

PRINCIPIA PURPOSE

SUMMER '19



TEACHING FOR TOMORROW: TECHNOLOGY IN EDUCATION

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The New Simon Field House
Is Coming!

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The "Inspired Word": Making the
Bible Relevant and Accessible

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Meet Principia's New Dual-Degree
Engineering Graduates

Know Someone Who Should **Visit** Principia?

The best way for prospective students and their parents to get a feel for Principia is to visit—explore campus, sit in on classes, meet students, and make themselves at home. Our Travel Fund is available to help with a portion of transportation costs.



MIDDLE / UPPER SCHOOL Visiting Weekends

- September 28–30
- October 26–28
- November 16–18
- January 25–27
- February 15–17
- February 29–March 2
- April 4–6 (Upper School only)
- April 25–27

Can't come on a visiting weekend, or interested in visiting our Lower School or Preschool? Contact us to schedule an independent visit.

COLLEGE Visiting Weekends

- October 3–6
- October 24–27
- October 31–November 3
- November 14–17
- February 27–March 1
- March 26–29
- April 9–12
- April 23–26

Friday parent visit days are offered during each Visiting Weekend. If Visiting Weekend dates don't fit with your schedule, please contact us to plan an independent visit.



Give us a call—we'd love to chat! **School: 314.514.3188 | College: 618.374.5180**
Or contact us online to let us know of any family members or friends we should invite to visit.

principia.edu/referastudent

The mission of the *Principia Purpose* is to build community among alumni and friends by sharing news, 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 Reader,

At Principia, we're focused on the future. That's what our daily work is about as we prepare students to graduate, find their niche, and make their mark in the world. But with technology accelerating change, we know with less certainty what that world will look like. That doesn't mean we can't prepare students for it, though. Our cover story explores how faculty on both campuses are using—and sometimes purposely not using—technology to train students for today's rapidly changing digital age.



In addition, you'll meet six seniors from the Classes of 2019, three from the School and three from the College (p. 54)—as well as our first cohort of graduates from the College's dual-degree engineering program offered in partnership with the University of North Dakota (p. 51).

Find out how the College's champion mediation program went from a whimper to a roar (p. 39), and see a sampling of the plants and wildlife catalogued during this year's BioBlitz at the School (p. 37). Plus, you won't want to miss learning about the growth—by student demand—of the School's Bible curriculum (p. 44), resulting in the construction, now underway, of a Bible Center at the crossroads between the Upper and Middle Schools.

As always, you'll find news about events and activities on the campuses and about recent awards and achievements.

Students are having a lot of great experiences here—as they have in the past and will in the future!

Marshall Ingwersen (C'79)
Chief Executive

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Share Your Thoughts about the *Purpose*!

It's been a decade since the *Purpose* was substantially redesigned and six years since we last conducted a survey about the magazine. In both instances, readers' feedback was an invaluable guide in improving the *Purpose*.

To ensure that we continue to meet readers' needs and expectations, we're again asking for your feedback—this time through an online survey that includes a few opportunities for open-ended responses.

The survey is hosted by the Council for the Advancement and Support of Education (CASE), of which Principia is a member. CASE will report the results of the survey to us in aggregate form only—you will not be identified. The survey is easy to use and takes about 10 minutes to complete.

If you have questions about the survey, please contact *Purpose* Editor Trudy Palmer at trudy.palmer@principia.edu or 314.514.3157.

Thank you in advance for helping us improve the *Purpose*.

To take the survey, please use the appropriate URL below:

- For non-alum friends of Principia:
principia.edu/casefriends
- For alumni of the Upper School only:
principia.edu/caseschool
- For alumni of the College only:
principia.edu/casecollege
- For alumni of both the Upper School and College:
principia.edu/caseschoolcollege

To submit your letters to the *Purpose*, email purpose@principia.edu, or write to *Principia Purpose*, 13201 Clayton Road, St. Louis, MO 63131.



Winter '19 Photo Caption Contest Winner

"Billy Breed (C'72) in the starting gate for the First and Last Lillian Brewer Buck House Brothers Giant Slalom Competition"

—Alan Willis (C'73)



For the next contest, submit your caption to purpose@principia.edu by October 1, 2019. The winner will be announced in the Winter '20 issue.

Correction: The Winter 2019 issue included a misstatement about Theodora "Teddy" (Becton, US'59, C'63) Phillips, the caption contest winner. It said, "Teddy is Sherm [Clark's] brother-in-law." It should have said "Sherm was Teddy's brother-in-law."

School News

Upper School Urban Experience Week



Designed to help students connect to the community beyond Principia Upper School, Urban Experience Week took freshmen and sophomores into the city of St. Louis in April.

Freshmen began the week looking at Principia's

own beginnings on the Page and Belt campus, where they engaged with the black evangelical Christian church and YMCA now on the site. In the following days, they explored St. Louis's role in westward expansion; the city's racial and economic divisions; its art scene; and its entrepreneurial spirit.

Sophomores' exploration of the city was driven by research plans developed in advance on a range of topics—entrepreneurship and innovation, sustainability, sports and community, urban arts, and entertainment, for example. Using Third Baptist Church near downtown as their home base, they fanned out in teams to interview experts and visit sites relevant to their research.

The week culminated in presentations—freshmen shared their collaborative artworks, and sophomore teams presented the results of their research.

Seniors Head Off Ready to Make Their Mark



On May 26, School families and friends gathered to celebrate the Upper School Class of 2019 and bid them a fond farewell.

The graduation speaker, Commander Terry Grigsby (US'97, C'01), told of learning to "be humble, love others, and fear nothing." Using metaphors

from his Navy experience, he urged the class to find trusted confidants to help them become seasoned sailors.

The 62 members of the graduating class received 142 acceptances from 82 colleges and universities from coast to coast—including Dartmouth College, Davidson College, several University of California campuses, and Principia College.

Two Girls Reach Basketball Milestone



On January 18, **Jordan Fredrickson** (above right), a forward on the girls' varsity basketball team, became the first Principia Upper School girl to reach 1,000 points as a junior. "I realize how special this accomplishment is, and I am grateful for all my coaches and teammates who have inspired me and supported me," she says.

Jordan works just as hard in the classroom as on the court. She has been on the Honor Roll every semester of Upper School and has particularly enjoyed her Bible classes.

Just two weeks later, on February 1, senior **Georgia Rather** (above left) reached the 1,000-point milestone as well. "What made it even more special was that both my parents were able to be at the game," said Georgia, a boarder from Wisconsin.

A leader on and off the court, Georgia was co-captain of the team and a member of the Girls' Dorm Core. Her favorite subjects have always been math and science.

Author Sandra Uwiringiyimana Speaks on Campus

“I love my home—it’s the reason I tell my story,” explained author and activist Sandra Uwiringiyimana, before recounting a complex account of repression, hate, and apathy to a riveted audience of Middle and Upper School students in late February.

Uwiringiyimana’s book, *How Dare the Sun Rise: Memoirs of a War Child*, tells her story as a refugee and advocate for change. Born in the Democratic Republic of Congo (DRC), Uwiringiyimana is part of the Banyamulenge tribe, which has been discriminated against for years because it originated in Rwanda. She told of being ambushed, robbed, and beaten en route to a refugee camp in Rwanda when her family was forced to flee the DRC—and then of the massacre at the camp, during which her younger sister was killed. The remaining members of her family immigrated to the U.S., settling in Rochester, New York.

In 2017, Uwiringiyimana wrote her memoir to enlighten others, give a voice to her people, and spread hope. Asked by a student how she can express so much joy after all she



has been through, Uwiringiyimana responded, “I think my joy comes from sharing my story and helping others see the world differently. We need more people in the world saying it’s okay to be different, to stand up to hate.”

Along with her talk in Ridgway Auditorium, Uwiringiyimana visited several Upper School classes, met with the kindergarten class (which was in the middle of a unit on world cultures), and had dinner with Principia’s International Club.



Middle and Upper School Disney Shows

In its second annual Theatre Week, the Middle School developed—from start to finish—a production of the Disney musical *Aladdin Jr.!* (top left). Returning from winter break, every student in grades 6–8 and the entire teaching team dove into rehearsals, set design, sound and light tech, costuming, and marketing. The long hours and commitment to teamwork paid off with a standing ovation-worthy performance for the Principia community.



For Spring Production, the Upper School produced Disney’s *Freaky Friday*. At times hilarious, at times touching, it tells of seeing life from another’s perspective, literally, when a mother and daughter switch roles. Empathy, self-acceptance, and forgiveness are just a few of the play’s themes. This contemporary version of the 1970s original played to enthusiastic audiences of Principia community members—and of children from the city of St. Louis in a special school-day performance.

College News

Commencement—A Call to Serve

On Saturday, May 18, presiding over her first College commencement, new College president Dr. Jolanda Westerhof shared gratitude and appreciation for the amazing accomplishments of the members of the graduating class. In all, 97 graduates make up the Class of 2019—69 received BAs and 28 received BS degrees.

The commencement address was given by Wambui Kinya (C'98), vice president of partner engineering at Andela, which recruits software engineers throughout the African continent and places them in established companies and high-growth startups. The first international alum to deliver the College Commencement address, Kinya reminded the graduates, “You are privileged to have . . . a unique education so focused on shaping your character development and commitment to service. . . . Please never forget that as the privileged you can choose and commit to change the course of thousands—maybe even millions—of deserving and overlooked lives for the better.”



Teaching Awards Given in Biology and Religious Studies

Dr. Chrissy McAllister (C'93) is this year's recipient of the Horace Edwin Harper Jr. and Evelyn Wright Harper Award for Teaching Excellence. A member of the Biology and Natural Resources Department, McAllister regularly involves students in plant research in the lab and the field, including research at Kew Gardens in England as part of her National Science Foundation grant. McAllister has also led a variety of study abroad trips.

Dr. Barry Huff (US'98, C'02) is the 2019 Teacher of the Year, chosen by student vote. His courses and publications focus on biblical studies, including his current essay in *Interpretation: A Journal of Bible and Theology*. His dissertation, awarded with distinction, shows how the book of Job transforms the Torah's priestly language and theology. Huff was a faculty fellow for Brandeis's Summer Institute for Israel Studies and led a new abroad this year (see p. 34).

New Maybeck DVD about Principia College

Produced last year, *Bernard Maybeck's Vision for Principia College* focuses on the project Maybeck called his “favorite child.” The film, sponsored by former Principia College faculty member Colette Colletter, is dedicated to the memory of Dr. Charles B. Hosmer Jr. (C'53), a nationally recognized historian of the architectural preservation movement and much-loved College history professor. The DVD is available through the College Store.



Public Affairs Conference Celebrates Milestone

Principia's Public Affairs Conference marked a milestone this year with its 70th anniversary conference, titled “Education: Your Asset for Global Change.” Speakers from around the world included Brittany Packnett, a 2018 fellow at Harvard University's Institute of Politics and former member

of President Barack Obama's Task Force on 21st Century Policing and John Dau, one of the “Lost Boys of Sudan” featured in the documentary *God Grew Tired of Us* and founder of the John Dau Foundation.

Along with considering policy issues, conference delegates explored the role education plays in the 21st-century job market and learned how to leverage liberal arts skills in the workplace.

Tennis Season Highlights

Undeclared in conference play during the regular season, the men's tennis team won their sixth consecutive St. Louis Intercollegiate Athletic Conference (SLIAC) Tournament and swept almost all of the All-Conference Awards, including the following highlights:

- Player of the Year—Daniel Gomez (C'20, below left)
- Coach of the Year—Rusty Jones
- 1st Team All-Conference #1–6 Singles
- 1st Team All-Conference #1 and #2 Doubles

The women's tennis team won the SLIAC Conference Tournament as well, claiming many All-Conference awards. Of particular note, Paige Cooley (C'19, below right) was undefeated in both singles and doubles conference play, never losing a set during singles play. The women's All-Conference awards include these highlights:

- Player of the Year—Paige Cooley
- Newcomer of the Year—Greer Sprague (C'21)
- 1st Team All-Conference #1 and #3 Singles
- 1st Team All-Conference #1 Doubles

After the SLIAC Tournament, both the men's and women's teams competed in the first round of the NCAA DIII National Championships. For the men, this was their first time at Nationals in 32 years. Their matches took place on campus in Hexberg Tennis Center in front of a huge and enthusiastic home crowd. The women played at Kenyon College in Ohio. Neither team advanced beyond the first round.



Moral Courage Speakers Encourage Unity

In April, the College presented professional musicians and race-relations experts Arno Michaelis (left) and Daryl Davis (right) as this year's Ernie and Lucha Vogel Moral Courage



Lecturers. In their talk, "No Place for Hate," Michaelis, a former skinhead and hate-metal band member, and Davis, an African American, Grammy-nominated blues and jazz musician, spoke of the need to turn away from violence and toward reconciliation and harmony. Students appreciated the men's candor in their evening talk, during their classroom visits, and at a dinner at Hutchinson House.

Pan-African Conference Seeks to Build Understanding



In February, in celebration of Black History Month, the College's Black Student Union hosted the Pan-African Conference "Step Up," a three-day event dedicated to quelling racial tension and building understanding. Kenneth

E. Nwadike Jr., the documentary filmmaker, motivational speaker, and peace activist known as the "Free Hugs Guy," delivered the keynote address, sharing how training as a runner helped him overcome difficulties growing up in homeless shelters in Los Angeles. He also described launching Free Hugs Project to help homeless teens.

Other conference events included a poetry slam, metaphysical talk by religion professor Dr. Brad Stock (US'76, C'80), and viewing and discussion of the award-winning film *Green Book*.

Awards and Achievements

SCHOOL



Cum Laude Inductees

In May, seven seniors were inducted into the Cum Laude Society: **Tegan Dry**, **Ella Gates**, **Matthew Hagenlocher**, **Gracie Paul**, **Alex Reyes**, **Allison Roberts**, and **Caledonia Strelow**. Lieutenant Haley (Morton, US'10, C'14) Haines, a commissioned officer in the Judge Advocate General's Corps of the Navy gave the keynote address, urging students never to give up the ship!



State Track Top-Two Finishes

Senior **Siwa Asinga** brought home three awards from the Class 2 State Track and Field Championships. She won the 100 m dash in 12 seconds flat, .22 seconds faster than her time in the prelims and a school record. She also won the 300 m hurdles, setting a new Class 2 State record. In the 200 m dash, she placed 2nd, setting a school record.

Among the boys, senior **Nathan Babcock** won the 800 m, finishing in 1:57.71, nearly four seconds ahead of the 2nd-place runner.

The boys' 4x800 m relay team also won, coming in a full seven seconds ahead of the 2nd-place team. Relay team members were seniors **Nathan Babcock** and **Stevie Keyes**, junior **Bramwell Havi**, and sophomore **Kyedence Jordan**. In addition, Bramwell placed 2nd in the 1600 m run, setting a personal record. Overall, the boys' team took 4th place at the meet, and the girls placed 8th.

Loeb Award Finalists

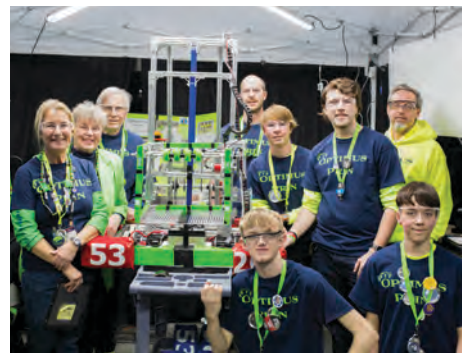
After a rigorous selection process, including a teaching demonstration and interview, Upper School teachers **Jim Moser** (C'04) and **Lynne Scott** (C'01) were chosen as finalists for the 2019 Loeb Prize for Excellence in Teaching Science and Mathematics. Principia was the only school with two top-five finalists.

