Twitter, LinkedIn, and YouTube. Offices at the School and College—Admissions, Alumni & Field Relations, Marketing, and Academic and Career Advising—host these online communities, responding to inquiries and facilitating connections.

As pleased as we are with this expanded Web presence, we're even more excited to announce the redesign of our website! If you haven't visited **www.principia.edu** recently, check it out.

The new site is separated into three distinct, but related, sections: School, College, and Community. The School and College sites, designed primarily for prospective students and families, share information and stories about educational and co-curricular opportunities on the campuses. They also emphasize the key role Christian Science and character education play at every level.

The Community section of the site covers broader points of interest relevant to the School and College, to alums and non-alums—topics like advancement, employment, and continuing education. The Community site also provides information about and ways to connect with Principia Clubs, reunion activities, and special donor groups such as the Howard Society. In addition, early in 2010, alumni will find an interactive directory, a forum for class news, and the option of linking their Facebook pages to our site.

Readily available from all three sections of the redesigned website are Principia Internet Radio (with both live and archived programs) and *Principia Wire* (our online newsletter). Also, look for our RSS news feeds throughout the site.

Whether you're reading this in the middle of the day or the dead of night, you can connect with Principia now—we're online 24/7! And when you visit, let us know what you think. Your comments and suggestions are always welcome—click on Contact Us from any page.

Connect with Principia Online

Our new website: www.Principia.edu
Direct link to the School site: PrincipiaSchool.org
Direct link to the College site: PrincipiaCollege.edu
Direct link to the Community site: Community.Principia.edu

Social media: Principia.edu/socialmedia
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Principia Internet Radio:
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Principia Wire:
Principia.edu/wire

"… we're excited to announce the redesign of our website!"

While we're on the subject of technology, we thought you'd be interested to know that all Middle and Upper School students now have their own personal tablet computer, issued by Principia. This article, adapted from *Principia Wire*, gives details.

21st Century Learning

Instrumental in teaching 21st century thinking and communication skills, tablet computers have the potential to "redefine classrooms as communities of learners and open new lines of communication between teacher and student, and among the learners themselves," says Roger Bower, academic technology facilitator for Acorn through Middle School.

Tablet computers have been part of the School landscape for several years now. Faculty members have had them for four years, Middle School students for the past two years, and Upper School students have used them in selected classes. This fall however, each 6th–12th grader received a Hewlett Packard EliteBook to use in class and at home. Lower School students will share tablets in the classroom, one for every two students.

Administrators, teachers, and school technology staff prepared carefully for this expanded launch of tablet computing by assessing student needs, visiting other schools to glean the best from their programs, creating a wireless infrastructure throughout the School, and providing teachers with professional development.

In conjunction with the program launch, Upper School math and computer science teacher Scott Alford spent his summer evaluating more than 5,000 websites to identify the best educational material on the Web. His resulting "resource library" of 2,000 sites helps teachers locate top-notch tools, research, and information to spur higher-level thinking and motivate students. "The classroom no longer has four walls," Alford explains. "Our students can engage with thinkers at places like NASA and the Smithsonian, and learn along with others around the globe."

~ Marla Sammuli

Pam Rupp Stroud: *Rekindling Connections*

by Kari Bradley

Though being a reunion volunteer comes naturally to Pam (Rupp, US '72, C'76) Stroud, she admits to getting "roped into it." In 2001, a volunteer for her 30th class reunion asked her to help. As Pam puts it, "One thing led to another, and soon I was heading it up!" After many phone calls and letters encouraging friends to attend, Pam and her classmates found themselves together again. Some had barely spoken as students, others had been roommates, teammates, or "required" dates to a dance. To everyone's relief, common fears about what people remembered of their un-cool clothes or social awkwardness were replaced by the discovery that those things hadn't made a lasting impression.

Instead, Pam says, "people discovered they were part of a group they hadn't realized they belonged to. We all came away feeling that a huge void had been filled and that we were still the people we'd been back then. Sure we'd grown up. But if you like someone in high school for their qualities, chances are they still have those qualities thirty years later."

Since that 30th reunion, Pam has continued to renew connections. Each year, more friends are "found," new connections are formed, and mini-reunions occur. Recently, eighteen members of the Upper School class of '72 met at Asilomar, near Monterey, California, for a weekend together. Surprisingly, not much time was spent reminiscing; instead, conversations focused on where each of them is now. Prior to the weekend, some had assumed they couldn't be included because of the direction life has taken them. But Pam is quick to explain, "That's so not true! We want everyone to share the joy of reconnecting. We don't want anyone left behind!"

To share in the joy of reconnecting with your friends and classmates, contact alum@principia.edu or call 314.514.3105.

"At first, we were all separate squares of a huge quilt, loosely sewn together. . . . When we graduated, we were cut apart. Each unique square—beautiful as an individual piece but still consciously part of the whole—ventured off into the world.

