“What the live creature retains from the past and what it expects from the future operate as directions in the present.”

John Dewey
Laura’s Story: Planned Giving at Parker

I started at Parker in Junior Kindergarten in 1975 and graduated in 1989. I spent 14 years here with amazing classmates who were smart, interesting, compassionate...a really special group of people, whom I now consider much closer to family than friends.

When I think about the experience I had here, I think about how each of my teachers—Mr. Dreuth, Mrs. Greenberg, Mr. Dure, Mr. McCutcheon, Mr. Duffy, too many to name—found ways to encourage me and created a classroom environment that made learning interesting and fun. They pushed me to think critically about the world around me and ultimately inspired a sense of confidence that I rely on and value to this day. For so many reasons, Parker is my foundation.

I'm now the parent of two curious, creative young girls, and the thing that I want for them, above everything else, is to experience that same love of learning Parker gave me. "Maximize your experience here." That's what I tell my daughters and what I would encourage every student to do. Join clubs, perform in a play, challenge yourself to do something you might not have the chance to do again.

As an alumna and parent at Parker, I feel strongly that I owe more to Parker than I received. It's a philosophy I've begun to instill in my daughters, who already understand what it means to give back to their school, as they do each year. I believe that, as an alum, I am a steward of this place I love, and as a parent, I am here to complement the things that others before me have done. So when Parker asks me to do something, I say "yes."

Laura P. Maloney ’89 is a proud member of the Anita McCormick Blaine Planned Giving Society benefiting Parker’s endowment fund, which impacts students today and for years to come. She is a trustee, parent to Cecelia ’28 and Peyton ’28, a 10-year board member of Parker’s Alumni Association and volunteer on several school committees.

For more information regarding Planned Giving at Parker, please contact the Development and Alumni Office at 773.797.5520.
An Introduction from Dan Frank

Parker’s faculty—from JK through 12th grade—is engaging in an expansive process of transforming the teaching and learning of math at Parker. This issue of *The Live Creature* features this exciting exploration into the intriguing world of numbers and mathematics across the school.

Parker’s commitment to cultivate critical, creative and empathic thinkers and doers—essential for the development of responsible character, citizenship and leadership—empowers students to develop their intellectual imaginations and quest for problem solving by advancing their numeracy skills, grasp of essential mathematical concepts and curiosity about numeric relationships.

Guided by the school’s mission to support equity by providing options, Parker’s expanding mathematics program ensures that all students can experience the joy of mathematical thinking and problem solving and demonstrate their skills to understand and apply mathematical ideas.

And what a journey it is!

Demonstrating the fact that the world is an interconnected sphere, these articles also describe how Parker is connecting the world of mathematics with other modes and disciplines of learning.

We converse with the world through numbers, images, sounds and words. None of these domains stands alone, apart from the others. Each offers a language through which we strive to understand, interpret and communicate how we make sense of our experience and understand the world in its exciting complexities. Numeric beats help music express the soul; images, linear and not, render narratives while numbers tell stories; and the ways we search for and craft words portray what and how we perceive our cumulative encounters with the world.

As we explore the richness of mathematics, or any other discipline, let us remember that it is through education—that through the relationships teachers and students cultivate in the context of classroom learning—that we have the great opportunity to expand our horizons and extend the reach of what we can create and question, analyze and answer. And, at Parker, we know that through education we learn by doing to integrate knowledge, skills and insight so we can understand the world and act to meet the many challenges we, as learning citizens, face together.
Let’s Talk Math:
The Discussion-Based Mathematics Classroom as Progressive Community

By Sven Carlsson, Mathematics Department Co-Chair

Math for Meaning
“Sue said something last week that I’ve been thinking about that I think applies here.”

A boy in my Advanced Calculus class last year made this comment (I changed only the girl's name cited). In making sense of Sue's idea, he had constructed knowledge in a lasting and meaningful way that had altered his manner of thinking. In a mathematics classroom where discussion is the norm, students become accustomed to exchanging ideas, posing questions and sincerely affirming their peers—in short, they learn to become engaged, caring citizens. Though some might find it surprising, vigorous discussion is the sine qua non of the progressive mathematics classroom.

Discussion:
What Mathematicians Do
The late William Paul Thurston said, “[M]athematics only exists in a living community of mathematicians that spreads understanding and breathes life into ideas both old and new. The real satisfaction from mathematics is in learning from others and sharing with others.” Far from solving equations or seeing how many deductions can proceed from a set of axioms, the work of mathematicians involves studying patterns and pushing the boundaries of how we understand and apply mathematical concepts.

The point of math lies in the realm of thinking and understanding. While numbers, shapes, manifolds, functions, groups, etc. may be a particular mathematician's language, he/she is actually aiming to strengthen the mind's ability to perceive which problems are worth solving and how best to solve them (or prove they cannot ever be solved, like finding the largest prime number).

At NSA, one of the mathematician's most powerful tools is teamwork. Mathematicians are welcome participants at NSA's many workshops and summer programs. Mathematicians routinely share their results and ideas through peer-reviewed papers, seminars, and conferences. NSA's learned societies provide opportunities for both intellectual and social interaction among mathematicians and other technical professionals. While mathematicians take pride in being part of a vibrant and cohesive community within NSA, ties to the wider mathematics communities outside NSA, particularly those to the National Labs and Academia, are also maintained.
In short, mathematicians collaborate, share and interact with others as they think and seek to deepen their own understanding and the understanding of the human species. This vision of mathematics dovetails with the concept of education Francis Wayland Parker advanced and the progressive model for the math classroom.

**Discussion: What Progressive Math Classrooms Look Like**

“In open discussions individuality will show itself in a strong light: no two pupils will think alike, have the same concept, or draw identical inferences.”

“The social factor in education stands far above all other factors—higher than principles, methods, subjects, and the teacher.”

Given the high value Colonel Parker placed on the social interaction of students in their classrooms and school life, it follows that the progressive math classroom should be a place in which community and discussion, i.e., the (voice and needs of the) child, enjoy preeminence over content or subject matter. The subordination of content to the child does not imply a loss of rigor or narrowed intellectual scope or focus. Quite the contrary—it is through the intricate, nuanced and beautiful ideas of mathematics that Parker’s concept of open discussion is most fully present.

Mathematical problems serve to engender rich discussions and positive social interactions, as they welcome—and often require—a variety of perspectives and modes of thinking to solve them fully. Like building a house, solving a math problem often proceeds in stages, each requiring a different set of tools and possessing a unique purpose. As diverse as the work and focus of the carpenter and electrician in the construction of a new house is the work of each student in tackling a hard math problem, with different perspectives and approaches building toward a correct solution.

For example, during an activity in our unit on complex numbers, juniors in my Precalculus class chose to divvy up their group’s work after initial discussion revealed their perspectives were quite different. They had internalized the norms of the progressive classroom and

Far from solving equations or seeing how many deductions can proceed from a set of axioms, the work of mathematicians involves studying patterns and pushing the boundaries of how we understand and apply mathematical concepts.
and procedures made each of their partial understandings whole. Given that no two minds are alike, when students have an effective stimulus (a math problem), their divergent thinking, fueled by their natural curiosity and desire to explore their own interests/hypotheses, creates a community that reveals various voices and manners of approaching the problem in mutually encouraging and enriching ways.

Discussions do not take place only in small groups. During one of my Geometry classes, I asked my students to propose a definition of polygon after they saw several figures classified either “polygon” or “not a polygon.” (A polygon, as you may recall, is a two-dimensional shape with straight sides, like a rectangle or octagon.) As they settled on a definition, a student posed a simple question that launched a wonderful debate: Could a circle be considered an infinity-sided polygon? This led to a lively and unexpected discussion that touched on the nature of infinity (can it be treated like a number, i.e., the number of sides?), hidden implications contained in even the simplest definitions and much more. In the end-of-year reflection, one student mentioned the “circle as infinity-gon” discussion as one of his most significant memories from the class, specifically because he had been able to clearly see inside the mind of one of his peers.

Given the choice between listening to me and listening to a peer, I would most always prefer my students listen to each other. Through engaging in meaningful and complex problem solving, students authentically create mathematical communities that reflect the true work of mathematicians and the spirit of open discussion the Colonel espoused.
Discuss...or Tell?

“The textbook study of science, which consists in the verbatim learning of facts that should be gained by observation, and the memorizing of inferences that should be original, hems in a child’s spontaneous activities, and robs him of his love for truth.”

“The part that imagination plays in education cannot be overestimated. By imagination the human being can go outside of the sense grasp, can picture that which lies beyond his own immediate environment. That world beyond...imagination must reveal, else study is vain and profitless.”

Just as Parker emphasized expression in the learning process, John Dewey condemned the education that “conceives the school as a place where certain information is to be given, certain lessons are to be learned.” They viewed education as allowing students to express their own understanding and interpretation of content—in short, to use their imaginations. Rather than telling students what is beautiful about mathematics or providing a correct solution, my job as a progressive math teacher is to create a classroom space in which students apply their unique manner of thinking to questions that lead them to seeing the beauty of math firsthand and to crafting increasingly complex (and correct) solutions in accordance with their creative instincts.

In short, the Colonel said it best: “An educative act has for its fundamental condition intensity of conscious action upon worthy content.”

Let All Be Heard

A question that guides all teachers is how to include and make room for all voices and styles of learners. How does one account for different learning styles in discussion-based math classes? An additional consideration is the gender dynamic in independent schools, math classes and Parker in particular.