Artists Chosen for Exhibition

The St. Louis Artists' Guild chose work by four Upper School students for this year's all-media Young Artists' Showcase, which receives submissions from high schools in the greater St. Louis area.

Work by the following students was chosen for the exhibit:

- Senior **Riley Small** (ceramic sculpture)
- Senior **Isabel Wesman** (acrylic painting)
- Junior **Katherine Peticolas** (digital design)
- Junior **Philipp Roser** (acrylic painting)



Robotics Team Alliance Wins Third Place

At the St. Louis Regional FRC competition in March, the Upper School robotics team, Optimus Prin, was chosen for a three-team alliance that captured third place. Principia's "build" team consisted of senior **Sam Ferrell**, junior **Mitchell Gordon**, sophomore **Gavin McFall**, and freshman **Elliott Day**.

COLLEGE

Student Receives Theatre Award

In January, junior **Carolina Queiroz Couto** and her scene partner senior **Tyler Flavin** progressed through three highly competitive audition rounds of the Irene Ryan Acting Scholarship, performing a scene from last fall's production of *The Shape of Things* at the Region III Kennedy Center American College Theatre Festival in Madison, Wisconsin. Carolina progressed to the final round of 16 performers from a field of 249 candidates and was recognized as one of the top four performers in the region, winning the Best Classical Actor Award.

Summer Internship Leads to Hospitality and Tourism Award

In early March, **Courtlyn Reekstin**, a senior mass communication major,

Awards and Achievements

received the Student Star of the Year Award for Michigan in hospitality and tourism at the Pure Michigan Governor's Conference on Tourism. Courtlyn interned in Michigan at the Grand Traverse Resort & Spa last summer and was nominated for the award by one of her managers there.



Seniors Present at Math Conference

Math majors **Ziad Ghanem** (C'19) and **Drew Shotwell** (C'19) presented

their senior capstone research at the 24th Missouri Collegiate Mathematics Competition at Lindenwood University in the St. Louis area in April. Ziad's presentation was titled "Stochastic Analysis, a Study," and Drew's was "Logic as a Calculus of Propositions."

Sophomore Corey Carter Wins Two National Championships

Corey Carter (US'18, C'22) won the 200 m dash in both the NCAA Division III Indoor and Outdoor Track and Field National Championships. This school year, he has set personal bests, broken school records, and earned All-American honors two seasons in a row.

Corey has been breaking individual and relay school records since arriving as a freshman, including helping to break the long-standing 4x100 m relay team record set in 1976.

Dr. Karen Eckert Honored

The Columbus Zoo and Aquarium recognized **Dr. Karen Eckert** (C'80), professor of sustainability and director of the College's Sustainability Center, with its Commitment to Conservation Award. Eckert was selected for her work as executive director of the Wider Caribbean Sea Turtle Conservation Network, which strives to ensure the survival of depleted sea turtle populations.



ALUMNI

Dr. Peter Martin (C'62)

Princeton University Press recently released Dr. Peter Martin's *The Dictionary Wars: The American Fight over the English Language*, which was very favorably reviewed in *The Wall Street Journal*. Among Martin's many other books are the acclaimed biographies *Samuel Johnson* and *A Life of James Boswell*.

Christine Corday (US'88, C'92)

From January through April this year, the Contemporary Art Museum St. Louis hosted an exhibit by Christine Corday. The site-specific installation included *Relative Points*, 12 monu-

mental sculptures, and debuted her hybrid, large-scale painting series *Primer Grey, Centers for Gravity*.

Jessica Morse (C'04)

Jessica Morse was recently appointed by California Governor Gavin Newsom to serve as deputy secretary for forest resources management at California's Natural Resources Agency.

Kate Wells (US'06, C'10)

Michigan Radio won its first Peabody Award this year for the podcast *Believed*, hosted by Michigan Radio reporters Kate Wells and Lindsey Smith.

The nine-part series investigates how former sports doctor Larry Nassar was able to abuse hundreds of women and girls for decades.

Colby Bermel (C'16)

At the start of the year, Colby Bermel was hired by *Politico Pro* to cover the California energy beat.

Previously, he was a reporter for *S&P Global* in Charlottesville, Virginia, where he covered the business and politics of energy in the southeast United States.

My Life with Principia

by Marjorie (Day, US'38) Hamlin



Margie's 1938 Upper School yearbook photo

My Principia story began before I was born. In the early 1900s, when my mother started high school, she learned about this new school for Christian Scientists. How she longed to leave her home in Colorado to have this new Christian Science academic experience that was available in St. Louis! Her father was a mining prospector, and her mother was a Christian Science practitioner, and there just weren't funds for this. But the dream lingered on . . .

Some years later, when my father asked my mother to marry him, she quickly asked, "If I marry you and we have children, can they attend Principia?"

"What is Principia?" my father asked. After a long description, he willingly agreed. So, when I was born several

years later in California, the die had been cast—and I learned that my future was already set.

When my younger brother, Charles Day (US'39), and I were lively teenagers in high school, our parents decided the time had come. Close friends asked, "How can you send your children so far from home at such an early age?" My mother replied, "Because I love them so much."

After taking the necessary steps to apply, my brother and I took the train from San Francisco to St. Louis. There were two railway cars reserved for Principians, one for College students and one for upper schoolers, each with a chaperone.

How I loved seeing my mother's dream come true as I moved into the Girls' Dormitory! It felt like heaven on earth to me. I told my parents on our first trip home for Christmas, "At Principia they don't just talk about Christian Science. They show us how to live it!" What a rewarding and happy two years I experienced before graduating from the Upper School, on the Page and Belt campus, in 1938.

I dreamed of returning to Principia to attend the College. But my parents had spent all their available finances on our Upper School education. Also, we lived very close to the University of California, Berkeley, which was a bargain for California residents.



Margie and Hank Hamlin at their wedding

But I wanted more Principia time, especially after having visited the following year for my brother's graduation from Upper School. My mother—who had long been the Principia Mothers' Club chair for Northern California—came up with an inspired idea: "We can open our home like a Principia dormitory, and you can invite the girls from your Sunday School class who live farther away from Berkeley to move closer to the campus with us," she suggested. So, we had a house full while I attended Berkeley! But I still missed Principia.

I had always been taught that my life was in God's hands and that I must trust His guidance. So, after my college graduation in California, I was delighted when my parents suggested we drive to Boston for the Annual



Margie (far left, second row), in 1987, with international students at the College




Margie, dressed as Mother Goose, reading to children in Lower School

Meeting of The Mother Church—with a stop at Principia along the way. I made an appointment with “Mrs. Billy”—as Garnet Morgan (US 1916), the Upper School Dean of Girls and daughter-in-law of Principia founder Mary Kimball Morgan, was known. In our conversation, she suddenly asked me, “Have you ever thought of working at Principia?” Never having thought I could be worthy of such an honor, a whole new possibility entered my thought. Mrs. Billy continued, “We need a housemother for our seventh- and eighth-grade boarding girls.” I gulped and responded, “I would LOVE such an opportunity!”

Later at Principia I met my husband, Henry Hamlin (US’41, JC’43), who was working in the boys’ Home

Department, and we were married in the College Chapel in 1945—with Mary Kimball Morgan in attendance. We moved to California to start our family, before returning to Principia in 1954, for Hank to take up the post of alumni director. We built our home on the School’s new “country campus,” and, in years following, I became the Lower and Middle School librarian. Starting in the 1970s, I was a resident counselor at the College, taught a course in Children’s Literature, led several study abroad trips to Africa and Asia, and served as the international student coordinator for about 15 years.

Each of these jobs enriched and blessed my life, and I now have friends all over the world. Although I did not get my four years as a student at Principia

College, God had something better in store for me—well over 60 years at Principia and a Principia education for all three of our daughters and three grandchildren! 

What’s your Principia story?

To submit a story (up to 800 words) about your Principia experience, email us at purpose@principia.edu. Selected submissions will be edited with the author’s permission. Shorter submissions are welcome as well. Feel free to share even a brief memory.

MEET ALICIA SORENSEN:

Helping Students Break through Barriers

Alicia Sorensen completed her undergraduate degree in English education at Northeastern State University and her master's degree in education and innovation at Webster University. She taught middle and high school English for five years in Oklahoma and Indiana before joining the Upper School English Department in 2016.

Q. What led you to teaching?

A. I remember, when I was eight years old, teaching my brother and sister everything I had learned at school each day. I would sit in front of our little chalkboard and draw the parts of a flower, or I would read a book to them and plan how we would act it out.

As I got older, my love for learning grew, and during my senior year of high school, I became a tutor for students who were learning English as their second language. This experience was really eye-opening and started me on the path of pursuing teaching as a career.

Q. What do you love about teaching at Principia?

A. I love the connections you can make with students and watching the growth that can take place in such a short time. It is so rewarding to see students discover how limitless they are. Time and again, I get to witness what can happen when they break through barriers that have been holding them back. Helping students reach that level of comfort within themselves is what I strive for on a daily basis.

But I wouldn't be a very good English teacher if I neglected to mention how much I love sharing books and writing with my students. I love the fact that they trust me to take them on a journey with a book. And it is always a highlight when students share books with me that they've found moving or just think I might enjoy.

Q. What do you find most challenging about teaching?

A. Most of the challenges I face with teaching involve having to scale back on activities or projects to better fit the time we have together. Everything I teach has to have transferable skills, so I have to reign myself in a little to be sure I can help students identify those transferable moments and make connections beyond the classroom. I know there has to be an emphasis on the actual learning, but I try not to let it spoil the fun in the learning.

Q. Can you share a moment from this year that was particularly meaningful?

A. At the end of February, we had the pleasure of inviting Sandra Uwiringiyi-

mana, a refugee of Rwandan descent, to our school to speak to and join us for a few classes. The interactions between her and our students were incredible. She was in awe of the love we showed her and very touched by the work we are doing to bring more awareness to the refugee crisis. Sandra shared that some of her visits do not always go well, so it was wonderful to see her laughing and joking with our students and sharing the joy and love she has for life with all of them.

Q. Can you share a character education moment you've had at Principia that stands out to you?

A. This past year's Outward Bound trip to the Boundary Waters of Minnesota provided ample opportunities to share character education moments with my Crew. One that stands out is the day we portaged the area known as "The Bruin." It was a 225-rod portage [nearly 1,240 yards], and right before we set out to complete this task, my Crew had a meltdown. I knew it was coming because the canoe ride leading up to this portage had been eerily quiet and moody, but it was still very hard to see their anguish and heartache.

I asked them to take a minute to just let it all out, to unpack everything they were feeling. The dread, the toughness, the sore muscles, and the doubt had to be recognized and called out. Once they had shared all their fears, I asked them to be silent and let the moment sink in, to acknowledge how their peers were feeling. Then, I asked them to find a truth that they could hold on to and share with us. We went back around the circle with our words of encouragement. Some shared inspiration from the Bible,



English teacher Alicia Sorensen and her students share the fun of learning.

some from *Science and Health*, and some from a favorite hymn. I asked for a moment of silence again, and then I asked the day's leader to make a plan for attacking this challenge. Everyone jumped in with ideas and worked together to figure out how we could manage this portage without feeling overburdened. To make a long story short, the portage was a breeze, and the rest of the trip was a testament to this moment that had shown us what we were capable of once we had cast aside our fear.

Q. What work would you pursue if you weren't a teacher?

A. I would love to travel and write articles for *The Christian Science Monitor*. One of my other childhood dreams was to be a journalist, and I think the

Monitor is one of the best forms of journalistic writing in the industry.

Q. What would people be surprised to learn about you?

A. I lived in a group home for a short time before my siblings and I were reunited and adopted by my brother's paternal grandparents. My childhood was not filled with the traditional things many people expect a kid to experience, but that has helped shape me into a more compassionate and loving person.

Q. If you had a day off and weren't allowed to use it to catch up on work, what would you do?

A. I would spend time outdoors with my family. I love going on adventure

walks with my girls and watching them climb and explore while my husband takes pictures of plant life and birds. I also love the moments where we can be together at home without technology and my oldest daughter, Lizzy, reads to us or asks us to join her in the art studio to paint a picture as a family.

Quality time is a really precious gift, so I would make the day all about showering others with love.

Q. If you could give students only one piece of advice, what would it be?

A. Never give in to the belief that what you have to say or share with the world is not worthy. You are worthy—just by being you. ■

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Gemma Ritchie (second from left) with other Open Society fellows at the launch of this year's program

Photo courtesy of Open Society Foundation

OFF TO A ROARING START

Gemma Ritchie: Standing for Sound Journalistic Principles

by Heather (Darling, C'84) Shotwell

Gemma Ritchie (C'17) remembers being fascinated with newspapers at age 5, when her father, journalist Kevin Ritchie, worked at *Diamond Fields Advertiser*, the local newspaper in Kimberley, South Africa. "Dad would often take my little sister and me to work with him," Ritchie recalls. "I remember walking around the printing presses and falling in love with the smell of the ink and the paper."

When the family moved to Johannesburg, where Ritchie attended high school, she did a stint shadowing journalism professionals at

Gemma (right), covering the African National Congress's leadership elections as a reporter for the *Mail & Guardian*

Photo by Delwyn Verasamy



a local radio show and at *The Star*, the daily newspaper where her father worked. With that, she was hooked. “Once I got to Principia College, I no longer had to watch people ‘doing journalism’ but got the chance to try it out myself as editor of the *Pilot* [the student newsmagazine]. Little did I know that asking probing questions on campus is not that different from journalism outside of school.”

Since then, editors and educators have taken note of Ritchie’s determination to stand for the journalistic principles of impartiality and accuracy. In January, Ritchie was selected for one of only five Open Society Foundation Fellowships in Investigative Reporting. The program involves a partnership with the Open Society Foundation, the journalism program at the University of the Witwatersrand (Wits), and Rhodes School of Journalism and Media Studies. The 18-month program includes nine months at Wits Journalism, three months of research at Rhodes University to develop major investigation on a chosen topic in partnership with a local newspaper, and a six-month internship to further develop investigative reporting skills and produce a portfolio of work. In addition, fellows attend an international investigative reporting conference in South Africa and another in Germany.

Currently in the Wits portion of the program, Ritchie says, “We’re looking at great examples of investigative journalism and how we can replicate this work. Each lesson is a deep discussion on journalistic ethics and the state of the media today.” She is learning from such notable journalists as Philip Meyer, who won a Nieman Fellowship for his reporting on the Detroit riots in the 1960s,

among other experts. “Meyer stressed the importance of data in journalism,” Ritchie says. “In South Africa, where the media tries to hold government accountable, it’s necessary to scrutinize the data released by government agencies.”

Ritchie is quick to give gratitude for the liberal arts foundation she received as an English major (with minors in mass communication and religion). “The opportunities at Principia were invaluable and all played a role in helping me pursue my career,” she says. “I’m grateful not only for the quality education I got, but also for the practical advice from professors. Every time I read a book or article or listen to a podcast, I hear

“The opportunities at Principia were invaluable . . . in helping me pursue my career.”

—Gemma Ritchie (C’17)

Dr. Heidi Snow (C’79) instructing us to annotate, which is very handy when I have at least three books and several journal articles to read each week.”

Serving as both a board member and co-director of the International Perspectives Conference proved valuable, too. As Ritchie explains, “I interacted with individuals who are experts in their fields—from international crime court judges to United Nations ambassadors—and this gave me confidence to interview people.”