"Now the squares are worn with age. Some are tattered, wrinkled, or musty. Others have been well taken care of and are in wonderful condition! And yes, there are missing pieces—some permanently, and some just haven't been found yet . . . . Some squares have been through so much! They were tucked away for too long. But the timing is ripe for reconstruction, and each reunion brings the pieces slowly together again. . . . Squares that before had nothing in common suddenly create the most wonderful combinations. We were taught, 'As the sowing the reaping.' Maybe it should have been, 'As the sewing.'"

~excerpt from a reflection Pam wrote in 2001, the year of her 30th Upper School reunion.

All photos are from the 2009 mini-reunion of the Upper School class of '72 held at Asilomar. Pam is second from the left in the top photo.

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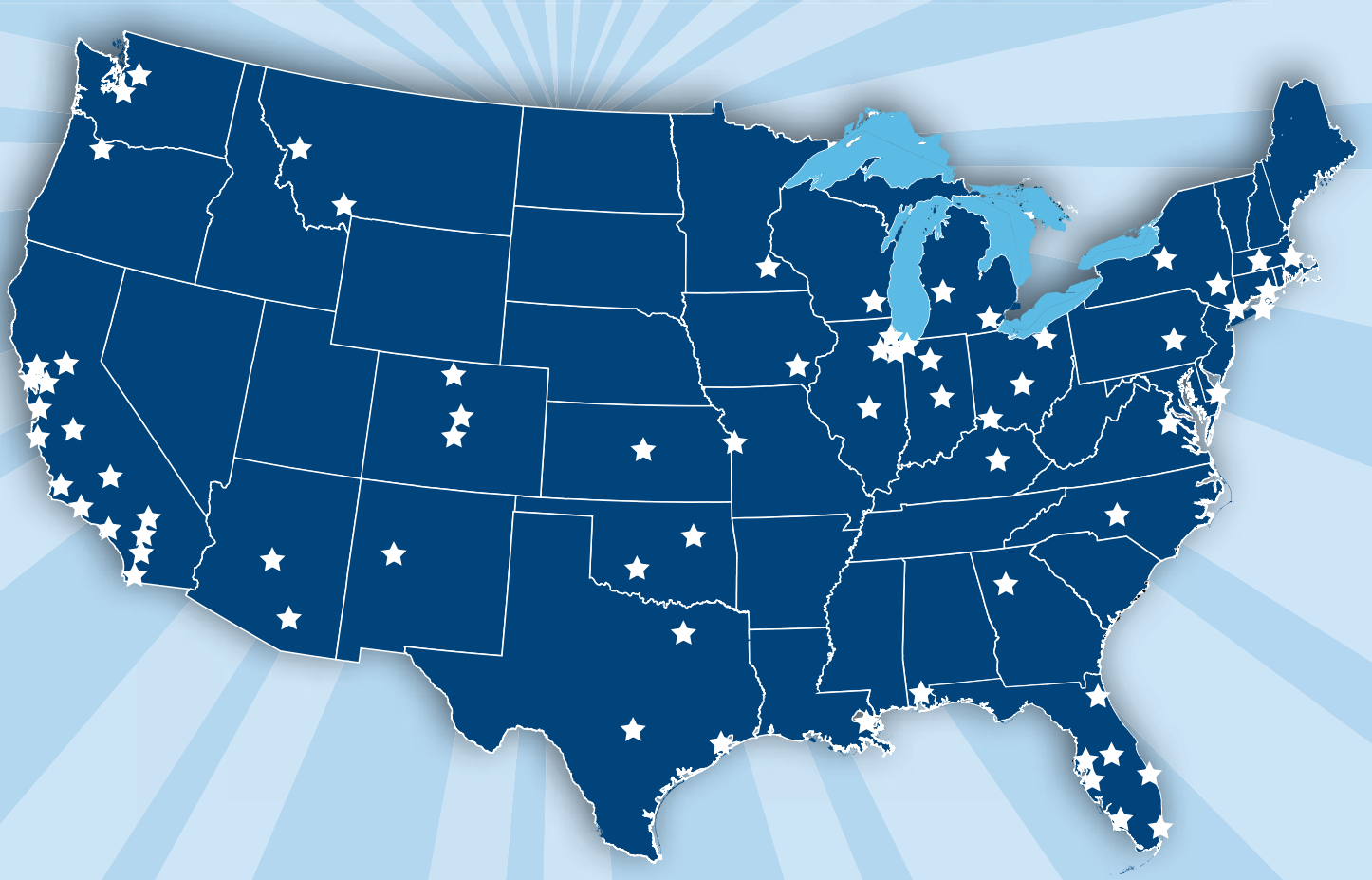

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Taking a stand for HEALING

by Tiffany Green

I can't think of a better place to find Christian Science in action than Cox Cottage, the Christian Science nursing facility at Principia College. Daily, this action pervades everything we do—from cleansing and bandaging an injury to helping a student contact a practitioner for the first time. Getting to see students come in with wobbly knees and leave strong and fearless is a blessed occupation. I have had the privilege of witnessing wounds heal, swelling subside, and fear abate before my eyes. The students we work with yearn for healing, and their prayers are swift and effective.