No single mode of instruction can meet the needs of all learners adequately. A discussion-based culture promotes appreciation of each individual voice, the validity of and need for multiple perspectives and a Klinker brick mentality in the classroom. (If you are not sure what the Klinker bricks are and what they represent, see the photos at left.) Additionally, we need room for students who are still finding their voices and prefer to ponder and ruminate at length before speaking, as well as those whose preferred mode of expression is non-vocal. As such, a
large number of the teaching tools in
the discussion-based classroom—e.g.,
individual reflection followed by
paired discussion, short turnaround
writing tasks, journaling and working
with manipulatives—help make
the classroom an open and equally
effective place for all learners. We also
must maintain an underlying culture
that normalizes error; students must
know the classroom is a safe place
to fail and offer partially formed or
potentially incorrect ideas. Hence the
sign in my room that reads: In This
Room, Mistakes Are Encouraged.

Being attuned to gender dynamics
among students is something critical
for all teachers, but particularly for
those in STEM (Science, Technology,
Engineering, Math) subjects and
teachers cultivating discussion-based
learning. (I prefer the acronym
STEAM, which adds the Arts.) One
immensely exciting thing about
discussion-based classrooms is that
they give young women a forum to
showcase their math understanding
and assume an empowering position
of intellectual authority. Recently,
a freshman boy approached me
stating that he forgot the formula for
calculating permutations, at which
point a female peer explained it to him
perfectly, though he missed part of
her explanation. He then asked me for
clarification on the part he had missed.
Rather than paraphrase her response,
I directed him to speak to her
directly, which he did. Her excellent,
correct explanation did not consist of
recitation of the formula but rather
an exposition of how to calculate
permutations based on reasoning
through what it meant to permute
objects. She showcased her conceptual
grasp, impressive by any standard, for
the betterment of all parties: herself
as speaker, her male counterpart as
listener/learner and me as witness to
the transfer of knowledge from one
adolescent mind to another.

Conclusion:
Some Apparent Disorder
“The shortest road to so-called order,
which is very generally understood
to mean stillness and the delusive
appearance of educative work, is the
result of the immediate will of the
teacher; the children are wrenched
into line; they are forced into habits of
quietness.”

“As is a teacher’s love for his pupils,
so is his work.”

These two quotes sum up why
I teach in a discussion-based
manner. There is a form of chaos in a
discussion-based math classroom, as
we walk a winding road students chart
to navigate towards mathematical
truths. A lecture or an interactive
presentation, in which the teacher
holds the rudder and thus the control,
would involve a straighter and simpler
path. But this is far afield from what
Colonel Parker had in mind for his
school experiment, and I suspect, were
he to visit my classes, my voice would
not interest him most; rather, he would
most enjoy my students’ voices.

1. Bill Thurston (mathoverflow.net/users/9062/bill-thurston),
What’s a mathematician to do?, URL (version: 2010-10-30): http://mathoverflow.net/q/44213
2. Job posting for Mathematician from the nsa.gov/ppp/
applyonline/EMPLOYEE/HRMS/ website, accessed 8/20/16
3. Talks on Pedagogics, Francis W. Parker, p. 257
NOTE: This note and others refer to the Centennial Celebration
version of Talks on Pedagogics edited by
Daniel B. Frank (ISBN: 0-9613573-0-4)
4. Ibid., p. 258
5. Ibid., p. 272
6. Ibid., p. 120
7. John Dewey, My Pedagogical Creed, 1897
8. Talks on Pedagogics, p. 121
9. Ibid., p. 274
10. Ibid., p. 219
This article would not be complete without the student perspective:

“Although full-class discussion-based learning environments are not my favorite or strongsuit...I have gotten used to that style of learning for a math class.... My best moments in math have been discussing homework with my classmates before class begins. Before this year, I literally had not done that since 8th grade, and it made me happy and proud to be able to take part in an engaging math discussion as a respected fellow classmate.... This year, more than any other year, I have used my understanding of math concepts in my thinking of other topics without even realizing I was making a connection. I knew calculus was starting to take over my mind when I tried to explain historical concepts in [a] class using optimization and related rates before realizing that no one understood a single thing I was talking about.” —Calculus student Evan Hughes '17
“In the past semester, I’ve experienced moments of revelation, utter confusion and everything in between. Most of my revelatory moments are partially, if not fully, dependent upon the rich discussions that we have in class. I learn as much from my classmates as I do from Mr. Carlsson, and I wouldn't want it any other way. I have a theory that my brain works in conversation. When no one is around, I imagine the people that I admire most giving me advice and pushing back on me as I think through a problem. It just so happens that in the context of math, the faces that appear in my mind’s eye are the faces of my classmates. Of course, having these conversations outside of my brain is much more enjoyable. Another component of our class discussions that I really appreciate is that I never feel judged or afraid to make mistakes. Often, I find myself talking through my computational and conceptual problems to my classmates. Their helpful suggestions have deepened my understanding of the subject matter in critical ways.” —Calculus student Ben Weiss ’16

“One of my favorite things about math this year is that the course is taught in a largely discussion-based environment. I feel that I am able to make sense of ideas more easily because I am able to talk them out instead of just being lectured at. I also am able to see other points of view because my classmates all think very differently than I do, which is also extremely helpful because if I don't understand how something is being explained, somebody else will have a different method of doing it. I think that a large part of the reason that the discussion-based class worked so well is that our first semester class environment was very supportive and productive. What I really like about our class is that it doesn't feel like we're being taught as much as it feels like we're coming together to figure things out. I think that my most productive days are when someone from the class poses a question that seems as if it doesn't have to do with the lesson...and we find a way to solve it that actually does connect with what's happening in the lesson plan.

“I’ve also noticed that because our class tends to talk things out instead of traditionally solving them, I’ve gotten a lot better at articulating my thoughts without needing to write them out. In the past, I’ve struggled with translating math into words, but because we spend so much time talking, I’ve really improved my ability to verbally solve problems. I’ve also gotten a lot more comfortable with approaching and solving problems by using variables instead of numbers. I used to have a hard time finding general proofs for problems, but because our class poses so many theoretical questions, I’ve found myself really getting better at it.” —Precalculus student Lauren Goodman ’17
A Playful Approach to Mathematics
By Barbara Hunt, Lower and Intermediate School Coordinator of Studies

Math for Meaning

Years ago, Jean Piaget asserted, “Play is the answer to the question: how does anything new come about?” At Parker, we are proud to offer a play-based Junior and Senior Kindergarten experience. While this is a philosophy I believe in, I often cringe when I hear us describing our program this way. Why? I fear these words are limiting and adults often misconstrue them.

We have assimilated a wide variety of cultural notions about work and play. Work is usually hard, even thought of as drudgery at times, but work is how we achieve, how we get results. It is what we have to do, whereas play is what we want to do. Play is fun, irresponsible, spontaneous, something we do on our day off. Even those of us who truly enjoy our work may find ourselves subjected to social ridicule: “She is such a workaholic.”

Consequently, adults have a tendency to view play-based programs as lightweight, less academic environments. We gravitate to our definition of play, rather than the child’s. As Erik Erikson wrote, “The playing adult steps sideward into another reality, the playing child advances forward to new stages of mastery.” Lev Vygotsky explained this even further: “In play a child always behaves beyond his average age, above his daily behavior; in play it is as though he were a head taller than himself.” So play-based means work-based for the child, but work that allows the child to delve into the world, exploring, discovering, manipulating, theorizing and proving. A child’s “work” builds deep understanding, creates meaning, encourages expansion; it doesn’t box one in, stifle creativity.

Is this just for kindergarteners? Are we play-based in kindergarten and work-based in 1st grade? Of course not. A playful approach to learning is what we strive for at all ages. There are things we have to teach—meaning show or point out—such as how to write numerals or what we call the days of the week, but our primary activity at Parker is educating, bringing forth, drawing out, unfolding the powers of the mind. In 1912, Anita McCormick Blaine wrote in The Origin and Aims of the Francis W. Parker School, “The School holds that nothing is done unless the mind within does it. Processes plastered on by another’s activity, though they may adhere under the pressure for a time, do not affect the growth of the mind but may be rather a waste, both of time and power, inasmuch as they may lead the mind further along the path of inactivity.

A child’s “work” builds deep understanding, creates meaning, encourages expansion; it doesn’t box one in, stifle creativity.
and inane acceptance of another's work to take the place of one's own and thus become steps which must be retraced before one's own work may be done.” In other words, students need to construct knowledge, they need to learn from the inside out, which is what a Parker education is all about.

What does this mean for mathematics? School taught many of us that math is arithmetic, and we learned procedures that allowed us to compute, to get numerical answers if we followed the procedures accurately. We didn't know if we computed correctly until the teacher gave back the paper with or without red marks. If we memorize “invert and multiply,” are we able to conjecture about the nature of fractions and how part of one whole is a different part of a whole that is another size? If we are taught to always combine quantities by starting on the right and adding, carrying the extra to the next place, will we develop flexibility with numbers and be able to add 692 and 408 in our heads by seeing it as 700 and 400?

Our goal is to grow mathematicians, people who see math all around us, just as our summer videos demonstrated (fwparker.org/summermathseries). Our young mathematicians play with patterns, shapes, data and numbers. They explore, looking for patterns, making conjectures and proving or disproving theories. They are more than calculators; they are thinkers. They use trial and error to experiment with numbers and shapes. They manipulate actual things (blocks, rods, connecting cubes) to develop deep understanding of mathematical concepts. They see that math is all about relationships. They talk, write and draw about their processes, developing increasingly greater clarity as they learn to describe their thinking. They learn math is for everyone, and mastering it can be exciting and enjoyable. They know it is infinite and changeable like the universe, and there are many unanswered questions, many elusive ideas that continue to provoke and challenge.