Ritchie traveled on the England Abroad her sophomore year, training with theatre professionals at Shakespeare’s Globe in London, researching at the British Library, and attending numerous theatre productions. Upon the group’s return to campus, they staged Shakespeare’s *The Winter’s Tale*. The following summer, Ritchie returned to England to intern at the Wordsworth Trust, conducting research and giving tours of Dove Cottage, where poet William Wordsworth lived. At graduation, Ritchie received the James Nelson Goodsell Award, named for a longtime *Christian Science Monitor* journalist and given to the graduating senior who attained the highest level of achievement in the field of mass communication.

Following graduation, Ritchie returned to her home country and was soon hired at *Mail & Guardian* in Johannesburg to create news content on a range of topics and maintain the brand’s social media presence on Facebook, Twitter, Instagram, and Google+. She covered the economy and industry for the paper’s business section, investigating wage strikes in the gold and platinum mining industry, predatory journals that focus more on profit than academic integrity, and the effects of drought on a threatened bird species, among other topics.

Ritchie doesn’t shy away from controversy and strives to meet problems with a prayerful response. “I keep the idea that God is everywhere at the forefront of my thought,” she says. “Even though journalistic integrity is being challenged right now, it is an opportunity to see Truth’s omnipresence uncover error, as Dr. Snow told me when I first mentioned the fellowship.” ■



A view of the Seine River in France
Photo by Susie Ledbetter (C'70)

Principia Lifelong Learning Goes to France and Greece

Enjoy an armchair adventure as these travelers reflect on their recent trips with Principia.

Bonded from the Beginning

by Susie (Levy, C'70) Ledbetter

"This group *arrived* 'bonded' . . . I have never seen anything like it before in all my years of cruising." That's what our Avalon cruise director, Tony, kept saying as he welcomed us aboard, shaking his head in amazement. On most trips, he noted, it takes days for groups to bond.

Yup, Tony nailed it! One hundred fourteen Principia Lifelong Learners on a Paris to Normandy cruise—we filled the entire boat. And from the moment each of us stepped onboard, it felt a bit like a reunion—a glorious weeklong Principia party on the Seine. I simply could not wipe the grin off my face; we all kept pinching ourselves and declaring we were never getting off! Simply sublime.

Sure, John Glen kept us centered and purposeful with his terrific lectures that prepared us for two very full day trips exploring the Normandy D-Day sites. We all returned with a completely new and firsthand understanding of the complexity and enormous odds that loomed large for the Allies.

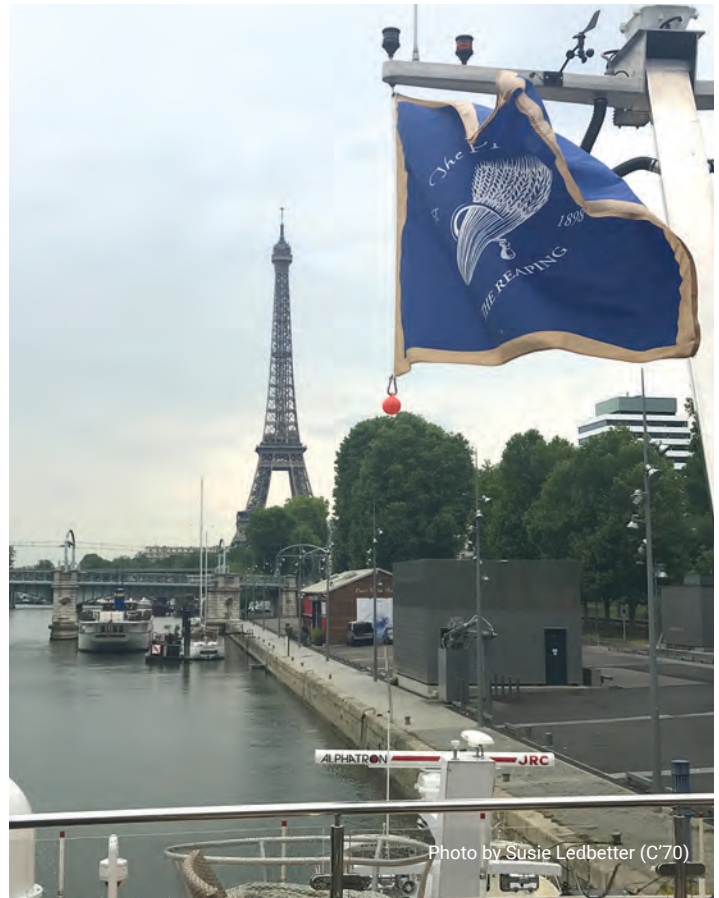
And I got to lecture on Monet, Giverny, Impressionism, and Van Gogh. On a clear sunny Sunday morning, we arrived at Giverny along with swarms of other visitors. Observing the line to enter Monet's home, I confess I slipped to the right and entered via the exit, walked quickly through his yellow dining room and headed for the stairway to his bedroom upstairs. Filling every inch of wall space were the favorite works Monet had purchased. These works by Cézanne, Van Gogh, Renoir, and others caught Monet's last glances at night and his first as he welcomed a new day. In fact, he called the

paintings his “friends.” I stood there acknowledging each one with a good night and a good morning—my Monet moment!

As our boat glided along the storied Seine, we were completely enveloped in the Norman art, architecture, history, and fabulous food that defines this famous region of France.

On the boat itself, we were all about renewing old friendships and making so many new ones. My sister Jane (Levy C’74) McLane figured out that 16 of us were Sylvester Sisters! That must be some sort of record. (There’s a photo of us on page 60 of the Winter 2019 *Purpose*.) The fact is—we were one big family; there was a comfort level unlike anything usually experienced in traveling. We all welcomed each other and cared for each other. Gale (Sauers, C’74) Teegarden’s luggage sat at the Paris airport for days, but, surprise, one of her College roommates, Linda (Pyle, C’73) Distel, was onboard, and voilà Gale was outfitted!

As the boat pulled up to the disembarkation dock in Paris, we were treated to the most marvelous sight: the Eiffel Tower, the bow of the boat, and the Principia flag billowing in the breeze (pictured on the right). The view served stunningly as the perfect metaphor for Principia Lifelong Learning.



The scene as the cruise ship pulls into Paris

Walking the Footsteps of Paul in Greece and Ephesus by Anne (Hindmarsh, C’86) Cooling

Traveling all day in a bus from Athens to Macedonia to go to the city of Thessalonica, I imagined Paul in the small boats of his day sailing up the body of water we were driving alongside. I imagined him walking the mountainous region of Macedonia. He was committed to spreading the gospel message of Christ that had so transformed his life. He knew dangers awaited him in the cities, but his prayers had to have included his journeys in between as well.

This was the time when Paul contemplated the gospel message—how it squared with what he’d learned as a Pharisee and with the Jewish Scriptures. Did his prayers on his walk communing with God include the receptivity of the town? Did he pray about how to minister to this budding movement and keep them from splintering into two groups, Jews and Gentiles? >>



The Parthenon in Athens, Greece

Lifelong Learning

As we journeyed to each city where Paul preached, we read his letter for that city on the bus. Barry Huff (US'98, C'02) made the stories come alive, giving us background for each letter. He was one of the highlights of the trip. And the tour guides enriched his stories with more Bible scholarship, Greek and Turkish history, and answers to our questions. It was a feast of Bible study complemented by experiencing what we were reading, which is the best way to learn.

The tour guides took care of every detail. Their professionalism was amazing, and they were touched by our dedication to the Bible and to each other and by the natural expression of Christian love from our group. The Greek food was rich and delicious, and the scenery was beautiful—from the monasteries on the cliffs to the deep blue Mediterranean Sea we admired from the boat and from the islands we visited.

For me, the greatest insight from the trip began forming as we stood in the ruins of Athens, Ephesus, Philippi, and Thessalonica. The Greek and Roman architecture was meant to

intimidate and impress. What we learned about the Roman and Greek empires helped us understand what Paul was up against, and I began to truly understand the power of God and His Christ in its effect on this human scene over the years.

The climax of this insight occurred at Mars Hill, a small hill looking up to the Parthenon, the tallest point of Athens. The Parthenon was (and still is) a masterpiece of design and materials, echoing its message across Athens that Greece was not to be trifled with. Yet, there Paul stood on that little hill, looking at this massive temple with its three-story statue of Athena, and gave his famous Acts 17 speech, declaring that God is not found in temples made with hands. His courage thundered in my heart that there was nothing I could face compared to this and that I could have courage, too.

My understanding and love for the Bible grew substantially because of this trip. I would recommend it to anyone. Not to mention, Greece is beautiful! 🇬🇷



Photo by Jeff Lindner (C'68)

Lifelong Learning travelers on the Greece trip in Veria (known as Berea in the Bible)



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Be a Thermostat, Not a Thermometer

by Dory Smith



I often remind myself of the importance of setting the tone, rather than reacting to what's going on around me. Years ago, I heard someone say, "Be a thermostat, not a thermometer." A thermostat sets the temperature, while a thermometer records the temperature. Christian Science emphasizes the importance of governing our thinking, much as a thermostat governs the temperature.

I love being involved with athletics because players and coaches encounter circumstances that test their character—an official's call, the way an opponent plays, or the number of wins and losses. Will they react in unhelpful ways, or will they choose, instead, to adjust and set the temperature?

One time, when I was coaching softball, my pitcher kept complaining about the umpire's calls. In the middle of the third inning, I visited the pitcher on the mound and asked when she thought the new umpire would show up. She looked at me with surprise and a bit of joy that another umpire would soon arrive.

Of course, there would be no new umpire, and it was time for her to stop complaining about this one. She needed, instead, to change her thinking,

"... set the standard and refuse to react ..."

adjust her pitching, and stop reacting—to be a thermostat, not a thermometer. And she got it! The reset in her thinking rewarded her with much more success for the rest of the game.

I remember one of the better Principia School basketball players during my time as School athletics director. We called him "Teflon" because he never let anything bother him or "stick" to him. He didn't respond to bad calls, physical play, or anything that didn't go his way. And he thought complaining was a waste of time. If something went wrong, he quickly recovered and moved on to the next play.

I often ask my athletes, "What's your recovery rate?" What I mean is, How long will you dwell on past mistakes or bad calls? How long will it take you to recover? Will you be a thermostat or a thermometer?

As the Principia College women's basketball team prepares for each practice and contest, we meet and talk about how to metaphysically approach the

activity. Our team has a tradition before each game of settling on a quality chosen by one of the players—humility, grace, joy, love, or trust, for example. This helps focus and guide players' thinking before they even step on the court. Players write that day's quality, along with a teammate's number, on a piece of athletic tape, which they tape to one of their fingers, as a reminder to play together as a team and to let their good thoughts set the temperature.

The lessons learned in athletics apply to every area of life. One of my favorite statements by Mary Kimball Morgan is, "Train yourselves for service. Have an unselfed purpose. The world needs you. It needs unselfishness, honesty, friendliness, consideration, courage, endurance, patience, hope, faith, and love to work out the tangles and misery of material living" (*Education at The Principia*, p. 163).

Our world needs people who act like thermostats—who set the standard and refuse to react to what's going on around them. ■

Dory Smith (C'77) is head coach for women's basketball at Principia College. She has also coached numerous sports and served as athletics director at Principia School and elsewhere.



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THE NEW SIMON FIELD HOUSE IS COMING!

Plans are underway for a new field house at the School to be named in honor of longtime School administrator and coach Bill “Willy K” Simon. (See tribute on page 63.)

Carey Field House has served Principia School well for 57 years, a space filled with fond memories of exciting wins, early-morning free throw practices, and friendships formed in the face of challenges. But it lacks the facilities needed today.

After careful planning and extensive conversation with architects, it has become clear that the most cost-effective way to support the size and scope of our program and meet the needs of both male and female student-athletes is to build a new field house rather than renovate Carey.

Extensive upgrades across the academic buildings have recently been completed, reflecting the School’s emphasis on collaboration and student-centered learning. Now is the time to update our athletics facilities to support the important role athletics play in character growth at Principia. Coach Simon, who received an honorary degree from Principia College at Commencement in May, lived the qualities we want Principia athletics to embody. The Simon Field House will celebrate his unconditional love, grace, courage, and patience in bringing out the best in each student.

Principia is blessed to have an anonymous donor who provided an unprecedented \$15 million gift for the Simon Field House. Other donors, including the Principia Parents Association, whose auction and trivia night earned a record amount this year, are contributing to this exciting project as well. We estimate that another \$10–15 million will be needed to complete the facility. A fundraising campaign will be launched during Upper School Reunion in September. In the meantime, if you would like to discuss the possibility of a contribution to the Simon Field House, please contact Chief Advancement Officer Barbara Blackwell at barbara.blackwell@principia.edu or 314.275.3521. ■



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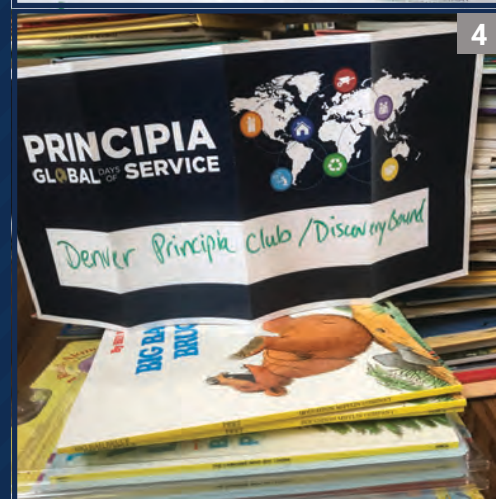
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PRINCIPIA GLOBAL DAYS OF SERVICE



April means selfless giving! Principia students, faculty, alumni, and friends gathered in groups of mighty force, no matter their size, to contribute to the 2019 Principia Global Days of Service. From California to Connecticut, Ireland to South Africa and Switzerland, Principians focused their efforts to make a difference in the lives of others.

Numerous individuals helped with a diversity of projects—sorting food at a local food bank (Tucson, Arizona);

volunteering for 4-H and a library (Littleton, Massachusetts); donating 231 books to a reading program (Denver, Colorado), making quilts for children in need (Cheyenne, Wyoming), and serving meals at shelters (Jacksonville, Florida), to name only a few. In addition to individuals' work, Principia Clubs also organized projects.

Meanwhile, on the College campus, the People of Courage class helped students at a local elementary school boost their reading skills, while athletics teams

took turns mentoring teens at the local Boys and Girls Club. The Sustainable Food Systems class volunteered at a Saturday Café sponsored by a local Presbyterian church.

A group of Upper School students spent spring break doing service work in South Africa. Others performed *Freaky Friday* (this year's Spring Production) for St. Louis-area schools. To help raise funds and awareness for a women's shelter, the Sports Science class sponsored a color run.

Alumni & Field Relations



Middle School students got involved, too, teaming up with another school to complete three service projects, and the Middle School Girls' Dorm cleaned up the neighborhoods around campus. First graders planted seeds, and fifth graders, representing the Principia Stream Team, took samples of water and picked up trash at a nearby stream.

Not to be left out, Preschool students created crafts to share with a Christian Science care facility, hand delivering them with hugs and an afternoon of

song. And an overwhelming 450 pounds of food was collected by the School Admissions Office and the Business Office to support the St. Louis Area Foodbank.