With its peaceful, homelike atmosphere, Cox Cottage is an ideal place to find inspiration. Nurses give care specific to each student's need, whether that's a mothering touch or a bit of humor. I've enjoyed getting to know students over a meal in our beautiful kitchen, and they never seem to get enough of our homemade smoothies! Students who come to Cox Cottage are taking a stand for healing, and they express much gratitude for the immediate and constant care they receive day and night.

People in the community often joke that they hope never to see us, meaning of course that they hope never to have an illness or injury serious enough to need our help. Instead, wouldn't it be great to think of nurses in relation to healing, not suffering? When I'm the nurse on duty at home athletic events, I'm there to witness freedom, strength, and perseverance; I'm not there expecting an injury.

"I have had the privilege of witnessing wounds heal, swelling subside, and fear abate before my eyes."

All the nurses enjoy seeing students in their various activities, and we find it beneficial to get to know them aside from the times they call on us for help.

Sometimes the care we give opens new friendships and creates the desire to look into Christian Science nursing as a career. One of the greatest compliments I've received was finding out that a student went into Christian Science nurse's training because of my example. It wasn't a head-swelling compliment; rather, I felt such gratitude to God for whatever I was doing right!

I'm also grateful for the spiritual lessons I take away from caring for students. Last year, for example, a student came to Cox Cottage with an injury. Though it was not extensive, even very gentle cleansing was painful. After several starts and stops, I helped the student call a practitioner and left the room. Fifteen minutes later, I returned and noticed that the situation had improved dramatically as a result of the student's and practitioner's prayers. All I needed to provide at that point was a simple bandage. This reminded me not to get so focused on the care I'm giving that I forget about instantaneous healing. Nursing care never *causes* healing; it simply meets the need while healing is taking place.

In the *Manual of The Mother Church*, Mary Baker Eddy writes, "A member of The Mother Church who represents himself or herself as a Christian Science nurse shall be one who has a demonstrable knowledge of Christian Science practice, who thoroughly understands the practical wisdom necessary in a sick room, and who can take proper care of the sick" (p. 49). This description guides everything we do and think when caring for patients at Cox Cottage. What results is some fabulous Christian Science action! P

Tiffany Green is the director of Christian Science nursing at Principia College.

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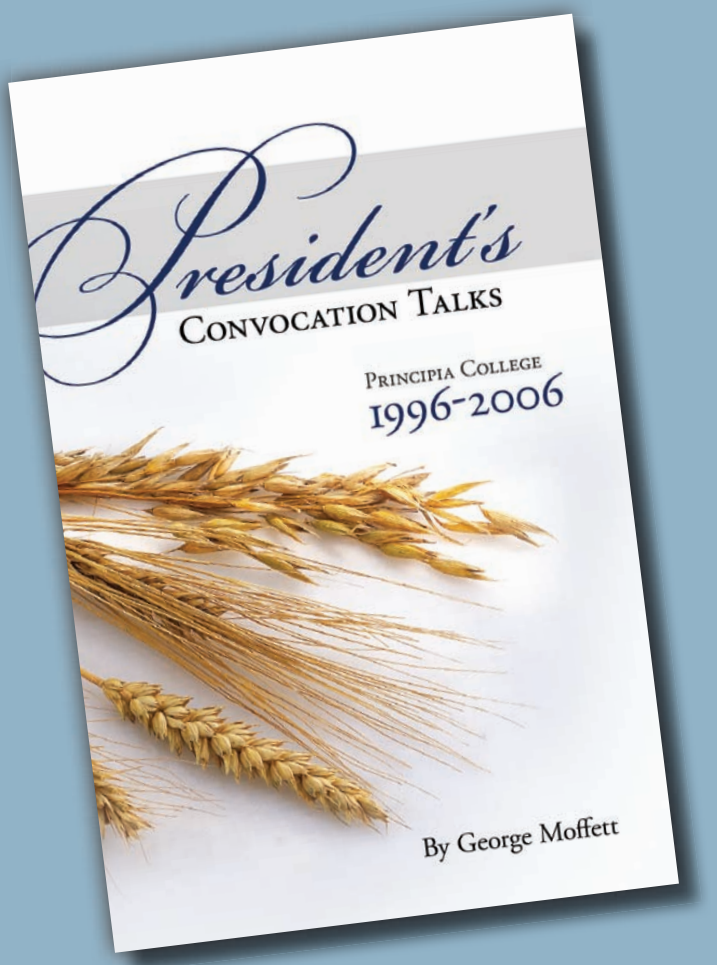

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