Through our play-based program, we hope to start students on a lifelong mathematical journey. In our classrooms one might see JK students creating equal piles of items to share as they learn the first concepts of division. A group of three SK students might be constructing a ship big enough for all of them to sleep in as they explore geometrical relationships. First graders love to see how long and wide things are as they develop their early ideas of measurement. Second graders begin to understand ratio as they construct their own buildings. Third graders might be choosing questions they are interested in and interviewing others to collect

Our young mathematicians play with patterns, shapes, data and numbers. They explore, looking for patterns, making conjectures and proving or disproving theories. They are more than calculators; they are thinkers.
information for graphing and making inferences based on the evidence as they probe the ideas of data analysis. Fourth graders construct candy boxes for a candy company as they delve into multiplicative thinking. Fifth graders create law firms to represent their numerical clients and prove to the court that one fraction is bigger than another.

The play is the result of the authenticity of the tasks, the fact that students find them engaging and meaningful. What about the math? How do they develop the skills? When the 2nd graders use interlocking cubes to build floors of buildings, they place each floor above the other. As the buildings grow, the students learn about the ratio of rooms to floors. The activity is naturally differentiated. Some students see the relationship early in the process and can predict the number of rooms in a structure with a particular number of floors using mathematical calculations. What if the building has 20 floors, 50 floors or 100 floors? Some students may calculate the number of rooms in a 1,000-floor building. Others keep counting the cubes. All of them develop their understanding of the relationship between repeated addition and multiplicative thinking. They begin to see the relationship between skip counting, addition and multiplication. As the buildings continue to grow, all students are
able to make some predictions. They have fun. They are challenged, and they develop important mathematical concepts that will facilitate further development of multiplication in 3rd and 4th grades and the understanding of rational numbers in 4th and 5th grades. As 5th graders work in groups to plan their defense as lawyers defending a particular fractional amount, they choose names for their firms. They script their presentations. They may dress up. Whatever fun they create, they need to prove their case. To do this, they have to show how one fraction is more than another mathematically. They may convert to a common denominator. They may compare amounts to benchmarks of ½ or 1 and show how one fraction is closer than another. They may draw pictures. Whatever their method, they have to explain their process with enough clarity to convince all the members of the jury (their classmates) and the judge (their teacher) that their argument is true. They have to calculate correctly, but they also learn that it is not enough. Mathematicians must also be able to explain their thinking thoroughly and present their findings in ways that communicate effectively to others.

Our goal is for our students to develop mathematical skills within the context of developing a mathematical mindset, a way of looking at the world as a mathematician, a person who looks for patterns and relationships, manipulates numbers, develops questions and searches for answers—a person who plays with the world around them.

Jean Piaget, The Psychology of Intelligence, 1950
Erik Erikson, Childhood and Society, 1950
Lev Vygotsky, Mind in Society, 1978
Joseph Roman, Pablo Neruda, 1992

Our goal is for our students to develop mathematical skills within the context of developing a mathematical mindset, a way of looking at the world as a mathematician, a person who looks for patterns and relationships, manipulates numbers, develops questions and searches for answers—a person who plays with the world around them. Playful students are doing their work. The poet Pablo Neruda said, “A child who does not play is not a child, but the man who does not play has lost forever the child who lived in him and who he will miss terribly.”
Mathematics in Social Justice: Letting the Numbers Speak
By Robert Wilson, Upper School math teacher

Math for Meaning
This past year was transformative for me as a math educator. In addition to serving on a small committee aiming to help enhance Parker’s Upper School Civic Engagement program, I had the wonderful opportunity to attend the “Creating Balance in an Unjust World” conference in January. The title clearly indicates the event’s focus on social justice, but the conference’s examination of how math education can enrich social justice education and vice versa made it even more special.

Approximately 300 math and social justice enthusiasts came together for an intimate and inspirational series of lectures, workshops and group discussions. Especially profound was the humility of the keynote speakers and workshop leaders; they acknowledged that they did not have all the answers and are still learning how to appropriately conduct this work. I realized the most important step I could take was to begin.

Every year I have taught Precalculus, I have always incorporated a credit card activity into the logarithms and exponentials unit. Year after year, I have had students select an item they wanted to buy, research a credit card that suited their personality or style and “charge” the item to the card. Then we analyzed the potential results of several scenarios: they ignored their debt, made only minimum payments each month or paid off the balance in full within the grace period. Students were always stunned at how much an item actually cost if they made only the minimum payments. We then used logarithms to approximate the time it would take to pay off the debt. In many cases, students found that it would take four to five years to pay off the balance—for just that one item! Students who “purchased” an electronic item were frequently the most appalled by this outcome, realizing their item was often outdated or even obsolete by that time. Many students contemplated the possibility: Was it really worth it?

At this point, I had accomplished both of the lesson’s goals: students learned how to use exponential and logarithmic properties to help them understand credit card debt, and students learned that making only the minimum payment each month is deceptively expensive. Students greatly appreciated learning a real-life skill and had a deeper connection to the concepts of the unit as a result.

I missed an opportunity to talk at length about wealth in this country and how compound interest could affect their lives seriously depending on who they are. It was time to begin my social justice work as a mathematics teacher.
This year, though, I realized, upon completion of this activity, I missed an opportunity to talk at length about wealth in this country and how compound interest could affect their lives seriously depending on who they are. It was time to begin my social justice work as a mathematics teacher.

While my impulse to bring social justice into the Parker math classroom prompted the project, I did not do it alone. Prior to assigning it, I reached out to the History Department for guidance, insights and resources. I collaborated with several faculty of color to help shape the project’s goals into something meaningful and authentic. Above all, I didn’t want my good intentions to have a negative impact on the students—especially students of color. Wendy Olt, who also taught Precalculus, joined me in this effort and contributed additional project choices for students. Through this team effort, the social justice project was born.

The project gave students five options (and the latitude to create their own social justice projects pending approval):

- Explore the aphorism, “The rich keep getting richer while the poor keep getting poorer.”
- What is a payday loan and who is targeted?
- Explore credit card usage and why Americans live beyond their means.
- Explore student loan types and who has what kind of debt and why.
- Explore the housing market collapse of 2008.

Each of these choices had a series of probing questions for the students to answer, the majority of which sought to tease out root causes and expose systemic social injustice.

Students had to write a five-to-ten-page paper with cited sources, a visual or artistic component and a mathematical component. In their papers, students had to analyze the what, how, why and who components of their topics. Specifically, students needed to demonstrate their understanding of root causes and identify who was most afflicted by the issues they analyzed. It was important that students came to their own conclusions based on facts they researched. Opinion and hearsay were not options. Interpretation is certainly subjective, but the students had to support any assertion they made with data and facts. Their papers also had to incorporate a real person’s story. Students read through blog entries written by people who were affected by the social justice issues they were researching. I wanted students to develop some empathy in a project that could easily be bogged down by facts and figures, which might have distanced them from caring about the issue.
Here’s what some students had to say:

“Through my time working on the social justice project, I discovered that I am incredibly interested in mathematics as long as I can relate it to other things I have experienced or will experience in my life.”
—Augie Fornengo ’16

“The social justice project was the number one useful project I’ve done in high school because of the relevance it had to me… It was important for me to see all of this before college decision time because I was able to make informed decisions.”
—Enrique Rueda ’16

“I have known for some time that the opportunities white Americans have differ from those of black Americans; however, I never knew to what extent. I gained many insights while simultaneously learning how math, once again, plays a role in almost everything.”
—Abby Feitler ’17

“The social justice project allowed me to understand the financial crisis on a level that I would never have been able to achieve on my own. During the project, I found myself uncharacteristically driven to understand the inner workings of the financial crisis and who it most affected.”
—Cam Roehm ’17
“Doing a project on student loans was eye-opening and it really fired me up… A huge pay-off moment for me came when I was discussing taking out loans with my parents and I found that they were very trusting of the loan system. I was able to lead the conversation and explain why it wasn’t something to treat trivially.”
—Alina Ekbal ’16

“This project really showed me how bad institutionalized racism can be and how it can be detrimental to people’s lives.”
—Marlee Neff ’17

“Since my research showed that black families received higher interest rates than white families, I used logarithms to determine the amount of money the black family could have saved to do other things. My math also showed how much less the white family had to pay than the black family per month. This project reaffirmed some of my beliefs about discrimination within real estate.”
—Corinth Jackson ’16

“The social justice project was perhaps one of my favorite projects I worked on throughout the entire year in any of my classes… I was asked to be creative many times this year, but the social justice project stretched the limits of my creativity in a way that I wasn’t asked to do a lot during my senior year… I still think about this project to this day.”
—Alex Boone ’16

Due to this overwhelmingly positive student feedback, I deemed the project a great success! Now that I have begun, I must continue. I hope to find new ways in which the “voice” of numbers can add to the ongoing conversation that we all need to have about social justice issues.

I wanted students to develop some empathy in a project that could easily be bogged down by facts and figures, which might have distanced them from caring about the issue.
As a progressive school, Parker has long eschewed an educational environment that emphasizes comparative student achievement—specifically, the school does not publish the “class rank” of its seniors, nor does the curriculum encourage students to focus on advanced placement (AP) courses. Parker instead pursues excellence by placing priority on supporting each student’s individual strategies for successful learning.

At the same time, there are a variety of practical reasons why Parker would offer BC Calculus, an AP course, according to Mathematics Department Co-Chair and Upper School instructor Sven Carlsson, and many of those reasons find their roots in the thoughts of the school’s founder. “The fact that ‘the needs of society’ should determine our work, and society has deemed the AP curriculum an educational good to be desired; or perhaps preparing students to succeed in college means exposing them to a curriculum as rich and challenging as that enjoyed by their future peers; or even because the BC curriculum overlaps perfectly with what any calculus teacher would be thrilled to teach.

“I think the reason is far less practical and far more philosophical. To quote the Colonel, ‘The primary gift of God to man is choice; and education should be the presentation of conditions for choice, for the exercise of reason.’ Quite simply, students told us they wanted to study BC Calculus, so we gave it to them. Student choice fuels the progressive classroom, so if students tell you their curiosity is pointing them toward infinite series and polar integrals, it is our duty as their teachers to create experiences that feed that curiosity.”