"Almost 1,000 Principians and friends gave 5,314 hours of their time to help 52 organizations on four continents," says Terry (Smith, C'85) Sheets, Alumni & Field Relations program coordinator. Don Steckler (US'65, C'69) volunteered 60 hours teaching citizenship and ESL classes, a com-

mitment of hours he fulfills each month. Many other individuals donate their time throughout the year as well, and we celebrate their efforts.

Congratulations to all on a job well done, and keep up the great work! 🎉

Photo captions:

- 1) Margaret (Dunham, C'82) Gibbs, helping 4-H
- 2) Bat Box Building at Principia School
- 3) Deborah (Thomas, US'69, C'73) and Steve Warren on a park cleanup in Austin, Texas
- 4) DiscoveryBound Denver Chapter and Principia Club of Denver Book Drive
- 5) Don Steckler (US'65, C'69) with ESL students
- 6) People of Courage class at a local school



TEACHING FOR TOMORROW: TECHNOLOGY IN EDUCATION

by Trudy Palmer



Don't blink! You'll fall behind in the rapidly accelerating world of technological innovation. At lightning speed, we went from floppy drives (remember those?) to handheld computers. And artificial intelligence isn't just breathing down our necks—it threatens to outrun us.



What's the impact of such rapid change on education, pedagogy, teachers, and students? In particular, how is Principia keeping pace?

Focusing on the Future



With the digital age well into adulthood, what it means to be well educated has shifted from possession of a body of knowledge to facility with essential processes, from what you know to how you learn and how you put that learning into practice. There are still things we need to know without having to look them up, of course, but there's no denying that holding in the palms of our hands more information than any library could ever contain is a game changer.



Dr. Peter Dry, Principia School's dean of innovation and academics, describes the overall goal of education as training students to be "future-ready." Many of tomorrow's jobs don't yet exist, so there's no way to know exactly what teachers are preparing students for. As a result, Dry says, "training students to be future-ready means cultivating the ability to be adaptable, to be a lifelong learner, and to be able to transfer one's knowledge and skills to new and challenging situations." Creativity, collaboration, communication, and problem-solving are essential to this type of training.



College faculty members Dr. Lauren (Stewart, US'94, C'98) Hinchman, chair of the Education Department, and Winnie (Hinchman, US'88, C'92) Needham, assistant professor of education and head of the Social Sciences Division, stress the applicability of knowledge as well.* "Education should emphasize what students can do with information and why it matters," they point out. "Our challenge is to help them wrestle with ideas through critical thinking and, ultimately, develop their own position and voice." >>



** Dr. Hinchman and Professor Needham wrote responses together to questions for this article. Their collaboration is reflected by joint attributions.*



Getting Past Soundbites

Admittedly, that's easier said than done with students' ready access to "global information at their fingertips," as Needham and Hinchman put it. "This instant gratification reinforces the misconception that finding the answer is the end goal in school." In fact, of course, thinking critically about that answer, determining one's position in relation to it, and deciding whether and how it can be put to use is the less-instant but far more educational—and gratifying—goal.

To address students' impulse simply to find the "answer," Hinchman and Needham say they "intentionally design assignments that require students to persist, collaborate, explore, and engage in scholarly discourse—assignments crafted to develop the skills crucial to students' future success." These assignments are multilayered, often involving student-conducted interviews, surveys, scholarly research, the requirement to develop a position on the topic, and creation of a multimedia presentation. That breadth of demand ensures that the neatly packaged, easy-to-absorb information readily accessible online won't fulfill the assignment.

Teachers on the School campus use a similar strategy, adjusted for grade-level abilities. Through interdisciplinary studies, in particular, teachers require students not only to gather information but to use it to solve a problem. For example, sixth graders' study of animal behavior and habitats included on-site observation at the Saint Louis Zoo, interaction with zoo experts in person and around the world (online or via Skype), research on the natural habitat of an animal of their choice, and the use of computer-assisted design (CAD) to develop an improved zoo enclosure for their animal. Final presentations are a key part of the learning process as well. Students shared their designs before an audience of experts (a zoo keeper and a science teacher) and peers. As with the multilayered College assignments, so in sixth grade: relying on Wikipedia won't work. Across all levels of the School and College, faculty craft assignments that require students not only to acquire knowledge but to use it to address novel and challenging problems.



Communication and Collaboration

The emphasis on presenting one's findings—beyond campus borders when possible—speaks to the key role of communication in preparing students for tomorrow's unknowns. "Being future-ready is centered around the ability to communicate across broad networks and to be global thinkers," Dry comments. "That means students also need the capacity to handle diversity in order to build teams, enhance creativity, and improve problem-solving."

Technology enables communication around the world, of course. Both campuses include spaces for videoconferencing when voice-to-voice or virtual face-to-face contact is desirable and feasible (in terms of time zones, scheduling, etc.). When real-time give and take isn't possible, soliciting others' views electronically opens up opportunities for responses. For example, Needham and Hinchman speak of the value of students producing a video for class, posting it on YouTube, and getting worldwide feedback. "Without technology, this could not be accomplished," they note.

In another instance, Hinchman took advantage of students' ever-present cell phones to broaden the basis for class discussion. Instead of being limited to the views in the room, she asked students to text someone of their choice anywhere in the world and ask for a personal definition of emotional intelligence and a description of the qualities of someone they know who has high emotional intelligence. The responses were then compiled anonymously on a screen in the classroom, enriching the discussion with a greater variety of perspectives.

Along with broadening one's view, collaboration can be a key benefit of communicating electronically. Using Google Docs, for example, has revolutionized peer editing. "I've watched the process," Dry says. "While typing out an essay, students will have buddies who are posing questions or correcting grammar or whatever it might be. Everything is very, very collaborative thanks to technology." Along with enhancing learning, this practice models real-world work environments where teams develop and edit materials collaboratively.



Changing Teacher/Student Roles

If, in all of these scenarios, you missed the teacher standing in front of the class dispensing information, that's because that teacher wasn't there. Yet none of these classes was without a teacher. "Information is free and easily accessible," Dry notes. "It's open source, so the teacher is no longer the fount of all knowledge. Students will fact check you very quickly based on what they've found on their phones, and they may ask questions about areas you're not fully familiar with."

As unsettling as that may sound from the teacher's perspective, Dry celebrates this shift. He describes being thrilled during a history course he was teaching when, "a week into the class, two or three students knew more about aspects of the course than I did." They'd gotten interested in specific points and pursued them online, leaving Dry in the role of facilitator rather than knowledge dispenser. For Dry, that was a success story. "Our job," he says, "is to inspire students to want to go deeper." >>



FACULTY SHARE TECH ADVICE AND CLASSROOM PRACTICES

Here's a sampling of responses to these two questions:

1

What do students most need to understand about technology in order to use it effectively?

2

How does technology enhance your teaching?

JIM HEGARTY (C'76)

College, Music

One challenge students face is that making music with technology is not as easy as they expect it to be. Tremendous advances in user interface design give us the impression that everything will be as easy to use as an iPhone app, but that's not the case. Another challenge is that the music we hear today is executed at a very high quality. It can be frustrating and discouraging when our work doesn't measure up to the quality of commercially produced tracks.

We all need encouragement and practical guidance to advance on the learning curve. One of the reasons the recording studio at Principia has been so successful is that we work hard to cultivate a community of musician/engineers who are working together to raise each other up and keep pushing for something better.

DINAH RYAN (C'78)

College, English

A pencil is technology. I'd rather read a sophisticated short story written in bad handwriting on the back of an envelope than a clumsy story published in a blog. Technology can't take the place of knowledge, the capacity to find and verify information, or creative thinking, but participating in contemporary culture requires technology. Students on the *Mistake House* literary magazine staff, for example, must efficiently use Office 365 software. They have to navigate the WordPress content management system as well as our submission software. The quality of thought is paramount, but technology helps give thought form.

JIM MOSER (C'04)

Upper School, Mathematics

The most important thing for students to understand is what technology can and can't do. In the context of math, technology makes tedious calculation and graphing by hand unnecessary. However, technology can't yet interpret, make conjectures, or creatively problem-solve. In my statistics classes, statistical software makes number-crunching and creating beautiful data graphics extremely easy. So, gratefully, our focus is on the interpretation of the data, which is far more interesting than doing mind-numbing calculations. That's why statistics is such an exciting branch of mathematics: it helps you understand the world and empowers you to make informed decisions.

MOLLIE GRANT (US'94)

Lower School, Grade 5

Technology has an amazing capability of transporting students through time and space! Recently my fifth-grade students researched the main events of WWII. On the Library of Congress website, they were able to access photos and radio clips that authentically linked them to the events of the past. Each student wrote a segment highlighting his or her event for our WWII radio broadcast, and their voices were broadcast live around the country to their friends and families via Google Hangout. The broadcast was recorded and submitted to NPR for the "Student Podcast Challenge."

SANDY BOSAK

Middle School, Mathematics

The most significant way that technology enhances my math teaching is by allowing for extensive differentiation. Having access to online programs and instructional resources at my fingertips allows me to provide my students with learning opportunities that meet them right where they are. For example, I can create stations on equation solving that easily adapt to each student and/or challenge him or her appropriately.



Assessing the Appropriateness of Technologies

Principia educators recognize that not all teachers are equipped for this shift from fount of knowledge to facilitator. Nor are they all tech savvy. The youngest teachers just completing their degrees are digital natives like their students, but most teachers are not, and it could easily take a generation before the majority of teachers are as fluent in technology as their students. “It can be hard to be authentic if tech isn’t your language,” Needham and Hinchman point out. “It’s like asking a teacher to teach in a foreign language.”

What’s the right role, then, for technology in the classroom? How best can it advance both teaching and learning?

“Like any other pedagogical tool,” Hinchman and Needham explain, “the educator needs to know when, why, and how to use technology and be able to assess its efficacy.” In short, teachers should constantly be evaluating which tools—from traditional to high tech—align best with their learning objectives. This is especially important in assessing new technologies. The key question, Needham and Hinchman point out, is “whether it will lead to students using higher orders of thinking such as application, analysis, synthesis, and creativity.”

To help the budding teachers in their classrooms learn how to make this assessment, Needham and Hinchman teach the

SAMR model created by Dr. Ruben Puentedura, an educational consultant and the founder and president of Hippasus. “The SAMR model,” Needham and Hinchman explain, “is a four-level scale that helps the educator determine whether the impact of a given technology on the pedagogical approach is a **S**ubstitution (writing with a pen vs. writing with a digital stylus), **A**ugmentation (hardcover encyclopedia vs. online encyclopedia with hyperlinks to videos, maps, and other web-pages), **M**odification (essay vs. multimedia presentation), or **R**edefinition (collaboration limited by physical location vs. collaboration across the globe).” The first two stages enhance instruction; the latter two transform it. The example mentioned earlier of a class video posted to YouTube receiving worldwide feedback is a redefining use of technology that transforms the learning experience.

Teachers at Principia School use the SAMR model as well to determine the value of incorporating technologies into their pedagogy. Dry also encourages use of the Rigor/Relevance Framework, developed at the International Center for Leadership in Education, to assess the value of class exercises and assignments. “A five-paragraph essay assignment asking students to explain the effects of global warming may be rigorous,” Dry notes, “but is it relevant? A more constructive essay question would provide a real-world case study, for example, and challenge students to apply their knowledge to solve it.”

That shift moves the assignment beyond theory to relevance, which not only engages students more deeply in the topic but also helps them solidify their learning by applying it. As illustrated by the CAD drawings of improved zoo enclosures, technology often facilitates students’ application of their knowledge. >>

In addition, Dry points to the work of Dr. John Hattie, director of the Melbourne Education Research Institute at the University of Melbourne and chair of the Australian Institute for Teaching and School Leadership. Hattie's comprehensive study of the effect of more than 250 factors on learning shows that "collective teacher efficacy—the ability of teachers to effectively work together—has an extremely high impact on student learning," Dry explains.

In line with this research, the School has developed a "highly collaborative culture, where teachers continuously share practices and assess their impact on student learning and engagement," Dry says. "Furthermore, teachers are encouraged to leverage technology to reach a broader professional learning network using tools like Twitter and Facebook. In addition, Google Hangout and Skype have brought teachers together in real time to discuss best practices." As Hattie's research shows, such breadth and depth of sharing among teachers is a huge boon to students' success.



Taking Charge of Technology

There's no ignoring technology. "Students live in a highly computerized world, and it's only going to get more so," Dry says. "Artificial intelligence is on the rise. It sits in our lives in spaces where we don't even know it exists. Our students will be working *alongside* technology."

Nor should teachers want to ignore technology. It offers unparalleled opportunities to extend learning. Yet caution is required. Teachers always need to be asking whether any given device or app or website will enhance learning. If not, it's just a "shiny object," as Dry puts it. "A five-paragraph essay may be better than using an app to create a cartoon about the topic," he notes.

And just as a shiny, new object (i.e., technology) can be distracting to teachers, the habitualness of technology can be distracting to digital natives. Most students (and adults) check their phones every time they ding and turn to them for entertainment and engagement every spare moment. This can



have a chilling effect in the classroom or on field trips and study abroad.

"In particular classroom settings and on study abroad programs," Needham and Hinchman note, "we have restricted or eliminated use of technology to enhance student engagement during discussions, cultural experiences, and opportunities to practice effective interpersonal communication." After these times, the professors include intentional opportunities to reflect on the experience of being screen-free. The School imposes limits on cell phone use and screen time in certain situations as well. For example, Upper School students forgo all electronics during their weeklong fall Outward Bound trips.


Without a doubt, shifting to a tech-free mode takes some adjusting, but students' reflections on even the most extreme of these experiences indicate their value. "On our outdoor-leadership-themed study abroad programs," Hinchman and Needham note, "the students are technology-free for three and half weeks—free of social media, texting and calling, streaming videos, and gaming. This provides an opportunity for them to fully immerse in the culture, be active observers,

work on interpersonal communication skills, and build their learning community. At the end, students unanimously acknowledge that being unplugged has a positive impact on their intercultural, academic, and personal development.”



Finding Relevance in a Decades-Old Policy

Despite all the industries technology is disrupting—education included—it would be misleading to focus only on what has changed. Untouched by all of technology’s useful applications and all its shiny objects are essential intellectual and interpersonal abilities—the same ones that were necessary back when computing was done by hand. Knowing how to gather and analyze information and how to work with others to apply that information to solve a problem will never be obsolete. The specifics of problems have changed, the location of information has shifted, and the teams that work together have expanded, but the critical thinking and communication skills needed to understand a problem and to work with others to solve it are timeless—in life and at Principia.

Principia’s Policy 6 clearly captures the institution’s commitment to develop this type of critical thinking: “The Principia shall dedicate its service to the task of training its students to think—and to think clearly, vigorously, fearlessly, tolerantly, unselfishly.” What, then, has changed at Principia since computers came on the scene? Everything and nothing. Teaching tools have changed, but faculty today continue to train future-ready students in the same type of critical thinking the institution has valued for well over 100 years. 



PETER DRY
School Dean of
Innovation and Academics



LAUREN HINCHMAN
College Chair of the
Education Department



WINNIE NEEDHAM
College Assistant Professor
of Education and Social
Sciences Division Head



TRANS FORM ATIVE TRAVEL

by
Julie
Finnin
Day
(US'87, C'91)



TAKEAWAYS FROM THE ISRAEL, PALESTINE, AND JORDAN ABROAD

ON A MISTY APRIL EVENING, College students dressed in brown Bedouin robes and colorful embroidered dresses shared highlights of the Jordan, Israel, and Palestine Abroad trip they'd taken over winter break. Conveying the transformative nature of the journey was difficult, but they found ingenious ways to share the sights and lessons and even the tastes of their trip.