Colonel Parker also observed, “Teaching children numerical figures without their applications is merely cultivating the recollection of meaningless forms, without any exercise of the judgment.”

Calculus is the ultimate form of application, tying together previous years of mathematical study into an exploration of how to use trigonometry, algebra and geometry.
The textbook study...which consists in the verbatim learning of facts that should be gained by observation, and the memorizing of inferences that should be original, hems in a child’s spontaneous activities, and robs him of his love for truth.’

“It is a fair and valid concern that trying to cover predetermined material by a predetermined date in March will not be progressive, and, in the progressive BC classroom, the former will not be strong enough to stand up against the latter. However, this is to misunderstand the power, purpose and process of progressive education. True mastery of the thinking and skills that lie at the heart of BC Calculus can be taught or developed through progressive means. Put another way, the real challenge of teaching students to love the beauteous truths of mathematics (and to look beyond memorization of facts or inferences) is in the delicate hand required to do this well, not in the content to cover or existence of a test date as a deadline for covering that content. In fact, the content in BC Calculus is so rich and fascinating that it lends itself to observation, inference and spontaneous, even fanciful, exploration. The pacing an AP class requires is a realistic constraint, but it does not reduce the progressive nature of the classroom any more than freedom from a year-end assessment creates a progressive environment.”

The value of the course extends beyond the Mathematics Department. Visual arts teacher Travis Chandler explained, “For one of the six documentaries they create during the semester, my Video Documentary
Production I students must create a documentary that in some way ‘makes the world a better place’—it can be socially, civically, ethically or communally beneficial. I approved several docs on BC Calculus last year based on two factors: first, they were communicating complex mathematical principles, which is a benefit as an educational aid, and second, BC Calculus instructor Sven Carlsson is immensely fun to collaborate with!

In fact, the idea of using video to share concepts from the class developed within the BC Calculus class itself. Former class member Rebecca Holleb ’16 is a freshman at Northeastern University’s College of Engineering in Boston and intends to major in mechanical engineering with a minor in either math or physics. “I was hoping to go into the STEM [science, technology, engineering, math] fields, so taking the class was a no-brainer,” she said. “I left the class with a comprehensive understanding of BC Calculus. I enjoyed the class. The topics were challenging but I finished with a good understanding of the concepts and was well prepared for the AP test.”

To help future students in BC Calculus, Holleb and several classmates made an animated video “to explain some of the more complicated topics we had learned. We hoped to help students taking the class understand and visualize them better.”

Ben Weiss ’16, a freshman at Yale, commented, “I wanted to take this class because I was excited by the prospect of a challenge and furthering my understanding of mathematics. My year in Calc BC with Mr. Carlsson (and my wonderful classmates who taught me new things every day) left me with a desire to learn more and to deepen my understanding of the things that I was already familiar with.”

“We were pushed to think creatively in the context of a variety of calculus-related projects and in our approach to standard problems. Introducing creativity into the world of math makes everything personal.”

Weiss continued, “Mr. Carlsson is hands down one of the greatest teachers that I’ve ever had. In class, my peers and I were encouraged to take risks, to trust each other and to learn from one another. When students are empowered in this way, a beautiful classroom dynamic unfolds in which the standard teacher-student hierarchy dissolves. What you are left with is a room full of people who are genuinely curious and excited to learn. We were pushed to think creatively in the context of a variety of calculus-related projects and in our approach to standard problems. Introducing creativity into the world of math makes everything personal. Sure, I learned a ton of math in that class, but I also came to recognize and understand the way my fellow classmates went about problem solving. Some might consider it redundant to discover different ways to do a single problem. We viewed things differently.”
Sven Carlsson: What's your second book about?

Eugenia Cheng: The second book is about infinity. It's the same ideas I'm always trying to put forward about what math really is—it's not just about numbers, and it's not just about solving equations, and it's not just about the things that you do on tests in school. It's about exploring and making things up and using logic to see what you can get from it. I'm hoping to persuade people that you appreciate it in an aesthetic way. It's fun. It's beautiful. I use a metaphor of going on journeys all the way through this book. In the previous book, I used a metaphor about making food and how it tastes delicious or not and that's all you care about. In this one, I talk about all the different reasons you go on a journey. You don't go on journeys just to get from A to B, and sometimes people think math is just about getting from A to B, and once you get to B, it doesn't matter how you got there. But when you go on journeys, sometimes you just go. If you go for a hike, you're coming back to where you started. So it wasn't to get from A to B, it was to get some exertion, and maybe the act of the exertion is part of the fun, along with the sights you see along the way and communing with nature.

Math can be that, too. The mental exertion is exhilarating, and there are interesting things to see along the way. Sometimes you go on a journey and you don't even know quite where you're going, you're just going to explore. For some people, math is a cliff edge, and they don't want to get there and look over the edge, whereas for others of us, like me, the cliff edge is enticing. Maybe logic takes you to one place and your gut instinct takes you to a different place, and that can be terrifying but it can also be cool.

So in this book about infinity, infinity isn't exactly useful because we never have to deal with infinity things. But the process of understanding it is part of a process of understanding how math works. If you start by thinking about something that's quite difficult, you get insight into things that aren't quite so difficult.
SC: At our orientation for new students, we talked about what progressive education is. Even if you walk in a class with one idea and leave with another, then you ponder it for a few days and go back to your first understanding of the issue, that’s fine—that’s the growth that we’re interested in, and that’s the place we want to put you. For me, one of the things math represents is the ability to take simple ideas, analyze them and come to a richer understanding of more complex ideas.

EC: It’s the difference between climbing up a mountain, and the sense of achievement you get when you stand on the top, and being helicoptered onto the top of the mountain, where you still get a great view, but it’s not as satisfying an achievement as actually powering yourself there. Even if loads of people have done it before, and loads of people are going to do it again, it feels good to get yourself there.

An odd burden people place on mathematics is to question its usefulness. There are many things we do and no one asks, “What’s that useful for?” Like football. And playing music. I love playing music because I love playing music. It makes people happy. Does that count as useful? Maybe. Yet with math, people ask that question. A lot of people are trying to show the ways math is useful and how math is inherently involved in various things around us. I want to do something different, which is to say we shouldn’t focus on that type of usefulness all the time. Sometimes it’s about visualizing, analyzing and breaking things down into easier things you can understand, then understanding how those pieces fit together, which is fundamental to being a mathematician.

Even if you walk in a class with one idea and leave with another, then you ponder it for a few days and go back to your first understanding of the issue, that’s fine—that’s the growth that we’re interested in, and that’s the place we want to put you.

I feel myself doing that when I approach problems in life all the time. It’s about developing the analytical part of your brain so you can look at a problem, analyze it, break it into small pieces and understand it better. As a mathematician, I am much better at quickly analyzing complicated world problems. Or if I hear people having an argument, I find it very easy to quickly isolate exactly where the disagreements are by using logic to break down things into smaller components.
**SC:** One of the things I tell my students is when we’re talking about series and you come up with a formula that will tell you the nth term of arithmetic series, that’s great but that's not the point. The main point is seeing how you can take a pattern you know is there and give voice to it and articulate it in a meaningful way that you can then apply to other sequences and series and realize one doesn’t fit.

**EC:** Right. The aim wasn’t really to produce a formula for that particular series. The aim is to understand how the process of producing a formula works. And in a way that’s one step more abstract than producing the formula. Abstraction is understanding something you just did in greater generality, from the outside. If you understand the process, you can apply it to more things. My art students keep telling me this thinking type of mathematics is much more relevant to their lives. Especially if they’re painters or sculptors, it’s about thinking differently and taking one idea and applying it to something else. That’s the power and the elegance of abstraction in my course: if you understand not just the solution to this problem but how you did it, you can apply it to many more things, and that’s when it gets exciting.

**SC:** One of the things that draws me to math is its beauty. I don’t go to museums and ask, “Why did Monet paint that?”

**EC:** Right. How is this painting useful? If you’re a painter of walls you’re more useful to some. I think a lot of people want mathematicians to be painters of walls. But there is math that is more than painting of walls, which is the math that goes into the engineering of bridges. Then there's the math that is a bit more Monet, that gives us more insight into the world around us.
EC: There will always be things math can’t explain, and I love that. Mathematicians can become a little too obsessed with explaining everything through logic, which can be very frustrating because the world doesn’t work according to logic, and people aren’t logical. I feel this if I spend too long on social media because nothing on social media is logical. I immediately start dissecting the memes and arguments logically and it’s exhausting. I love the stuff that’s just on the boundary—for example, you can analyze a piece of music logically and almost mathematically up to a certain point. Beyond that point, you can’t explain why it moves you or makes you cry. That’s the point I find the most beautiful, the exact interface between the parts I logically can explain and the parts I can’t. But I don’t think we should try and eliminate the things we don’t understand. That’s part of what I think is so important about logic mathematics—we can look at a situation and understand which parts are logical, the parts we don’t have to worry about. Then we can focus our human intelligence on the parts that aren’t logical.

SC: I think one of the fun challenges about teaching is creating in my students the appreciation that math is governed in that way. We will never finish math. We won’t come to the end. We won’t have figured it all out.

EC: That is one of the favorite things that people say to me: “How can you do research in math? You can’t just invent a new number.” One of the things I wanted to explain in the first book, and I also go into in the second book, is how math proliferates itself. Math reproduces because every time you answer a question, it causes more questions. If you come up with a new way of studying math, that’s a new piece of math. And then you can come up with a new way of studying that, so there’s always more because every time you do something new, you’ve made a new math that needs to be studied.
SC: There's a purity to the fact that I've never actually seen a circle. My eyes haven't been able to see a circle, but my brain has seen many.

EC: Right. I do this hilarious thing with my art students. I say, “Okay, what circles can you see in the room?” And they say, “This clock, that light, this trash can.” Then I ask them if they’re really circles. Then I play a mean trick on them: I tell them there are no circles, and I let that sink in. When they all get used to that, I tell them actually there are circles everywhere because the set of points that’s an equal distance from any point is a circle. Then I get them to sit and meditate until they start feeling they’re hallucinating circles everywhere in the room. Circles are really everywhere; there’s a set of points that’s equal distance from this point. I can't draw it. But it’s there. I love that.

There will always be things math can’t explain, and I love that.

SC: I am planning some things for my Algebra I class. They’re young, and high school is new, and this is a great opportunity to flip how they might define mathematics on its head. I want to talk to them about clock arithmetic and the idea that sometimes eight plus three will actually be 11, but 10 plus three will be one. The idea is to consider how we perceive these different mathematical systems that act in a fun, interesting fashion contrary to expectation. There's a newness and a whimsy to math I find refreshing.

EC: It's nice to try to persuade everybody that math isn’t some kind of absolute truth. It’s all conditional, in a way. There are lots of instances when one and one doesn't equal two. My art student made a stained glass window, and for her one plus one equals one because if you mix one color with another color, you get one color. You don’t get two colors. Everyone should start seeing that math is more flexible. It’s taught too often as a bunch of rules, which is much less interesting than, “Let’s make up rules.” Children love making up rules for games, and if you play a board game with children, they’ll start making up new rules to develop the game because playing with the prescribed rules is not as interesting. I had never realized I was playing Monopoly wrong because we just vaguely made up different rules, and when I tried to play with someone outside my family, I discovered I wasn't using the normal rules.

SC: I think fondly of Calvinball, from the comic strip Calvin and Hobbes, and the only rule was you couldn't play it the same way twice. They made up rules as they went along.

EC: It’s about understanding how things work, isn’t it? I love the idea of progressive education. I had a job in a more traditional educational setting, and I was trying to use progressive methods inside a traditional structure, and it wasn't fitting. At the School of the Art Institute, there aren’t any grades. There’s no syllabus. There are no requirements. At most universities, math is part of the core and art is an extra you can do, whereas at the School of the Art Institute, art is the core and math is a fun extra you can do, which is brilliant because everyone has a completely different attitude toward it.
I've read many articles saying children's education should be all through play until the age of, let's say, eight. And I thought, eight. Eighty-eight! It should always be about play. To me, play is getting to make up your own rules. You don't have other people's rules imposed on you. Maybe that's why I've never liked a sport—because I don't get to make up rules.

All subjects are trying to get at truth in some form or other, and they involve using different methods and studying different types of truth. The type of truth you're looking for and the way that you look for it are very intimately related. So if you're trying to understand things about the past, you're more likely to look at records and artifacts. But if you're a mathematician and want to use logic, you have to use things that behave according to logic. But within the constraints of that basic logic, you can play around and invent things. So it feels like play to me when I'm doing research.

SC: It's one of the things that is refreshing to me about teaching here. I have a lot of friends who teach in schools where a real constraint is standardized metrics. Here I'm doing my job if I'm making kids more curious. It's a harder challenge in some sense. It's a less safely quantitative one. But it's a far more meaningful one. I like leaving my kids looking at how their brains work, saying, “How do I look at problems?”

EC: I was reading Christopher Danielson’s book *Which One Doesn't Belong*. The point he’s making is that learning is about having new questions to ask, rather than trying to answer them, because the questions keep going. It’s a shame we stifle children’s tendencies to ask why to everything. I love that small children are curious about everything, and we suppress it because we think that education is about learning facts or providing the answers to things.

I think progressive education should help develop the ability to ask more questions rather than answer them. Math does answer questions but only to immediately ask more of them. It’s about curiosity. You can cram a formula down people’s throats, and maybe you can train them to be able to solve problems, but what has that achieved? That’s the trouble with a system that involves having to pass all sorts of standardized tests. The teachers are under a lot of pressure to get their students through them because that’s how they’ll be evaluated. It’s very difficult to get value out of that system because what is the point of cramming all those formulas into people’s heads? They’re just going to forget them, so what have you achieved in the end?

Some people say if you do everything by exploration and curiosity and play, you don't get anywhere. And I think, yes and no. You’ve actually gotten somewhere meaningful. Because if you’ve developed your own way of thinking, that’s something that will stay with you. Whereas if you memorize a formula and then forget it, what was the point?
SC: In a progressive math classroom, there’s a lot of discussion because the idea is that it’s the questions you’re asking that are the most rewarding, and the point isn’t the answers you arrive at but whether or not you have a bank of questions.

We talk about making lifelong learners here; what we mean is that they will always have something in their brain to play with. It might be a question of history or politics or, hopefully, mathematics. But some very meaningful hard question they can ponder and play with like a toy, something they can constantly probe and push. We want our students to leave here knowing it’s good to be curious.

EC: I think, also, they should be equipped with ways of investigating. When I first started teaching, before I gave my first lecture I sat down and wrote what is still one of the most popular essays on my Web page, “Why Lectures are a Waste of Time.” I thought, if I’m going to start lecturing, I need to think about what lectures are for. I was pretty sure that the first important thing is to get the students motivated and wanting to learn things. The second is to equip them with ways of learning those things. A very late third is telling them anything I think. I don’t mean lectures are a complete waste of time, but they’re destined to be a waste of time for somebody, especially in math because everybody understands things at different rates. Some people say everyone should still be taught together. But a better way of teaching is to let people explore things in their own time. Exploring in a more progressive setting is more interesting, productive, worthwhile, fun—everything.

We talk about making lifelong learners here; what we mean is that they will always have something in their brain to play with. It might be a question of history or politics or, hopefully, mathematics.

SC: One of the things that draws me to teaching math in a progressive school specifically is the idea that what should reign supreme is discovery and choice. The idea isn’t to say, “Here’s how I see math and here are the problems I can solve,” any more than I can watch Usain Bolt run the 100 and be able to run 25 miles per hour. By watching him do it, can I do it myself? That’s not how muscles work. That’s not how the brain works. The kids have to organically engage with some stimulus that’s so fascinating and nuanced that their curiosity actually has no choice but to come alive. They have the space to say, “Here’s an idea I have, and I would like us to spend four minutes discussing it. You may have a lesson plan that’s all nice and worked out, but here’s something that so-and-so said that sparked a weird idea in my head.”

EC: I love that about open-ended teaching. I’m not restricted by standards or things I’m supposed to do. It gives everybody a little bit of ownership of what they’ve done, rather than someone else’s thing that you’re forced to do.
Students learn at an early age that math is everywhere, including chocolate shops. In a unit of study titled “Muffles Truffles,” 4th grade students explored multiplication by creating and organizing truffles. Parent and Veruca Chocolates head chocolatier Heather Johnston reinforced these concepts when she visited with 4th graders to talk about how she uses math in her work every day.

As a recent final project, 6th grade students each designed and created “math clocks” that represented a wide variety of mathematical ideas they had covered during the year. Although each student used common materials and followed the same general instructions, the range of aesthetic presentation and mathematical understanding the final pieces reflected was vast and impressive.

When 6th grade math teacher Robin Masters reached out to her former students in Sven Carlsson’s AP Calculus class for ideas on how to present some particularly challenging new materials to her Middle School students in accessible and fun ways, the students responded with solutions incorporating posters, pizza-themed presentations and bingo to share their expertise with their younger peers.

In a recent Algebra II/Trigonometry final, teacher Vicki Lee directed her juniors to create their own labels using only seven functions: Linear, Trigonometric, Quadratic, Square Root, Cubic, Cube Root and Absolute Value. The student projects proved to be as artistic as they were mathematically sound!
Students in 4th grade study small place values such as tenths and hundredths. For this decimal and fraction art project, the students created a design on a 100 grid. After completing their designs, students identified each color’s fraction of 100 and also represented this number as a decimal.

With the AP Calculus exam a recent memory, Sven Carlsson took the opportunity to craft a unique final assessment project that required students to demonstrate their proficiency as mathematicians in a unique visual medium: stop-motion video! Students created videos that depicted a complete solution to either a volume by rotation or cross-section problem demonstrating and articulating the calculation of the volume of the solid and the solid formed by one cross-section—animated using stop-motion photography. Accompanying completed videos were individual student reflections about their experiences working on the project.

To help students better appreciate the concept of the “Unit Circle” and understand the mathematical coordinates associated with it, teacher Laury Raff asked Upper School students in her Algebra 2/Trigonometry class to tap into their creativity to draw their own, including degrees, radians and the coordinates at each point. Students then used what they had learned to select five new points on separate circles and derive the coordinates of the angles’ measure.

As part of their geometry work exploring the area and perimeter of different shapes, 4th grade students designed their own area and perimeter names. Students identified the perimeter of their names in centimeters, as well as the area in square centimeters.

To demonstrate her students’ knowledge and understanding of parabolic arcs in the world around them, teacher Wendy Olt asked Algebra1+ freshmen to use photo bursts along with Photoshop to re-create a real parabola. They then used graphing software to help them find the equation of each parabola.
Maggi Steib

Maggi Steib has had a rich experience as a Parker parent—and perhaps one of the longest. Her son, Carl, started in JK in 1994, followed by her daughter, Catherine, in 1996. When Carl was a senior, Steib’s son, Cisco, started in JK and is now in 8th grade, so by the time he graduates, Steib will have been a parent at the school for 27 consecutive years! Add to that her 10 years as a student (she graduated in ’84), and one might understand why she says, “Parker and family are very interwoven for me.”