After a video in a packed Wanamaker Hall, visitors followed a dark path, illuminated by tea light candles, to Holt Gallery in the School of Nations. There, students presented an experiential exhibit, complete with a "Bedouin tent," a wall dividing "Israel" and "Palestine" with graffiti from Bethlehem and profiles of Palestinian speakers on one side and a painting of the Western Wall and profiles of Israeli speakers on the other side, and treats of hummus, baklava, and herb-infused Bedouin tea.

Led by Dr. Barry Huff (US'98, C'02), assistant professor of religious studies, and Karen (Cogan, C'85) Daugherty, former abroad program manager, the group of 22 traveled to a land considered holy by the world's three largest Abrahamic faith traditions. Students pursued the overriding question "What makes a land holy?" Behind this question lay many others: Does the land itself make a place holy? Or ancient historical events? Or the qualities expressed by its inhabitants? Is holiness achieved through excluding—or embracing—the "other"?

Over four weeks, students walked through the red-rock desert of Jordan, considering the term wilderness as a spiritual theme and staying as honored guests with two Bedouin tribes. They explored Jerusalem sites holy to Christians, Muslims, and Jews, such as the Church of the Holy Sepulchre, the Dome of the Rock, and the Western Wall. They crossed Israeli checkpoints into the Palestinian territories and interviewed university students about life under severe economic and logistical restrictions. They finished their journey on the sweeping, lakeside hills of Galilee, where many of Jesus' miracles occurred.

More than just a tour of significant biblical sites, the abroad was designed to give an authentic experience of the region through the eyes of Jordanians, Israelis, and Palestinians. In addition to homestays, meetings with peacebuilders, and workshops with Euphrates Institute Founder Janessa Gans Wilder (C'98), their tours were conducted by both Palestinian and Israeli guides, who gave their views of the other's holy sites and narratives. "We observed several heated but respectful conversations between the guides about issues, and I think it was revealing for the students to be able to see that authentic discussion and observe similarities and differences between Israeli and Palestinian narratives," Huff says.

One of the most unexpected highlights came as they met with the imam, or leader, of Al Aqsa mosque next to the Dome of the Rock—Islam's third-holiest site. "As he was speaking to us, he began to talk about the bonds that unite Islam, Judaism, and Christianity," recalls Huff. "Afterwards, our Muslim tour guide said, 'I've never heard an imam draw those connections before!' So that was really moving to witness."

For many students, the highlight was their homestay in Jordan with Bedouins, who taught the concept of "radical hospitality"—the idea that if your sworn enemy shows up at your door in need, you invite the person in for tea and offer help. "They also talked about global equality and of everyone being the same—equal blood," says senior Chris Hronek. "These two ideas left a mark on me, and I've been working to be more hospitable and more welcoming since then." >>

Many students came home with new outlooks on the world and their place in it. “With each interaction, I learned how to ask better questions, be a better listener, and be sensitive to cultural differences,” says junior Mesa Goebel. “Hearing from people with diverse perspectives and backgrounds encouraged me to consider multiple sides of an issue and put aside my own biases. This helped me grow as a global citizen because I have become more comfortable with complex issues and ambiguity.”


Another student, junior Hannah Hathaway, gained a similar insight: “These individuals taught us the importance of dialogue and tackling a problem through connecting to the other side. Through these conversations we soon realized that it’s not ‘me versus you’ but ‘you and I versus the problem.’” 

Photo captions:

- 1) Graffiti in Bethlehem
- 2) View of Oval Forum from the Temple of Zeus in Jerash, Jordan
- 3) View of the Dead Sea from Masada
- 4) The Monastery in Petra, Jordan
- 5) The abroad group in front of the Dome of the Rock on the Temple Mount/al-Haram al-Sharif
- 6) Ein Gedi Waterfall



Photo by Chris Hronek (C'19)



Photo by Adrianna Swarts (C'19)



Photo by Adrianna Swarts (C'19)



Photo by Chris Hronek (C'19)



Photo by Samer Nabulsi



Photo by Dr. Barry Huff (US'98, C'02)



Seeing Nature Up Close at



In neighborhoods, parks, and campuses around the country—and the world—communities use BioBlitzes to expand their understanding and appreciation of nature. On May 10 and 11, Principia School hosted its second annual BioBlitz.

Undaunted by the cooler-than-normal weather, more than 250 school students from the St. Louis area—along with families and community members—joined scientists from a variety of organizations to explore portions of the School's 300+ acres of oak-hickory forest, prairie, ponds, and creek beds in order to survey the plants and animals living there.

Additional activities included hayrides, stargazing, bird watching, bat netting, eye shining for wolf spiders, a pancake

breakfast, plein air painting instruction, and a plein air painting contest judged by award-winning painter Shawn Cornell. Principia seventh grader Samantha Chapman won the contest with a verdant nature scene, despite the gloomy day.

Upper School science teacher Joel Allen also brought his telescope to campus. Seeing incredible views of the Moon, Mars, and the star Capella were highlights for many in attendance.

For detailed information about species surveyed on the School campus, join iNaturalist, an online citizen science project, and search for Principia BioBlitz 2019. Visit nationalgeographic.org/activity/backyard-bioblitz if you are interested in conducting your own backyard BioBlitz!

HIGHLIGHTS FROM PRINCIPIA SCHOOL'S 2019 BIOBLITZ

SCHOOLS PARTICIPATING

Pamoja Academy
St. Louis Catholic Academy
Principia

NUMBER OF STUDENTS

250+

SCIENCE EXPERTS

15 (from Saint Louis Zoo, Missouri Botanical Garden, Missouri Department of Conservation, Wildheart Ecology, University of Missouri-St. Louis, Principia School, The College School)

>>

A Sampling of Species Found

BATS



- Big brown bat

BIRDS



- Summer tanager
- Scarlet tanager
- Indigo bunting
- Lincoln's sparrow
- Bay-breasted warbler
- American redstart
- Blackpoll warbler

AQUATIC INVERTEBRATES



- Dragonfly larvae (three species)
- Damselfly larvae
- Mayfly nymph
- Water boatman (lots!)
- Predacious diving beetle
- Phantom midge fly larvae

PLANTS



- Mayapple
- Phlox
- Wild lettuce
- Spiderwort
- Roundleaf ragwort
- Honeysuckle
- Creeping thistle

TREES



- White oak
- Red oak
- Shagbark hickory
- Hackberry
- Black cherry

REPTILES AND AMPHIBIANS



- Northern water snake
- Green frog tadpoles
- Cricket frog (adult and tadpoles)
- American toad
- Gray tree frog
- Three-toed box turtle

INSECTS



- Eastern tailed-blue butterfly
- Black swallowtail
- Margined calligrapher
- Common white-tail dragonfly
- Green-striped grasshopper
- Caddisfly

ARACHNIDS



- Rapid wolf spider
- Striped lynx spider
- Peppered jumping spider
- Silver long-jawed orbweaver
- Genus *Philodromus*

Principia College's mediation team regularly competes against colleges and universities many times Principia's size—and often wins. Find out how the team got its start and discover the secret behind its success. Also, learn how one team member put her skills as a mediator to the test, helping to resolve a tense business confrontation (p. 42).

After a Humble Start, Competitive Mediation at the College Soars

by Dr. Jeff Steele

The Principia College mediation team returned from Athens, Greece, in March, toting the honor of its fourth top-10 finish (9th place in Team Advocacy) at the International Law School Mediation Championship Tournament. It was Principia's sixth straight appearance at the tournament—an achievement earned by winning a 1st-place finish at the undergraduate Intercollegiate Championships the preceding fall.

The team also brought home several other honors from the undergraduate competition: the 1st-place trophy for Team Mediation, the 2nd-place trophy for Team Advocacy, and the coveted H. Case Ellis Spirit of Mediation Award for Team Advocacy—the team's second Ellis award in as many years.

The International Academy of Dispute Resolution (INADR) has been around for more than twenty years, and one

of the central pillars of its educational philosophy and public service is sponsoring and fostering competitive tournaments in mediation. Similar to Mock Trial and Moot Court competitions, colleges and universities send teams to the tournaments to demonstrate their skills. Teams are ranked throughout the tournament rounds, leading ultimately to top designations and trophy awards. Principia College has recently done well in this pursuit. >>



Photo by Dr. Jeff Steele

The 2018–19 championship mediation team, from left: Ben Robinson (US'10, C'19) Grace St. George (US'18, C'22), Namrata Roy (US'15, C'19, co-captain), Olivia Burbee (US'17, C'21), Will Adler (US'16, C'20), Brittany Duke (US'16, C'20, co-captain), Juliet Beck (US'18, C'22), Hunter Hummell (US'17, C'21), Mackenzie Batten (US'16, C'20)

The beginnings were a bit more humble, however.

Getting Started in Mediation Competition

In 2007, Principia College was invited to compete in the National mediation tournament at Drake University in Iowa. A handful of Principia students had a passing interest in the activity, but there was no formal team. Serving as the de facto coach, I assembled enough interested students to form a team and did half of the tournament training in the van on the way to the competition.

Principia acquitted itself well under the circumstances and came home with an 8th-place trophy and the Most Promising Newcomer award. In addition, Bethany (Davenport, US'04, C'08) Protzmann earned enough tournament points for the designation of All-American—Principia's first of 12 mediation All-American awards.

The following year, the team had more time to practice and fared slightly better at Nationals. However, that year the entire team graduated. A five-year hiatus followed, shelving what had almost become a mediation program.

Reconstituting a Defunct Team

In 2012, Meredith Clark, Lauren Littell, and Brian Simpson (all Class of 2015) attended the College's Public Affairs Conference on peacemaking and were fascinated by Dick Calkins's talk on transformative mediation. They asked him afterward how they could get involved in mediation through INADR, and he informed them that Principia already had a team—they just needed to get it back into action.

Surprised but encouraged, they tracked me down and asked if I would coach them if they could assemble a team. I was skeptical, but they convinced me that this time would be different—and

then they assembled 12 interested students.

This new crew was so gung-ho that they found early success in regional qualifying tournaments before heading to the National Championships. A respectable showing of 6th place in Team Advocacy and another Most Promising Newcomer trophy lit a fire under six of the students, who became the core of this re-formed team. There was no question that they would be back at Nationals the following year, and it was obvious to me that they had a talent for mediation.

Also, a few of them were highly motivated to stay involved by their aspirations to attend law school. (Competitive mediation is an excellent co-curricular activity for law school admission.)

Meredith and Brian became the first team co-captains and set a precedent

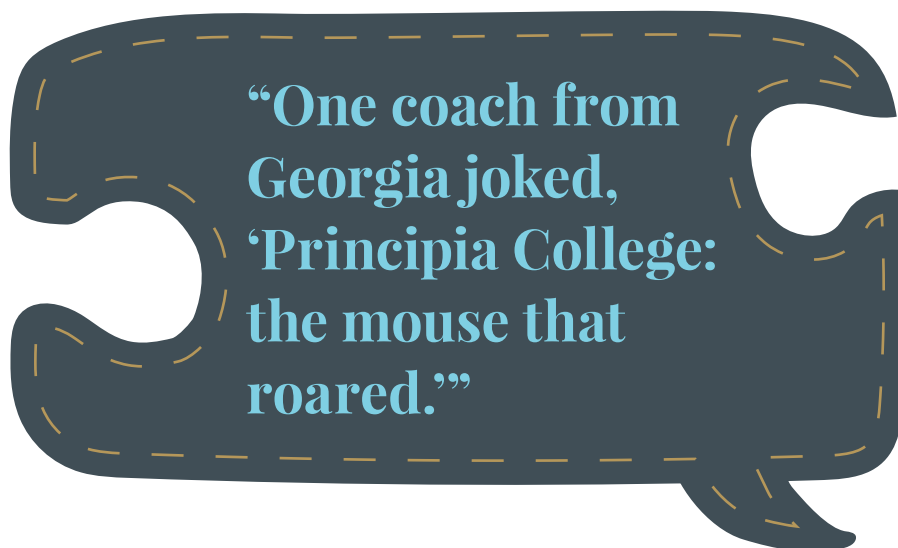
for those that followed. The team grew through a combination of personal recruiting and interested students showing up for practice. There were a few disasters along the way—Principia did well in some tournaments and came in dead last in others. But the team learned from their mistakes and improved their game at such a rate that they soon found themselves at the top of the National tournament in 2015, when they won in Team Advocacy and took 2nd place in Team Mediation.

This was a stunning win, not only for Principia but for the league itself. Principia was by far the smallest college at the tournament (competing against such powerhouses as Boston University, University of Texas at Dallas, and Texas Wesleyan University, among others). One coach from Georgia joked, “Principia College: the mouse that roared.”

There is no seeding at tournaments, so a small school can start off right next to the University of Texas on a level playing field. It does not matter how many students attend the institution; what matters is the talent that resides in the teams.

To prove that 2015 was no fluke, Principia has been a top competitor for the last five years, making regular appearances in the renamed International Intercollegiate Mediation Championship Tournament.

To be sure, the league has grown since 2001, the competition has become more challenging, and programs representing India and Canada have entered the mix. The international expansion made the All-American award obso-



lete, but Principia had earned 12 All-Americans before the award was terminated.

Christian Science—the Key to Success

Principia holds a league record for earning six consecutive invitations to the Law School Championships. (Taking 1st or 2nd place at the undergraduate Championship earns the team a spot in the Law School Championship.) But the honor the team holds most dear is winning back-to-back H. Case Ellis Spirit of Mediation Awards—first in mediation and then in advocacy. Principia also holds the league record for winning the award in both categories (mediation and advocacy) in consecutive years.

The key to the team’s success is their metaphysical approach to preparation and competition. At first, this approach was a natural result of going into tournaments as the clear underdog, but over the years team members have come to recognize it as the key ingredient to understanding the nature of disputes. They see the big-picture perspective of the disputants as good people in

tough situations, and they understand the need for mediators to express humility and impartiality and to let go of human opinion and judgment.

The techniques of peacemaking and mediation employ many transformative elements similar to those in spiritual healing—which explains why Principia students take to the work so quickly and succeed so readily. Team member Namrata Roy (US’15, C’19) describes it this way, “The basis of Christian Science puts us a step ahead. We are striving toward finding harmony and resolution every single day anyway, and the competition allows us to hone our peacemaking skills in a very effective manner.”

Now known as a mediation “powerhouse,” Principia College takes up the challenge of remaining at the top of their game. No team can sustain 1st-place finishes indefinitely, but the mediation team carries on now just as they started: committed to perfecting their skills as peacemakers and taking their experience into graduate school and careers, rather than worrying too much about tournament results. ■

From Threats to Hugs:

Putting Mediation into Practice

by Jan (Mosteller, C'82) Duke

Our daughter, Brittany Duke (US'16, C'20), returned home from her freshman year at Principia College and asked to shadow me in my business for a few days. For 30 years I have been renovating houses and was grateful she wanted to learn more.

On our first day together, we were in the car when I received a call from an investor I had been mentoring. She reported having problems with the waterproofing company I had recommended and was extremely frustrated and angry. They had done more work than she had contracted with them to perform, but the waterproofing was still not resolved, and they were demanding more money from her

before they would complete the work. Further compounding the problem, she was unable to proceed with the renovation of the house until these preliminary water issues were resolved, and she was losing money every day the property sat vacant.

This phone call came over the speaker of the car, and my daughter immediately began to whisper to me that we could help. Brittany told me we could mediate this for her.

My first inclination was not to get involved, as I had an excellent 10-year relationship with the salesperson from the waterproofing company and didn't want to offend either of the parties by getting in the middle.