Steib grew up on the Near West Side, first attending Charles Dickens Child-Parent Center, a federally funded early education program for economically disadvantaged families with classrooms in mobile trailers in the neighborhood school’s parking lot. After a few years, the principal contacted her parents and urged them to send her to a more challenging school. Parker was on the short list.

After graduating, she studied economics at the University of Chicago where she met her future husband, Kurt Steib. She later finished her B.A. in English at Northwestern University.

“Over the years I’ve seen some families flourish here; they feel truly connected to the school. I think it’s because of volunteering—you interact, you get to know other parents, and it’s a way to feel invested. You’re part of the school, and you want it to succeed.”

Starting their family quickly, the Steibs enrolled their son at Parker only 10 years after she graduated. She started volunteering almost immediately. “We lived in Evergreen Park, which was quite a drive, and I wasn’t interested in going back and forth,” she recalled. “So I went across the street to the Alumni Office and announced, ‘I’m here till 11:45,’ and I stuffed envelopes. That was my entry into the volunteer world. I met wonderful people across the grades. Ellen Block and I answered phones for the Evening Courses, I was a grade chair for each of my children’s classes, I was a parent trustee, and later I was part of the four-person leadership of the Parents’ Association.” She also co-chaired the Centennial Scholarship Auction in 2002 and is currently co-chair of the Parents’ Association.

“My older kids loved seeing me around school,” Steib noted. “When I became co-chair of the Parents’ Association, I asked Cisco if he wanted me to warn him when I was going to be at school, and he was fine with it. He said it was natural for me to be here. He was at County Fair in his stroller, so he’s been here his whole life.”
Her history with the school gives her unusual perspective. “What has impressed me the most is how the school has evolved in terms of diversity. When Carl started in JK, one of the first events I went to was a gathering of mostly African-American parents regarding their kids’ experience at Parker. Out of those conversations came the parent group Aware. I became involved in it right away and eventually chaired it. I’m so happy to see how far we’ve come since then.”

All three of her children are forging their own paths. “Carl’s Parker experience really fostered his independence,” she described. He is currently living in Palo Alto, California after earning a master’s degree from Stanford University.

Catherine enjoyed playing music and sports while in Middle School at Parker and is currently in graduate school in Chicago.

As for 8th grader Cisco, she said, “Parker has been very good for him. He has grown tremendously and loves school. He’s into robotics and video games, so we love the programs he can take advantage of.”

Steib has special memories of her own experience as a student that resonate today. “My dad worked nights for most of my childhood, so he was the parent who spent most days with me. He rarely missed a County Fair or Class Day in 10 years.”
In my junior year, when we ran the Tea Room, my friends and I were working as waitresses, and when my dad arrived as a customer, it was the biggest thrill. It’s one of my favorite memories. He also painted the holiday windows with me. My dad was a welder and fabricator by trade, but an artist at heart. He passed away in 2014, and when I recall memories of him, it is tied to Parker. When I’m here and involved in some activity or going to County Fair, I often think about my dad.”

“I encourage parents, especially new parents, to volunteer. One of the most special things about Parker is our community.”

Steib’s husband, Kurt, is a trader. She and her family are avid Star Wars fans, they enjoy Family Fun Night every Friday, and they try to take a road trip every year. She had a party planning business for several years but recently discontinued it. “For all the time I’ve been at Parker, I’ve wanted to co-chair the Parents’ Association,” she said. “I’m glad to have the opportunity and the time now.”

Steib undeniably speaks from experience when she offers this advice: “I encourage parents, especially new parents, to volunteer. One of the most special things about Parker is our community. As someone new, how do you become part of the community? Not from drop-off and pickup—you need to get involved. Over the years I’ve seen some families flourish here; they feel truly connected to the school. I think it’s because of volunteering—you interact, you get to know other parents, and it’s a way to feel invested. You’re part of the school, and you want it to succeed.”
George Austin: 
Upper School Science Teacher

A Community 
of Learners: 
Faculty/Staff

Is it possible to teach a course that covers science and philosophy? If you’re George Austin, it is. Primarily a physics teacher in Parker’s Upper School, he created the physics elective known as ACME—Astronomy, Cosmology, Metaphysics and Epistemology—16 years ago. While the first two components refer to the origins of the universe and celestial bodies, "metaphysics asks, 'What exists?';" Austin explained. “Epistemology goes one better, asking, 'How do you know what exists?'" I have degrees in philosophy and physics, and this elective combines them.”

Austin didn’t start out aiming to be a teacher. Moving from India to Chicago with his family when he was seven years old, he later earned a five-year degree in liberal arts and engineering from the University of Illinois at Urbana-Champaign. He worked as an engineer for a couple of years, which he liked, but he missed connecting with people. “So I started tutoring students on the side and found I enjoyed it,” he recalled.

After conferring with friends who were teachers, he enrolled at Northwestern University and earned a master’s degree in education. He taught for a few years at Niles North and Niles West high schools in Skokie and Alan B. Shepard High School in Palos Heights. Then, Parker alumna Sophie Haroutunian-Gordon ’61—whom Austin knew as the director of the Northwestern master’s program in education—told him about an opening at Parker.

“I didn’t know much about Parker, but I did some research and then visited the school. I found it interesting, exciting and a wonderful way to educate,” he said. “The high schools I went to [Gordon Tech] and had taught at were huge. With so many people, it’s hard for students to get involved in multiple areas. I thought it was unusual to be in an environment with smaller classes that gave students opportunities to do many different things.” Austin is now in his 20th year teaching Upper School science.

During his time at Parker, Austin has appreciated some of his non-curricular responsibilities, including Advisory. “It’s fascinating getting to know students for four years and figuring out how I can help them,” he said. “I really enjoy learning and growing as a mentor. In my classes, I view teaching through the lens of physics; in Advisory, I work with students directly, without any one particular lens to view them, and can see them develop as a whole person over a longer period of time.”
One of the programs at Parker of which Austin is most proud is robotics. “In 2003, seniors Jamie Shkolnik and Zac Grossman approached me, as well as [Upper School science teacher] Xiao Zhang and [theatre technical director] Joey Wade, and requested our support for an Independent Study proposal to work on a robot for the FIRST Robotics Competition,” he described. “It was incredibly ambitious—students learn directly from professionals who do this for a living and build robots that do the same things you see in a warehouse, at a construction zone or on a NASA mission, using the same software and tools the professionals use. I didn’t realize it would be that big when I agreed to support their proposal.”

The FIRST robotics competitions were part of Parker’s robotics programs, which grew out of this student initiative. The mission of FIRST—For Inspiration and Recognition in Science and Technology—is to inspire young people to be science and technology leaders by engaging them in exciting mentor-based programs that build science, engineering and technology skills; inspire innovation; and foster well-rounded life capabilities, including self-confidence, communication and leadership.
“We started with the largest option, FRC, building a full-scale 120-pound robot for competitions at places like the UIC Pavilion and the Rams’ former home, the Edward Jones Dome in St. Louis,” Austin said. “Later we decided to add FTC, a smaller-scale introductory competition for high school students, and FLL, the LEGO competitions, to bring in Middle School students, who are mentored by their Upper School counterparts. The FIRST program matches perfectly with Parker’s philosophy: when you go to a competition, your goal isn’t simply to crush everyone there but to build them up so they are as good as they can be. So if you beat them, you genuinely beat them at their best. At each competition, if a team has a problem with their robot breaking down or needing a part, the students can make an announcement saying what they need, and you’d be surprised how many other teams come running with the missing parts. FIRST calls it ‘cooperatition.’”

This year, Austin is particularly excited for the opportunity to work with Wendy Freedman, Parker’s Robert A. Pritzker Visiting Scientist•Inventor•Engineer in Residence. The John & Marion Sullivan University Professor of Astronomy & Astrophysics at the University of Chicago, Freedman will interact with Austin’s classes, sharing information about state-of-the-art activities, including her work with the Giant Magellan Telescope being constructed in Chile.

In addition to his passion for physics, Austin has other outlets of a “physical” nature, including dancing. When he was at the University of Illinois, he was part of a competitive Latin dance team. The team stayed together after graduation, teaching and performing at conventions and trade shows. He even taught dance at Parker before the school had its current studio and professional dance instructors.

“I’m still trying to dance as much as possible,” he said. About eight years ago, he appeared on a Chicago-based reality TV program, From Junky to Funky, which involved finding discarded items and giving them new life. “They put a small dance floor, made out of dining room table tops that we carved out like puzzle pieces, in the corner of my living room. This way I can take it apart and put it away, then easily reassemble it when I need it.” He still occasionally teaches dance, often to couples preparing for the first dance at their weddings.

Austin also likes to take long trips on his motorcycle with several biking buddies, some of whom also happen to be teachers. “We’ve been to more than 30 states and six of the 10 Canadian Provinces, spending up to two months straight on the road. We’ve traveled to the West, South and Southeast United States, so Northeast was our next goal. Last summer we were aiming for Maine, but we got only as far as Toronto due to lack of time. Next year we are planning to attend the Sturgis Rally in the Black Hills of South Dakota, along with about half a million bikers. And someday, we might even fly to Europe or other continents and rent bikes.”

But there’s no doubt his travels will bring him back to Parker. “In my 20 years, we’ve had so much growth in every area—more classrooms, teachers, activities—but it still feels like home, a place where you know everyone.”
Kirill Kireyev ’96

Kirill Kireyev was born in Minsk, Belarus (former USSR). When he was 12, his family moved to the United States, seeking better economic and educational opportunities while the Soviet Union was undergoing its collapse. They landed in Chicago, where Kireyev attended Lincoln Park High School for a year before transferring to Parker as a sophomore. He graduated from Cornell University magna cum laude with a B.S. in computer science. He worked with a number of software technology companies, ranging from ecommerce to architectural design to scientific computing. In the meantime, he became an avid traveller, spending time backpacking in Peru, the Middle East, Southeast Asia and Nepal (where he participated in volunteer development work with Engineers Without Borders). He then earned a joint Ph.D. in computer science and cognitive science at the University of Colorado in Boulder, where he developed an interest in artificial intelligence (AI) and its applications in building intelligent educational technologies. Shortly after graduate school, Kireyev developed instaGrok, an innovative educational search/discovery engine hundreds of thousands of teachers and students use. He is currently working on an AI-based intelligent reading tutor app to help low-literacy adults improve their reading abilities. He also advises a number of other technology startups. He lives in Berkeley, California with his wife, Lucy Flood.