Then, a few minutes after that call ended, I received another one—this time from the other party, and he was equally furious. He proceeded to tell me he wasn't afraid to take this to court.

Brittany continued to talk to me about the opportunity to assist both parties in this dispute. To the same degree I was trying to dance around the issue, she was willing to swoop in and solve it. I continued to push her off, having no clear sense how we could help.

As the afternoon progressed, Brittany told me more about the mediation training she was receiving at Principia and the tremendous success they were having at their national and interna-

tional tournaments. She felt it was a privilege to have these opportunities to assist with peacebuilding. She also commented that her study and practice of Christian Science was helping her prepare for and resolve disputes by recognizing there is one Mind providing the ideal solution to every challenge—with “the universal solvent of Love” (*Science and Health*, p. 242).

We went to a couple of appointments and then received another phone call from the woman investor saying she had scheduled an in-person meeting at the waterproofing company and was on her way to meet with the management. Brittany passed me a note, “We need to be there!” Warily, I asked my friend if she would like us to come with her. Her response was a resounding and grateful, “Yes!”

We rescheduled our next appointment and turned the car around to head to what I thought could be a lion’s den. I still did not know how we were going to be able to assist or why we would want to insert ourselves into this battle. But Brittany had a vision, and my inspiration was telling me to trust her and follow through with her well-intentioned motive.

When we arrived, we were greeted by a very official-looking assembly around a conference table. On one side were three representatives from the firm: the salesperson I had worked with for 10 years, his production manager, and the general manager. On the other side of the table was my friend looking a bit overwhelmed. Introductions were quickly made, and Brittany and I took our seats at the table.



Photo by John Williams (C’76)

Mediation team members after a competition in Greece, from left: Brittany Duke, Hunter Hummell, Mackenzie Batten

There was an awkward moment of silence as the five of us were unsure how to even proceed. Fortunately, Brittany broke the silence by asking if she could pose some questions. She took out paper and pen and began writing notes as each party reported their perspective on what had occurred. She kept the conversation flowing in what struck me as a gentle and gracious manner, as she was seeking to understand and then to help others be understood.

Within a short 20 minutes, she had proposed a solution to which both parties agreed. The waterproofing company was willing to come back to solve the remaining problems if the investor was willing to pay for some of the work that had been done without permission.

Brittany wrote down the details of the agreement and had both parties initial her statement, acknowledging that a more formal contract should be drawn and executed. There was a palpable sigh of relief between all of us as we saw this

process unfold with such civil discourse and harmony.

With the mission accomplished, the salesman turned to me and said, “I didn’t know you were going to bring your attorney.” I smiled and told them she was not my attorney—she was my college-age daughter. They all dropped their jaws in amazement and appreciation. As we walked out of the conference room, the salesperson turned to me and said, “When all of this is done, there will be hugs!”

Contracts were drawn as expected, money was paid, and the work was completed quickly. All the waterproofing issues were resolved, allowing the renovation to be completed and the house sold.

I am a grateful believer in Principia’s mediation training, and we continue to reap the blessings of Brittany’s peacebuilding skills at home and at work. ■

Jan Duke is the owner and founder of Duke Homes.

All images are renderings of the School's new Bible Center.




THE "INSPIRED WORD"

Making the Bible
Relevant and Accessible
to Students

by Armin Sethna (C'84)

"Being able to walk where Jesus walked . . . [made] the Bible come to life and become so much more than words on a page."

"As Christian Scientists, we are able to bring the 'new wine' to the world by actively practicing divine Science and having a greater understanding of the 'inspired Word' of the Bible."



"Teaching at Principia shall emphasize . . . that education carries with it the obligation to use technical skills and intellectual attainments for the betterment of humanity."

—Principia Policy 10

These student sentiments reveal the far-reaching impact of Principia School's K–12 Bible program on students' knowledge of and appreciation for the teachings of the Bible as well as on their ability to share this learning with peers, parents, and others.

Due, in large part, to student interest, the program is poised to take a significant leap forward this fall with the completion of a Bible Center on the School campus. This dedicated space will provide a range of reference

resources and artifacts, as well as cubbies, group-study areas, and classroom space for students at all levels. Centrally located in the hallway that links the Upper School to the Middle and Lower Schools—the Bible Center is being generously supported by the Upper School 50th Reunion Classes of 1969 and 1970, whose gift has already exceeded \$300,000 and will be presented at their upcoming Reunion. In addition, the Principia Parents Association and the Upper School Class of 2019 are making donations to the project.

As Head of School Travis Brantingham (US'94, C'98) points out, the introduction and evolution of the Bible program ties in perfectly with Principia's long-established purpose of serving the Cause of Christian Science as well as the School's emphasis on training students to put their education to work "for the betterment of humanity" (Principia Policy 10). The range of technical skills needed to succeed in the future cannot be known today, but "certain character and moral qualities will always be requisite for success," Brantingham notes. >>

Evan MacDonald (US'94, C'06), Bible program head, describes it this way: "Instilling a love of Scripture and deep study of the Bible will, we believe, help students think and act rightly throughout their lives."

TEACHING THE BIBLE THROUGH STORIES, HISTORY, RESEARCH

For the last several years, MacDonald has headed up a small team of teachers leading students' exploration of the Bible. Along with MacDonald, who focuses on the Upper School courses, the team currently includes Brad Warrick (US'90, C'94), who teaches middle schoolers, and Jessica Charlston (C'05), a member of the on-campus Christian Science Nursing Department, who teaches several hours a week in the Lower School.

The program begins by familiarizing younger students with key Bible stories, characters, and events. As they move up through the grades, students can choose to delve into specific books of the Bible and historical eras, including exploring in depth the gospels and the writings of Paul. Once in Upper School, students have the opportunity to travel to the Holy Land and Greece as part of the Bible 2 and Bible 4 classes.

"I have been most impressed with [Principia] students' knowledge of and enthusiasm for the Bible," says a St. Louis-area Christian Science practitioner who has taught various ages in Sunday School for almost 20 years. "I was amazed at how much the Principia students knew about the details of each story," she notes regarding a class of second and third graders. "They would always say that they learned most of it during Bible class." Among older children, she has observed "deep thinking and a desire to understand Scriptural concepts."

STUDENT DEMAND DRIVES CURRICULUM GROWTH

In Upper School, Bible course offerings have grown rapidly in response to increased student interest and demand. The program began in the fall of 2012, with a required, introductory Bible seminar. Three years later, an "advanced" Bible seminar (now known as Bible 2) was added, with the option of a trip to Israel during spring break.

The advanced Bible seminar and the on-site experiences in Israel and the West Bank generated deep and wide interest among those >>





Principia School Bible Curriculum at a Glance

Lower School (Kindergarten to Grade 5)

At this level, the Bible curriculum is about “developing a love of stories, getting the children to know them and enjoy them,” says Jessica Charlston (C’05).

During weekly, 30-minute sessions with each class, Charlston presents Bible stories related to various themes, such as “God’s Promises to Me” or “Overcoming Obstacles.” Each story is presented over two class periods—the first period introduces the story, the second draws out the theme and connects it to ones previously studied. Charlston makes sure to involve the students in hands-on activities such as drawing and crafts (e.g., building a paper ark) as well as watching videos and reading aloud the stories from picture books.

A student enrolled in all six years of the Lower School program will have engaged with 42 Old Testament stories and 54 New Testament stories or parables—without any story being repeated.

Middle School (Grades 6–8)

With Middle School students, the focus is on developing a more direct knowledge of the major Bible characters, their connections with each other, timelines, and the geography of the region. Over three years, units are presented chronologically, starting with the patriarchs of Genesis, running through the great kings, and continuing with the lives of Christ Jesus and the Apostle Paul:

- Grade 6—Genesis through Joshua
- Grade 7—The lives and works of Saul, David, and Solomon and the captivity of the Jews
- Grade 8—Two gospels and the history of Paul

Upper School (Grades 9–12)

In only six short years, the Upper School Bible curriculum has burgeoned from just one introductory class to a series of six courses, two of which incorporate travel to sites in the Holy Land (Bible 2) and Greece (Bible 4) and one of which (Bible 6) includes advanced students presenting and co-teaching their peers in some of the earlier classes in the series.

In **Bible 1**, students conduct research using Hebrew and Greek lexicons and Bible commentaries; create art that represents metaphors for teenage problems; and use technology to create public service announcements, podcasts, and presentations. (This class is required for all Upper School students.)

Bible 2 prepares students for a trip to Israel during spring break. Choosing a Bible story set in a location they’ll visit, students research and write a 15-page exegesis on the historical, geographical, and spiritual importance of the story. Once in the Holy Land, they record videos for later presentations.

Bible 3 dives deeply into Old Testament history, identifying symbols and themes that run throughout the Scriptures.

Bible 4 presents the writings of Paul and includes a trip to Greece to learn more about his life and understand what it takes to spread the gospel (the message of good).

Bible 5 tackles the Old Testament prophets, especially the four major and 12 minor prophets and their prophecies about the Messiah.

Bible 6 is a thorough study of the four gospel accounts of Jesus’ life. Students also assist the teacher in the Bible 2 class, preparing talks that they present to their peers.

taking the classes as well as their peers. As a result, the Israel trip became an integral (rather than optional) part of Bible 2, and in the 2017–18 school year, two additional classes were added. Just a year later, two more were added—bringing the total to six (see preceding page).

The Upper School courses are designed and taught by MacDonald (affectionately known to his students as “EMac”), who has participated in or led four Principia School trips to Israel and the West Bank since 2012. Since spring 2018, he has also led two trips to Greece, where students in the Bible 4 class followed in the footsteps of the Apostle Paul.

The study and research tools MacDonald introduces to students help them feel less intimidated by the Bible’s language and more comfortable unraveling its symbolism and metaphors. In the process, students agree, they come to realize that the Bible’s teachings are neither outdated nor irrelevant—a realization that holds true regardless of how long a student has been studying Christian Science. “As someone fairly new to Christian Science, being able to take the Bible classes at Principia laid a firm foundation for my growth in prayer and healing and became the biggest blessing that came out of my Principia Upper School experience,” says Grace St. George (US’18, C’22).

BIBLE CLASS TRIPS PROVE LIFE CHANGING

For all students, no matter their background, the in-country learning opportunities are a game-changer. Noah Ostler (US’17, C’21) continues to use the inspiration he gained from the Bible 2 trip to Israel his senior year. “I frequently reflect on the class and all the spiritual growth that occurred,” he says, adding that the trip helped him gain “a pure sense of confidence in the accuracy of our Pastor in explaining the spiritual reality of life eternal” as well as “a deeper reverence for the spiritual import of the Bible.”

Noah’s younger sister Kale (US’19) has taken all six classes available. “Bible 1 laid the foundation for all of it, asking us, ‘Why is the Bible still relevant if it was written more than 2,000 years ago?’” Kale recalls. “That question sparked my interest in learning as much as I could.” And the Bible 2 trip to Israel “got me hooked . . . it was so amazing to learn about Jesus’ ministry and to see where these events really occurred.”

The Upper School Bible courses, especially the advanced ones, are known for their rigor—and rewards. The classes are “really time-consuming . . . with hours spent doing personal study as well as research for essays and projects,”


Kale says. “But all the classes connect to each other as a whole—and every one of these classes has only brought me blessings.”

Just a few months ago, in her final spring semester, Kale and a couple of her classmates in Bible 6 were thrilled to be traveling to Israel again—this time, serving as teaching assistants to MacDonald on the Bible 2 class trip and

“... being able to take the Bible classes at Principia laid a firm foundation for my growth. . . and became the biggest blessing that came out of my Principia Upper School experience.”

—Grace St. George (US’18, C’22)

preparing and presenting talks to the students.

As MacDonald notes, no matter how many times one visits the Holy Land, “there is always something new to learn”—just as rereading books of the Bible provides new insights each time. 



This multipurpose garden area will provide outdoor discussion space for the Bible Center.

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The PRINCIPIA

A collage of various sports photos from Principia College, including basketball, volleyball, soccer, and track & field, set against a dark blue background.

PRINCIPIA COLLEGE

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////// FOR //
HOMECOMING!

OCTOBER 18–20, 2019

/ CHEER FOR THE PANTHERS.

Volleyball and soccer players hope to see you in the stands.

/ COMPETE WITH THE PANTHERS.

Join alumni matches in volleyball, swimming and diving, rugby, tennis, and women's soccer.

/ RUN IN THE COWBELL CLASSIC!

Go for a PR, or race at a relaxed pace—all runners are welcome.

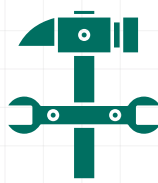
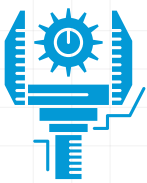
/ CELEBRATE THE GRAND OPENING

of the McVay Center for the Performing Arts at Morey.

ENJOY SPECIAL EVENTS THROUGHOUT THE WEEKEND!

Homecoming is also Parents' Weekend—a great opportunity to connect with classmates and make new friends. We can't wait to see you!

Get the details at principiaalumni.org/homecoming.



MEET PRINCIPIA'S NEW DUAL-DEGREE ENGINEERING GRADUATES

by Heather (Darling, C'84) Shotwell

FOUR YEARS AGO, Principia launched a professionally certified, dual-degree engineering program in partnership with the University of North Dakota (UND). The first cohort of students to complete the program walked across Cox Auditorium stage in May to receive their diplomas, armed with the specialized training of an engineering degree and the breadth of knowledge and skills that come with a liberal arts education.

While meeting the academic demands of the program and making innovative projects in Principia's makerspace, they also made time to take advantage of all Principia offers, joining sports teams and student clubs, studying abroad, and serving in campus leadership roles. And they expanded their professional networks by completing at least one summer internship.

This past summer, the group spent a few weeks in North Dakota, teaming up with faculty and students at UND to put theory into practice during intensive summer labs. UND deans, faculty, and staff spoke highly of the Principians, praising their dedication, talent, good attitude, and respect—not only toward one another but to the diverse community they entered at UND. The relationships students made during the summer labs also helped prepare them for their senior projects, which they completed on teams with UND students.

We asked each graduate to offer a peek into their experience. Enjoy the nuggets they share.

PAIGE COOLEY

- 🏠 Hometown: Traverse City, Michigan
- 🎓 Principia College
BS, Engineering Science
- 🎓 University of North Dakota
BS, Mechanical Engineering
(with aerospace concentration)



FAVORITE ENGINEERING CLASS

Thermodynamics

FAVORITE LIBERAL ARTS CLASSES

Christian Science Movement
Life of Mary Baker Eddy

CAMPUS ACTIVITIES

Student body president, Christian Science Organization reader, Public Affairs Conference Board, Model Illinois Government, tennis

INTERNSHIP

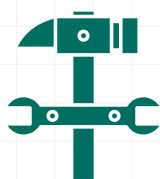
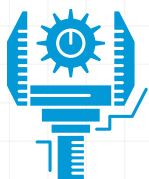
Mars 2020 Flight Systems Engineering Team at NASA's Jet Propulsion Laboratory (JPL) in Pasadena, California

SENIOR DESIGN PROJECT

Paige worked on Gannet UAS, a bio-inspired project designed to allow for operations in flight and under water. The objective was to develop an autonomous, fixed-wing UAS (Unmanned Aerial System) able to safely transition from air to water, conduct aquatic mission objectives, transition from water to air, and return to base.