I remember life as relatively carefree in Belarus. We lived in a central part of Minsk, next to a river (Svislach) and a large park (Gorky Park). I was largely shielded from the political corruption and oppression that was (and still remains) quite prevalent there. Later I learned about the societal injustices and distortions, such as the caricatured negative way in which Byelarussian government/media portrayed the U.S. and the West and artificially propped up the patriotism among its citizens. I never met my grandfather on my mom’s side; he died while imprisoned by the Soviet regime before I was born, and little is known about the later years of his life.

Seeing the United States, particularly Chicago, was exhilarating in many ways: the tall skyscrapers, fast cars, picturesque Lake Michigan—even the giant supermarkets were something I had never seen before! I enjoyed biking along Lake Michigan, playing in parks and strolling along the busy streets of downtown and Lincoln Park. It was also intimidating jumping right into a new culture (or rather, a multitude of cultures). I had some prior knowledge of English, but not enough to feel comfortable in casual conversations. I remember struggling to understand others in conversation and often felt embarrassed by missing humor or cultural cues. Thankfully, this became easier after a few years.
I've always had an interest in science. I remember reading astronomy books and science fiction as young as eight years old. I was chronically under-challenged in school, and teachers would often give me more advanced science books to keep me busy in class. When I was about 10, my school opened a computer lab (a rarity back in those days), which immediately fascinated me. While most kids went there to play video games, someone taught me how to program, and I was hooked. I delighted in being able to use logic to create something tangible that comes alive on screen. It was a number of years before I got a personal computer of my own; in the meantime, my parents bought me a programmable calculator (an incredibly clunky contraption by modern standards), which I spent a lot of time on. When I moved to the U.S., I had already spent thousands of hours programming and knew that's what I wanted to continue studying.

When I went to get my Ph.D. a few years after college, I took an Intro to Cognitive Science class, which was an interdisciplinary subject touching on psychology, artificial intelligence (AI) and neuroscience. I immediately became captivated by understanding the human brain and learning and modeling/improving it with intelligent technology. Shortly thereafter I met Dr. Thomas Landauer, who has become my mentor and got me involved in doing a lot of fascinating R&D on learning technologies as part of my work for Pearson Education.

Shortly after graduating, I started wondering about creating something new and innovative in the learning technology space. This gave birth to instaGrok (instagrok.com), a search/discovery engine to help students learn and foster their curiosity. The “grok” in instaGrok is a word that originated in the science-fiction novel *Stranger in a Strange Land*, and it roughly means, “to understand something so deeply that it becomes an inseparable part of you.” When I look back, I realize that it was my own insatiable desire to learn independently and follow my curiosity—as well as my frustrations with being able to do so freely within the constraints of a traditional education system—that motivated me to create something that facilitates learning and discovery for others. Hundreds of thousands of teachers and students have used instaGrok, and I’ve received grants from the U.S. Department of Education and other education technology awards to support it.

I recently cofounded a nonprofit start-up called TextGenome (textgenome.org), which is developing an AI-based reading/literacy platform. To explain it simply: it creates personalized reading recommendations, vocabulary practices and exercises to most optimally improve learners’ vocabulary (which has been the biggest single predictor of success in school and beyond). Our technology incorporates the latest in literacy-related academic research and innovative AI algorithms. I am also the founder of a project called Evolving Literacy (evolvingliteracy.com), which is developing a mobile app to help more than 35 million low-literacy adults in the U.S. improve their reading skills.
Definitely. For example, my senior year I did an independent study in computer science under the guidance of mathematics teacher Peter Barrett. This experience helped me not only learn more about what I’m interested in, but develop the habit of taking learning into my own hands and defining my own learning goals and outcomes, as well as presenting my work to others. Parker’s student government helped me understand and appreciate collective discussions and decision-making. Last, because so many people at Parker are so unique and receive encouragement to cultivate their interests and gifts, I left empowered to carve my own path in life and contemplate my deeper purpose.

I loved the mischief and humor that transpired for the Senior Prank day. Also, I loved participating in the school musicals, appreciating all the selfless hard work and preparation that goes into creating a beautiful production.

I try to be physically active—biking, rock climbing, yoga, skiing, hiking. I recently went on a week-long back-country rock-climbing trip in the Sierras. My wife and I met on a meditation retreat, and we have a daily meditation practice. We are also obsessed with studying different personal development and contemporary spirituality practices, which the Bay Area is an incredible hub for.

I am incredibly grateful to Parker for all the support and inspiration I experienced there, as well as life lessons and insights that continue to reveal themselves years later.

Kirill at school in Belarus.
Alumni Reconnect


Principal Dan Frank ’74 (L) and Alumni Association President Jeremy Goldblatt ’92 welcome alumni to the annual Chicago Alumni Gathering on June 1 at the home of Leonard Goodman ’80.

Parker alumni gear up for the annual Rick Haskins Alumni Soccer Match during Reunion Weekend 2016.
(L–R) Kaela Rowe ’89, Ellen Sandquist ’79 and Henry Davis ’71 catch up at the Parker Alumni and Friends Reunion Celebration.

Upper School teachers Mike Mahany (far L) and Jeanne Barr (far R) reunite with former students and colleagues at the Los Angeles Alumni Gathering on November 2 at the home of Barri Klutznick ’85 and Package Pencak.

(L–R) J’naí Gaither ’01, Carl Steib ’08 and Melissa Luu ’08 enjoy the San Francisco Alumni Gathering on November 3 at Tacolicious.
Class Notes

Parker alumni: please send your class notes to Joe Bruno, Associate Director of Alumni Engagement, jbruno@fwparker.org.

1944

Chris Holabird writes, “I took it upon myself to fill in after the recent sad death of our 1944 class rep of many years, Fran Heller [see In Memoriam on page 60], so here goes: Parker friendships age well. Two years ago, the class of 1944 held its 70th reunion and well over half of its 22 surviving members attended. This included a couple of Californians, one class member each from Florida and Maryland and a class member each from London and Paris. The pull of good memories and long-lasting friendships was powerful enough to reach across mountains, oceans and time. We counted ourselves very fortunate to be able to attend and to enjoy the good genes, good doctors and good luck needed to be among those still present. We shared two evenings of happy Parker recollections and fast updates of the intervening 70 years as we were fully aware that this would almost certainly be our last such meeting. Already our class ranks have thinned with the sad loss of our longtime Parker rep Fran Heller among the most recent. Looking back on that final reunion, two thoughts come to mind. First is that living abroad seems good for one’s health. Our three class members living abroad, Bill Vanderkloot in London, Jane Meyerhoff Bussiere in Paris and Denis Fodor in Munich, are not only still with us, but active contributors. Bill is writing articles for Wikipedia, Jane is playing serious piano, both classical and improv, and Denis and his wife, Sorry, provide welcoming hospitality to visiting classmates. And last, a bonus of our advanced age is that it offers the possibility of becoming great-grandparents and sharing in the pleasure of seeing a family’s living history being played out with ourselves as full participants. Helen Dreyfus Greenebaum, one of our hosts in 2014 (John Deimel was our head host), has three great-grandchildren. And every time she sees them, which is often, they make her feel young again!”

1951

Helen Harris Brandt writes, “I have lived in Santa Fe, New Mexico for 24 years in a home that Richard and I built. We designed it with an architect, with love and care, over a three-year period. I’ve been involved in several boards, mostly in the areas of film, art and music, while living there. We recently sold our home in Santa Fe and now maintain a small apartment in Santa Fe for visits and summers. The rest of our time is spent at Sagewood, a fabulous retirement home in Phoenix, Arizona. It is particularly special because so many of the residents have so much to offer, and we have made many wonderful friends. I serve on a Cinema Society Committee, which presents challenging films for discussion, and on the Food Committee to ensure that we keep our wonderful menus up to date and enjoyed by the majority of residents. Looking back over an already long life, I still can’t quite believe I’m ‘old.’ Perhaps I still have a heart of a young girl! My years at Parker were just the best. I remember almost all of our teachers; in my mind, I can still walk around the wonderful Victorian building in which
we studied and of which I seem to remember the no-longer-existing nooks and crannies. Most of all, I remember each of you. To those I have not continued to see, my long-ago memories of you are so special; to those I continued 'growing up with,' it's been wonderful to enjoy life's journey with you. My very best to each of you.”

**Barry Hornstein** writes, “My wife, Melanie, and I have lived in Santa Fe, New Mexico for the past 25 years. We have two children in their 50s. Both with live-in ladies, one married and one soon-to-be married. We do not have grandchildren. I would love to hear from any classmates and we would like to host any potential visitors that would like to experience the real ‘wild west.’ Contact me by email at barry@cnsp.net or call 505.986.0899.”

**Hattula Moholy-Nagy** writes, “We are greatly looking forward to the opening on October 2 of a major exhibition of the art and photography of László Moholy-Nagy at the Art Institute of Chicago!” Majoly-Nagy: Future Present runs through January 3, 2017.

1955

**Joanne Schuette Beckius** was in Chicago from her home in Arizona for a brief lunch. **Violet Hirsch Margalit** came in from Tel Aviv, Israel and lunched with **Anne King Kuhn**, **Anne Kner Frenkel**, **Joan Weil Smith** and **Sally J. Brady Murphy**, who writes, “Fun times!”