POSTGRAD PLANS

"I'm returning to JPL this summer for another internship, and then I will attend the University of Michigan in the fall to obtain my master's in aerospace engineering." >>



JOSH KEELEY

- 🏠 Hometown: Herndon, Virginia
- 🎓 Principia College,
BS, Engineering Science
(with sustainability minor)
- 🎓 University of North Dakota
BS, Civil Engineering



FAVORITE ENGINEERING CLASS

Steel Design

FAVORITE LIBERAL ARTS CLASS

Business Analytics

CAMPUS ACTIVITIES

Solar car team, Turning Point USA, cross country, track, soccer

INTERSHIPS

- Operations at Holder Construction in Washington, DC
- Civil engineering at Fuog Interbuild in Purcellville, Virginia

SENIOR DESIGN PROJECT

Josh helped design a two-million-gallon water tower for Grand Forks, North Dakota, to accommodate city expansion.

POSTGRAD PLANS

“I plan to work as a structural engineer or project manager for a large engineering firm.”

BEN ROBINSON

- 🏠 Hometown: Havelock, Iowa
- 🎓 Principia College
BS, Engineering Science
(with sustainability minor)
- 🎓 University of North Dakota
BS, Civil Engineering



FAVORITE ENGINEERING CLASS

Mechanics of Materials

FAVORITE LIBERAL ARTS CLASSES

- The Age of FDR
- Acting 1

CAMPUS ACTIVITIES

Mediation team, student government, house board, Christian Science Organization, Admissions ambassador, student worker in Mail and Copy Services and Housekeeping, rugby, Water Ski Club

INTERSHIPS

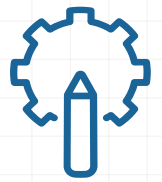
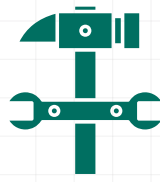
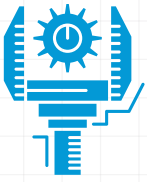
- Operations at Holder Construction in Washington, DC
- Project engineering at Brinkmann Constructors in St. Louis, Missouri
- Project engineering at Evergreen Institute in Gerald, Missouri

SENIOR DESIGN PROJECT

Ben worked with teammates at UND to design and correctly size a water treatment facility that will provide a specified water flow and treat contaminants.

POSTGRAD PLANS

“I plan to pursue a career in project management for a general contractor or home builder. I am also very interested in real estate with the long-term goal of building custom homes.”



NAMRATA ROY

- 🏠 Hometown: Bellevue, Washington
- 🎓 Principia College
BS, Engineering Science
- 🎓 University of North Dakota
BS, Mechanical Engineering



FAVORITE ENGINEERING CLASSES

Heating and Air Conditioning Systems
Thermodynamics

FAVORITE LIBERAL ARTS CLASSES

- Communications
- Chemistry 2

CAMPUS ACTIVITIES

Mediation team (including traveling with the team to Greece her freshman year), Model Illinois Government, Moot Court, Christian Science Organization reader, International Perspectives Conference Board, student government, Admissions ambassador

INTERNSHIP

Project management at Tool Gauge in Tacoma, Washington

SENIOR DESIGN PROJECT

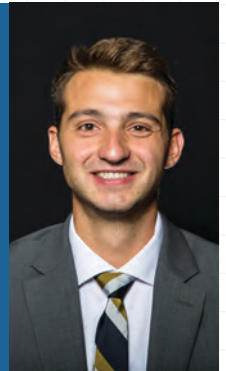
Namrata was on the brake and suspension team of the UND Formula One racing team as they prepared to race against other engineering schools in several competitions.

POSTGRAD PLANS

"I'm aiming to work as an associate engineer for a couple of years and then attend law school to study intellectual property and patent law."

MASON SWITZER

- 🏠 Hometown: Crystal Lake, Illinois
- 🎓 Principia College
BS, Engineering Science
- 🎓 University of North Dakota
BS, Mechanical Engineering



FAVORITE ENGINEERING CLASS

Finite Element Analysis

FAVORITE LIBERAL ARTS CLASS

Acting 1

CAMPUS ACTIVITIES AND ABROAD PROGRAMS

Italy International Field Program, St. Lucia and Grenada Abroad, Lazy Zipper (improv comedy group), Student Senate, Turning Point USA (chapter founder and president), tennis, Water Ski Club

INTERNSHIPS

- Mechanical engineering for the Powertrain Division of Continental Automotive Systems in Deer Park, Illinois
- CAD specialist at Schwartz Performance in Woodstock, Illinois

SENIOR DESIGN PROJECT

A member of the senior design staff on the UND Formula SAE (Society of Automotive Engineers) team, Mason was in charge of the differential mounting system for the race car.

POSTGRAD PLANS

"I am seeking a position as a mechanical engineer in the power sports, automotive, alternative energy, bicycle, or boating industries." ■

Get to Know a Few of This Year's Graduates



SCHOOL

Garrett Sheets

Birder and Wrestler

Except for third and fourth grades, Garrett Sheets has attended Principia since Acorn. “The quality of character at Principia—it’s hard to come by,” he comments. “There are a lot of solid thinkers and amazing people here.”

When Garrett’s older brother was in Middle School at Principia, he took an ornithology class taught by Brad Warrick (US’90, C’94). Garrett tagged along on many early-morning birding trips, and it soon captured his interest. In Upper School, he joined his biology teacher Christian Hagenlocher (US’07, C’11) at the World Bird Sanctuary, where he learned how to band birds. For his Eagle Scout project, Garrett supported the sanctuary by leading volunteers in constructing photo boxes for his bird photos and descriptions that are displayed at their feeders. In addition, former Upper School biology teacher Ross Furbush (US’11) connected Garrett to ornithologists at his alma mater, the University of

Washington (UW). Garrett spent two summers working alongside a UW team in Washington and Nevada, collecting bird specimens and data to add to the university’s extensive collection.

For his senior project, Garrett combined his passions for birding and for photography, traveling in Missouri and Texas. Posting his photos on social media led to an invitation from Tamron, a photographic lens manufacturer, to try one of their lenses, and his work was featured in one of their magazines. After graduation, Garrett helped lead a 10-day nature photography workshop in Peru—the result of one of his UW connections.

Another highlight for Garrett was participating in varsity football, wrestling, and baseball, including placing first in wrestling at Districts this year. Garrett was a member of the Upper School band and enjoys playing the piano, clarinet, and sax. He has also loved his Principia experiential education and service learning trips to the Dominican Republic, Costa Rica, South Africa, Spain, Israel, and the Tetons.

Next year, Garrett will attend Principia College. “I hope to grow in my knowledge of birds and photography and put that together into a business or job,” he says.

—Kari (Wells, US’93, C’98) Bradley



SCHOOL

Ella Gates

Maximizing Opportunities

Ella Gates first heard about Principia from her dad and aunt, then later from camp friends. On a family trip to St. Louis while she was in middle school, Ella toured the campus and started to think about the possibility of attending. Leaving home and family was not easy, but she enrolled sophomore year.

“When I came to Principia, everyone was so friendly and inclusive,” says Ella. “The community here and being able to take advantage of so many opportunities really appealed to me.”

Ella participated in four sports (softball, tennis, basketball, and soccer) and numerous theatre shows and Spring Productions, tutored and served as hall coordinator in the Girls’ Dorm, and received National Merit and cum laude recognition for academic excellence.

“It’s hard to point to one experience that stands out,” Ella says. “I found value in everything.”



During her junior year, Ella spent a semester at The School for Ethics and Global Leadership (SEGL). This selective program for juniors from across the U.S. emphasized ethical thinking skills, leadership development, and international affairs.

“It was an incredible experience that made me more aware of issues around the world and our ability to make change,” notes Ella. “Not only did I leave a better leader and communicator, but I was able to talk about and share Christian Science more freely.”

As Ella explored college options, she focused on schools on the East Coast that included what she loved most at both Principia and SEGL—a true sense of community, in-depth, academic offerings, and a diverse population of high-quality thinkers and leaders.

Ella received acceptances from several of her top college choices, including Wellesley, Davidson, and Dartmouth. Eventually, she committed to Dartmouth. “I was very attracted to its strong liberal arts program,” she says.

“I’m so grateful for all the teachers, coaches, families, and friends at Principia who have affected me in such a positive way.” Ella adds. “My time here has been amazing!”

—Connie (Alford, US’89, C’95) Sablan



Will Towle

Lessons in Excellence and Teamwork

When Will Towle looks back on highlights from his time at Principia, one common theme emerges—excellence in teamwork. Whether on the soccer pitch or on stage with the band, Will learned from coaches who expected excellence from their players.

During his freshman year, Will was part of the State Champion soccer team led by Kipp Keller (US’84, C’91). Though he didn’t have as much experience or playing time as some of the other team members, he says that being around role models who exemplified a high level of competition and maturity really shaped him. Likewise, Band Director Martha Stitzel was an important role model. She taught by example, Will notes, leaving him with profound lessons about selfless giving.

After having been at Principia all his life, Will felt ready for a change toward the end of his junior year. When he

visited The Island School—a semester school located in the Bahamas—and saw students putting away their scuba gear instead of their laptops after class, he realized this was the new challenge he was looking for. He had excelled in multiple varsity sports, juggled a rigorous academic schedule, and played in the jazz, pep, and symphonic bands at Principia, but he yearned to stretch himself even further. So Will attended The Island School fall of his senior year.

The experience stretched him academically and spiritually. “I finally figured out what Christian Science means to me—which was a big thing,” he says. Without the distractions of cell phones or internet for 100 days, and without the comfort of family and lifelong friendships, Will learned to work through things on his own. “Everything I rely on when I have a problem was gone,” he notes. “It was just me. I learned a lot, and I feel like I’m a totally new person.”

That fresh perspective affected his view of Principia, too. “By stepping away for a semester, I have been able to see everything it gave me,” Will comments.

Heading in the fall to Davidson College in North Carolina, Will plans to immerse himself in the liberal arts and see what sparks his interest. >>

—Kari (Wells, US’93, C’98) Bradley



Lauren Weiss

Teacher and Dancer

An economics and educational studies double major, Lauren Weiss dug deeply into best practices in education, especially during Ed Block (a semester when students take only education classes). “I appreciated the opportunities to connect educational theory to real-life educational settings, and the experiences helped me define my own beliefs about teaching and learning,” she says.

A highlight of Lauren’s college experience was traveling on the New Zealand Abroad, which included an opportunity to study indigenous pedagogy. “I interviewed elders and others in the Maori community to learn about their history, customs, and efforts to integrate the Maori language into the curriculum in local schools,” she explains. Lauren discovered multiple opportunities for spiritual growth on the abroad as well—trekking through a mountain pass, supporting a friend with an injury, and facing an unexpected transportation glitch. “I witnessed firsthand God’s

incredible provision and protection. It made me realize that when I travel later in life, Love will be guiding me every step of the way.”

Dance opportunities were a priority for Lauren in her college search, and she found her niche at Principia. She choreographed for Dance Production and taught swing dance to children at the Boys & Girls Club in Alton.

A member of the College’s Phi Alpha Eta honor society, Lauren studied the economic advantages of early childhood education for her capstone. And her junior year, she worked on a team to develop Cash Savvy—personal finance workshops to help her peers tackle budgeting, taxes, saving for retirement, etc.

Lauren’s college experiences expanded well beyond academics, however. She served as a student senator, resident assistant, president of the Swing Dance Club, member of her house board, and as president of and a reader for the Christian Science Organization.

Following graduation, Lauren will earn a master’s degree in international education at the Instituto Franklin de la Universidad de Alcalá in Madrid, Spain. “I’m excited about the opportunity to make connections abroad—and then return to the U.S. ready to teach.”

—Heather (Darling, C’84) Shotwell



Garrett Barner

Research, Swimming, and Art

Resident assistant, student senator, and a member of the Christian Science Organization, Principia’s Turning Point USA chapter, and Phi Alpha Eta honor society, Garrett Barner had a wide and varied experience at the College. He was also captain of the swimming and diving team and is training for an Iron Man race this summer. “Promoting team unity as captain helped me grow the most in college,” he says.

A political science and economics double major, Garrett worked closely with faculty. “The research methods I learned in my political science major and my work as a research assistant for a professor played an especially key role in my academic experience,” he notes. Garrett also competed in legislative simulations in Model Illinois Government his junior and senior years, honing valuable public speaking skills.

Deciding to stretch himself creatively his senior year, Garrett traveled on



the Greece, Turkey, and Italy Abroad, which focuses on art and philosophy. “Drawing and painting in the many beautiful locations was a great experience,” he says, “and learning about the cultures was absolutely incredible.” While abroad, Garrett also determined the topic for his economics capstone—the impact of dollarization in foreign economies. “I became fascinated with issues of the eurozone,” he explains.

Garrett appreciated how faculty wove in Christian Science throughout his academic experience. “For example,” he says, “we studied complex—and rather dark—material in a political science class, and the professor shared *Christian Science Sentinel* articles to help us address the issues as metaphysicians. And I’ve especially valued the classes about Mary Baker Eddy and the history of the Christian Science movement. That is something you won’t get anywhere else.”

Soon after graduation, Garrett begins intensive training as a wealth management analyst with J.P. Morgan Chase & Co. in New York City, followed by a full-time job with the firm in Clayton, Missouri. “Faculty have helped me develop confidence in this field, and I feel well prepared after my internship at Matter Family Office, an opportunity I found through an alum.”

—Heather (Darling, C’84) Shotwell



Juliana Okonya


Challenged and Inspired to Help

When Juliana Okonya arrived at the College from Nairobi, Kenya, she experienced some culture shock. The food was unfamiliar, she had no transportation or family nearby, and cultural differences made her feel like an outsider. “I just wanted to lie low,” she says. But with some newfound coping skills—cooking comfort food in her dorm, reaching out, and finding friends with cars—Juliana took charge of her situation and even helped Principia improve the international student experience.

A biology major and sociology minor, Juliana loved the small classes, demanding professors, and experiential education. She also took advantage of opportunities to develop as a leader. She directed the International Perspectives Conference one year, managed the student workers in Dining Services, and was a member of the Speaker Relations Committee for this year’s Public Affairs Conference. “Principia has brought out qualities that I never knew I possessed,”

she says, “such as independence, creativity, critical thinking, making informed choices, and even the willingness to stand alone on an issue.”

Perhaps her proudest accomplishment was finding her voice as a change agent on the African Student Experience panel. “We were creating awareness in the community of what it takes to be an international student,” she says. “I was going out to voice problems that other students face. I put my all into it, and I was not afraid of the consequences. That is one thing I will forever be proud of.” Later, a one-year analyst position charged with recommending improvements was created. And, already, Juliana sees progress.

Juliana received the College’s Mueller Environmental Award, and this fall she begins a master’s program in environmental science, with a focus on social policy, at Southern Illinois University Edwardsville. She wants to return to Kenya to help women and girls who farm, teaching them better farming practices, water conservation methods, and financial management skills. “I want to help women see that they have power to do things they’ve dreamed of doing but just didn’t know how. I want to know that if I leave this earth, I’ve done something good for someone—even just one person.” 

—Julie Finnin Day (US’87, C’91)



The PRINCIPIA



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principiagiving.org/cga



*Friends enjoy a stroll alongside the Chapel
(from the 1940 Sheaf, the College yearbook)*

ALUMNI NEWS



Dear Alumni,

Summer greetings from Elsalh where we are preparing for Summer Session as this goes to print. We look forward to having alumni and their friends on campus taking classes and renewing friendships. Some are even coming with their families and having mini family reunions!

Here are some of the other upcoming events we hope you'll find as exciting as we do:

- The 2019 Upper School Reunion is September 26–28, with the Classes of 1969 and 1970 celebrating their 50th Reunion. We look forward to welcoming all of this year's Reunion classes back to campus. Learn more and register at principiaalumni.org/reunion.
- A wide range of Principia Lifelong Learning trips are coming up—from cruising in southern France, the Pacific Northwest, or along the Mississippi to tours of the Southwest and northern Canada. And for adventure seekers, we've planned trips to Antarctica, the Galápagos Islands, and Ireland. See all our trips at principia.edu/trips.

- Principia Clubs feature a variety of activities throughout the year, including distinguished speakers, sports events, Acorn activities for little ones, and our always-popular Christmas Sings. Visit principiaalumni.org/clubs to see what's happening at the Principia Club near you.

Each year thousands of alumni and friends participate in these activities. But we also know that many of you don't. **What would catch your attention?** We are actively looking for new approaches and activities that you find relevant and engaging. If you have ideas, we want to hear them! Please email or call us with your thoughts.

We invite each of you to travel with us, catch up with friends, make some new memories, and come home to Principia. We often hear from those who attend our events that they are so glad they made the effort because they feel a warm welcome and sense of belonging and find strength in renewing relationships.

ALL are welcome! Won't you join us?

David Lovegren (US'72, C'76)
Director, Alumni & Field Relations
david.lovegren@principia.edu
618.374.5194

PRINCIPIA ALUMNI BOARD MEMBERS



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Julian Bradley
(US'96, C'00)
Mercer Island, WA

Members of the Alumni Association Board are regional volunteers for Principia who serve for three years, representing the interests of Principia's alumni around the world.



Holly (Thompson, C'03) Johnson
Yountville, CA



Terry McNabb
(US'71, C'75)
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Sarah (Neale, US'99, C'03) Rand
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Bonnie Jean (Stitt, C'83) Schlaepfer
Parker, CO



John Tibbetts (C'82)
Darrien, CT



Sophia Hathaway
(C'20)
Student
Representative



Principia alumni, families, former staff, and former Lower and Middle School students in Philadelphia at the Army-Navy Game on December 8, 2018. Back row, from left: Gabe Hoffman-Johnson, Caleb Hoffman-Johnson, Andy Kirkpatrick (US'81), Jim Stock (US'81, C'85), Bowen Brantingham, Travis Brantingham (US'94, C'98), Jamie Lyle (US'81), and Kristen Lyle. Middle row, from left: Aden Lyle and Jamie Kirkpatrick. Front row, from left: Seth "Chic" Johnson (FS'93), Jill (Weldon, US'85, C'90) Butler, Barrett Pierce (US'17), and Rich Butler (C'86).

56

Ray Hanzlik (also C'60) returned to the U.S. Department of Energy (DOE) in July 2018 as a senior legal advisor, having previously served in the DOE for four years during the Reagan Administration. Prior to accepting this appointment, he practiced law and managed a lobbying firm in Washington, DC. Ray and his wife, **Marilyn (Burnap)**, live in Leesburg, VA.

06

Vessel Operations Coordinator (VOC) Lieutenant **Kristin (Golmon) Raja** was chosen to participate in Homeward Bound, a global, 12-month leadership initiative for women with a

background in STEM (science, technology, engineering, mathematics, and medicine). Its goal is to build "a global network of 1,000 women in STEM to lead and influence decision making as it shapes our planet."

A commissioned officer in the National Oceanic and Atmospheric Administration, Kristin's work as VOC at the Channel Islands National Marine Sanctuary off the coast of California involves scientific project coordination and management of two Sanctuary research vessels. In addition, as part of her Homeward Bound program, she's participating in live online learning sessions and working with her peers to

develop her leadership capacity, strategic capability, and collaboration.

Following coursework, she'll join this year's 100 Homeward Bound participants for pre-voyage training in Ushuaia, Argentina. Then, in late 2019, they'll embark on a life-changing expedition to one of the most ecologically sensitive and inspiring areas on Earth, Antarctica. Homeward Bound cofounder Fabian Dattner explains the choice of destination: "It is where we can see the impact of our inaction firsthand. It is sensitive and challenging, awe inspiring and motivating, and I can think of no more fitting experience for a group of leaders."

Thrilled to be participating, Kristin comments, "This network of like-minded women in STEM fields takes the idea of strategic collaboration to the next level and could enhance scientific partnerships across the globe. Women bring a different perspective, and this increased diversity in leadership benefits everyone. I am using this opportunity to step back from my mission-oriented career and consider how I can lift up other women and collaborate to make changes together."

Visit buildingasustainablefuture.com to follow Kristin's journey. *See photo.* >>



Kristin (Golmon, US'06) Raja, a Homeward Bound participant. See US'06.

Correction

Roger (US'59, C'63) and **Mary (Kumler, C'84) Jones** traveled to Greece and Turkey last June with Biblos Foundation—not with Principia Lifelong Learning as was mistakenly stated on page 59 of the Winter 2019 issue of the *Purpose*.



College grads enjoying a fun mountain get-together in Beaver Creek, CO, this past March. Back row, from left: Matt Schlaepfer (C'82) and Chuck Cole (C'82). Middle row, from left: Larry Harrison (C'82), Bonnie Jean (Stitt, C'83) Schlaepfer, John Shelton (C'81), Susie (Mann, US'76, C'80) West, and Randy West (C'82). Front row, from left: Jane (Herrmann, US'78, C'82) Harrison, Jeff Tolrud (C'82), and Becky Tolrud.

80

Liana (Jockey) Franklin writes: “I think back with such fondness to the community of Principia College. I learned so much about the world, the arts, academics, and Christian Science. I remember one professor saying we were there to learn how to learn. I have used this throughout my life. I now live in a similar, lovely town with so much inspiration and creativity. The people

are fascinating, arts abound, and we are close to anything you would want from a metropolis. It is a place to learn and to grow spiritually. If you are ever nearby, please come to visit our little church and enjoy the beauty of Brown County, Indiana. I own a shop called The Totem Post in the center of Nashville, the main town in the county. It is a wonderful place for a visit or to live. Check us out.” See photo.

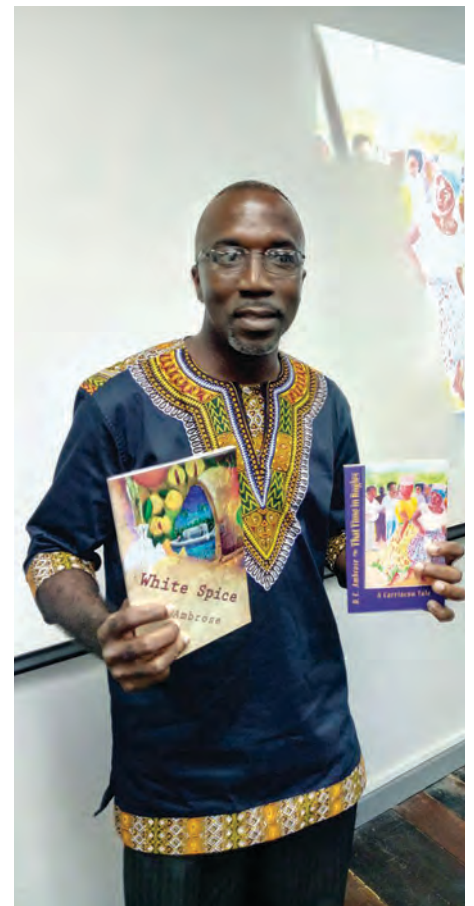


Liana (Jockey, C'80) Franklin, owner of The Totem Post in Nashville, Indiana. See C'80.

93

David Ambrose writes: “I am an educator and published author in my native Grenada. In 2018, I published my second book, *That Time in Bogles: A Carriacou Tale*. My debut novel, a crime thriller titled *White Spice*, was released in 2015.

“I am also Sunday School superintendent and substitute reader at my Christian Science church in Grenada. My Principia College experience has certainly played a major role helping me contribute to the development of my country as I lecture in foreign languages and communication studies at my community college.” See photo. ■



David Ambrose (C'93) holding the books he released in 2015 and 2018. See C'93.

Appreciation for Willy Kurt (Bill) Simon Jr.

In late February, hundreds of Principia alumni and friends returned to the School campus to celebrate the life of longtime Principian Willy Kurt (Bill) Simon Jr. (US'54), who passed on earlier in February. Throughout his nearly six decades serving Principia School in multiple capacities, Bill epitomized a true Principian.

A few years after attending Upper School on the Page and Belt campus, Bill returned to Principia as a houseparent and coach in 1961. After serving as a houseparent in the Boys' Dorm, he became dean of boys and even served as dean of girls for one year during a time of transition for the Girls' Dorm. He was dean of students from 1976 until his "retirement" in 2003. He and his wife, Liz, continued to live on the School campus, and Bill was a constant presence around campus. He never stopped giving to Principia and Principians of all generations—coaching and visiting with students in the Upper School lobby until just a few weeks before his passing.

Bill coached male and female athletes in soccer, football, track and field, and cross country. He received a dozen or more awards as Coach of the Year. In 2009, he was inducted into the Missouri Track & Cross Country Coaches Association Hall of Fame. He took multiple teams and individuals to State competitions and championships. In District competition, Bill coached at least 12 1st-place track and field teams and seven 1st-place cross country teams. From 1970–2007, he coached a dozen teams that won ABC League championships.



No matter where a student's thought was when coming into contact with Coach Simon, he unfailingly poured in love and support, embodying the concept of Principia's Policy 3 to "recognize that man as the child of God reflects the intelligence and strength of his Maker, and that all men have equal opportunity and equal ability in the sight of God." His unflagging support of and appreciation for students' progress was felt and appreciated by generations of Principians.

In recognition of Bill's lifelong service to Principia as an educator and a landmark

figure in the lives of countless Principia students, an honorary Principia College degree was conferred on him at the May 2019 College Commencement ceremony. In addition, a new building to replace Carey Field House will be named in Bill's honor. (You can learn more about the new field house on p. 22.)

At the celebration of Bill's life in February, individuals spanning many decades—classmates, friends, colleagues, and former student-athletes he had coached—shared their gratitude for the lasting impact of Bill's unconditional love on their lives. ■

SUBMISSION GUIDELINES

We welcome your news and photographs. Items for the next issue are due October 1, 2019. Please follow these submission guidelines:

NEWS

Please provide first and last names for all Principia alumni mentioned in the news you share. Principia reserves the right to edit and abbreviate news submissions.

PHOTOGRAPHS

Please provide first and last names of all those pictured and indicate who attended Principia. Photographs that are low-resolution, dark, out of focus, or grainy usually cannot be used. Even images that look fine on a computer screen may not work well in print. Please make every effort to submit a digital image that meets these specifications:

- **Digital Photos**
Please ensure that your camera or smartphone is set to the highest possible image-quality setting.
- **Scanned Prints**
Please scan all printed images at a minimum setting of 300 dpi. (Occasionally, smaller images are usable.)

Please submit all images as the original JPEG. We will take care of any photo touchup or resizing that is needed. Do not submit photos that have been dropped into Word documents, PDFs, PowerPoint presentations, etc.

Materials sent by mail will not be returned unless accompanied by a stamped, self-addressed envelope. The *Purpose* accepts no responsibility for unsolicited artwork or photographs. Content in the *Purpose* does not necessarily reflect the policies or views of Principia.

To e-mail submissions, write to alum@principia.edu. Or post your news at principiaalumni.org/classnotes. Send submissions via mail to *Principia Purpose* at this address: The Principia 13201 Clayton Road St. Louis, MO 63131.

Lovingly Remembered

Fern (Barber) Maynard (JC'35)

Richard "Dick" E. Henne (JC'42)

Jeannette "Jay" (Abbott) Maddock
(JC'46)

Barbara (Bayz) Singletary (C'47)

Colin C. Campbell Jr. (C'49)
Former Faculty/Staff

J. Thomas "Tom" Heckel Jr. (US'46, C'49)
Former Faculty/Staff

Janice "Jan" (Elbring) Konter (US'45, C'49)
Former Faculty/Staff

L. "Al" Chenue Jr. (US'46, C'50)

Wilmer "Bill" Iddings Rehr III (US'46, C'50)
Former Faculty/Staff

Shirley "Shann" (Young) Rupp
(US'46, C'50)

Charles "Chuck" S. Hutchinson Jr. (C'52)

Robert "Bob" E. Coffey (US'49, C'53)
Former Faculty/Staff

Clifton "Clif" R. Greiner (US'50, C'54)

Marilyn (Schlaepfer) Haines (US'50, C'54)

Willy "Bill" K. Simon Jr. (US'54)
Former Faculty/Staff

Charles "Phil" P. Daniell (US'51, C'55)

Mary Lee (Coffey) Black (US'54, JC'56)

Martha (Hackett) Munnecke (JC'57)
Former Faculty/Staff

Barbara (Bidlake) Siegmund (C'58)

Rowland L. Nofsinger (C'60)

Denise (Shane) Dietz Baker (C'67)
Former Faculty/Staff

James "Jim" H. Andrews (US'64, C'68)
Former Faculty/Staff

David J. Hawkins (C'69)

Scott W. Gerber (US'70)
Faculty/Staff

Brian K. McGookin (US'70)

Todd A. Culbertson (C'72)

George A. Andrews III (US'69, C'73)

Timothy "Tim" E. Culbertson (US'74, C'79)

Lynette C. Ditz (C'84)

Elizabeth "Liz" (Paine) Hagenlocher
(US'80, C'84)
Former Faculty/Staff

Christopher "Chris" L. Stringer
(US'87, C'91)
Former Faculty/Staff

Former Faculty/Staff

Dona (Rusk) Ball

Ira-John "IJ" Gorman

Stephen "Steve" E. Heidtbrink

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Principia Upper School REUNION 2019

SEPTEMBER 26-28, 2019

50TH REUNIONERS ARRIVE SEPTEMBER 25.

Who's REUNITING?

10th 2009, 2010	50th 1969, 1970
20th 1999, 2000	55th 1964, 1965
25th 1994, 1995	60th 1959, 1960
30th 1989, 1990	65th 1954, 1955
35th 1984, 1985	70th 1949, 1950
40th 1979, 1980	75th 1944, 1945
45th 1974, 1975	80th 1939, 1940

To book a room, call the St. Louis Marriott West at 800.352.1175 and ask for the Principia block rate.

Sign up today!

principiaalumni.org/reunion

Principia College REUNION 2020

JUNE 25-28, 2020

50TH REUNIONERS ARRIVE JUNE 24.

Who's REUNITING?

10th 2010, 2011	50th 1970, 1971
20th 2000, 2001	55th 1965, 1966, JC'63, JC'64
25th 1995, 1996	60th 1960, 1961, JC'58, JC'59
30th 1990, 1991	65th 1955, 1956, JC'53, JC'54
35th 1985, 1986	70th 1950, 1951, JC'48, JC'49
40th 1980, 1981	75th 1945, 1946, JC'43, JC'44
45th 1975, 1976	80th 1940, 1941, JC'38, JC'39

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and stay tuned for more information!



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JOIN US HOMECOMING WEEKEND FOR THE

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**McVAY CENTER
FOR THE PERFORMING ARTS
AT MOREY**

October 18 and 19, 2019 • 7:30 p.m.

Celebrate the transformation of this iconic Maybeck building and the completion of another fully donor-funded project on the College campus.

Students in the Theatre and Dance and Music Departments will perform both evenings. There is no cost to attend, but space is limited, so tickets are required.

Visit principia.edu/mcvay for tickets.

PRINCIPIA COLLEGE