**CAPTION:** (Standing L–R) **Anne Kner Frenker, Sally J. Brady Murphy, Violet Hirsch Margalit, Joan Weil Smith** and (seated) **Anne King Kuhn**.

1957

**Aimée Brown Price**, who would have graduated with the class of 1957 had she not been hauled off to California at the insistence of her parents after splendid Miss Greenebaum's 8th grade, is still trying to figure out what happened. Should classmates (or those in neighboring classes), wish to discuss that with her, in person, by phone or by email, please do so. Aimee lives in New York City with her husband, Monroe Price; still does art history; has three grown, not disreputable sons; and eight totally adorable (of course) grandchildren. Please do make contact through mail (203 West 86th Street, New York, NY 10024), phone (212.799.7223) or email (a.brownprice@gmail.com). She writes, “FWP was the best!”
1961

Susan Hunt-Wulkowicz has moved within Janesville, Wisconsin. She writes, “I am still doing prints and some paintings, too.”

Andy Kaplan had a photograph featured at an art gallery opening in Evanston last July. Jan and John Leary attended the opening—all retired FWP teachers. Andy still edits *Schools* and is the school’s archivist. Jan is now a novelist, John a painter and artist and Andy a photographer.

(L–R) Jan Leary, John Leary and Andy Kaplan.

1964

Jane R. Dickie writes, “I retired after 40 years of teaching psychology and directing women’s and gender studies at a small liberal arts college, Hope College in Holland, Michigan. I love teaching and doing research with students and especially helping them to see the power and possibilities in their own lives. I used to say, I would have taught for free—I loved it—but I was paid for grading! Now I continue to work for social justice, particularly in the areas of helping my own religious denomination to be open and affirming of LGBTQ folks. I served as president of the board for our local agency, The Center for Women in Transition, intervening on behalf of survivors of domestic violence and sexual assault. I chair the personnel committee for my church. I find that if I am open to it, there are many requests for my time. When not volunteering, Larry, my husband of 48 years, and I love to travel internationally, often using Airbnb to find little apartments in beautiful places, and nationally in our little teardrop trailer. Still, my idea of a really good time is being with good friends and eating good food in beautiful locations. Our children and grandchildren are our joy. Peace and love to all of you this day.”

1967

Jane Steinberg lives in Santa Fe. She works with WYD Media Management. She represents, among others, Thom Hartmann and Stephanie Miller. Jane volunteers in the New Mexico State Prison system teaching meditation and mindfulness.
Rick Bendix writes, “Mary Bendix ’71 and I have experienced many changes in the past few years. We sold our home in the suburbs and moved to a condo in Streeterville. Escaping from the boring suburbs to Chicago has been wonderful. We do so many more fun things now than we would ever have done if we had not moved. Our son, Sam, got married in 2014, and our daughter, Emily, got married last December. Our daughter, Sarah, is the last matrimonial holdout. Finally, Sam and Julie had their first child and our first grandson, Teddy, in March. Unfortunately, they live in Washington, DC, so we do not see Teddy as often as we would like. We continue to hope that they will move back to Chicago soon. I am looking forward to attending my 50th reunion in 2018.”

Rick Bendix with grandson Teddy.

Melissa Shiflett writes, “My opera, Lisa’s Room: A Dream, was given its second production (fully staged with orchestra) on June 24 and 25, 2016. It was produced by the American Chamber Opera Company at the Riverside Theatre in New York City. The title role, Lisa, was sung by Maggie Finnegan. She recently made her Kennedy Center debut as the first prize winner of the Washington International Competition for Voice. Ms. Finnegan had previously sung the role of Anna Freud in my opera, DORA, in Baltimore, when it had its second full production by the Johns Hopkins Peabody Opera Theater.”

Cliff Douglas writes, “In April 2015, I became Vice President for Tobacco Control and Director of the Center for Tobacco Control at the American Cancer Society. I also maintain my faculty role as an adjunct professor at the University of Michigan School of Public Health, where I’ve taught tobacco control policy since 2005. I’ve devoted the past 28 years of my professional career to tobacco control and prevention. Before joining ACS in my current role, I served as the consulting tobacco control policy advisor for U.S. Assistant Secretary for Health Dr. Howard Koh from 2010 to 2014, for whom I co-chaired and co-authored the agency’s first-ever national tobacco control strategic action plan, ‘Ending the Tobacco Epidemic: A Tobacco Control Strategic Action Plan for the U.S. Department of Health and Human Services,’ released by the U.S. Secretary of Health in 2011. Subsequently, I served as the consulting tobacco control policy advisor for the U.S. Surgeon General from 2014 to 2015. Along the way, on behalf of HHS and the University of Michigan, I served as the founding director of the national Tobacco-Free College Campus Initiative from 2012 to 2015. Given that tobacco use remains America’s, and the world’s, leading preventable cause of death, we still have a lot of
work ahead of us. The good news is that, since the first Surgeon General’s report
in 1964, we’ve reduced the smoking rate in the U.S. from 42 percent to 15 percent
(and nine percent for teenagers), which has saved more than 8 million lives,
proving that public health policy advocacy works.”

Courtney Lance-Morakalis writes, “It’s been a long while since graduating
from Parker, but those days have not been forgotten. I learned a great deal, met
and became friends with so many great people and enjoy so many wonderful
memories. Here we are, 40 years later. What has been going on with Courtney
Lance, sometimes referred to as Mrs. Morakalis? A lot actually, but I’ll try not to
bore you with too many details. Probably one of the biggest and best decisions of
my life was to marry Sotirios Morakalis, for so many reasons, the least of which is
that I have been able to visit the most beautiful land of Greece. Seriously, I could
not have found a better partner when it comes to love. Who knew? A bigger
power than all of us is really the right answer. He is the sweetest, best man in the
world. We’ve known each other for 13 years and have been married for nine. The
years get better and better over time.

“I lost my mother in 2001 to multiple sclerosis. I lost my father next in 2010
to renal failure due to a blood clot, resulting from some terrible snafu during
exploratory surgery. My brother this year transitioned at the hand of metastasized
cancer. It’s been an intermittently tough and sad decade and a half, I must say. They
were wonderful people who informed my life in so many special ways, who loved me
more than I realized and remain with me in spirit to this day. I am quite fortunate
that I had them in my life for as long as I did.

“During those challenging days, I studied massage, graduating from the then-
Chicago School of Massage Therapy. I still practice and maintain my license, but I’m
not as active as when I first graduated. Going to school there was very therapeutic—
no pun—and got me through some tough days. I am currently employed with
Draper and Kramer, Incorporated, a rather large and tenured (over 100 years) real
estate firm here in Chicago. I manage internal audit for them and have been for a
little over 30 years. I must like it, huh? I also sing professionally for a church, bake and
make granola for money and I’m a writer, all of which bring me great joy.

“One of the most important events in my life is publishing Pruno, Ramen, and
a Side of Hope, Stories of Surviving Wrongful Conviction with Nikki Pope ’75 in
10 stories of men and women who’ve been wrongfully convicted, anywhere from six
years to over 20. These are extraordinary men and women who’ve managed to live
through the horrendous experience of prison life, having not committed a crime and
maintained hope throughout their prison sentence. I was deeply moved and touched
by this experience and their strength and resolve. I realized how ill-prepared I was to
find out that our justice system was not as healthy as I wanted it to be. I got a little—
actually much more than that, really, terribly—angry and disheartened! Not only did
I learn so much more than perhaps I would’ve liked about prosecutorial misconduct
and ineffective defense, about eyewitness misidentification of the accused, whether voluntary or involuntary—that is, some are paid and rather commonly others just mistakenly identifying the accused—or faulty or junk science, but I learned of the tremendous strength and will of the human spirit. These men and women had/have that, and it’s pretty phenomenal. They are wonderful folks, and it’s just tragic that they were put through that hell. Their voices must be heard.

Nikki and I agreed at the onset of this project to give the storytellers 50 percent of our proceeds and 25 percent to organizations who are committed to providing legal assistance to the wrongfully convicted. Exonerees are not entitled to any compensation for the time spent in prison. Imagine leaving prison, your family has passed away, few if any friends left, the world vastly different than when the prison sentence began, and you’ve got nowhere to go with no money. It is terrible and disastrous to be in that place, but typically they are in that place.

“We are now producing the audio version of the book and have gathered quite a talented group of artists to tell these stories. Chicagoan Bill Kurtis is just one of the many artists that are graciously honoring us with their talent!

“It’s been a huge honor working on this project and meeting so many wonderful exonerated men and women, who are also doing a lot to help others who are wrongfully convicted. I certainly want to do the most and best that I can to help. Whatever I can, wherever I can. The audiobook will be released at the end of October. You can catch it on Amazon.

“I currently sit on the board of Life after Justice, which provides reentry support to men and women who’ve been exonerated and need help to navigate the new world. It’s, in some way, my way of continuing to do as much as I can to help.

“Much love to you all. Until next time, perhaps a bit sooner than 40 years.”

(L–R) Sotirios Morakalis, Bill Kurtis and Courtney Lance-Morakalis.
1981
Kim Kerbis made the Who’s Who 2016 list in Chicago Agent Magazine. An excerpt from her profile: “Kim Kerbis is an established leader in Chicago real estate, with a long list of awards and satisfied clients supporting her reputation for excellence. Those awards include consistent recognition for high sales, among them @properties’ coveted Road-to-Rolex Award for annual sales over $10 million. Kerbis has nearly two decades of experience and is a member of the Chicago Association of Realtors, serving on both its Ethics & Grievance and Professional Standards Committees. She also serves on the Board of Directors of the National Association of Realtors as a Large Firm Representative and Business Issues Policy Committee member. Kerbis is an Accredited Buyer’s Representative, a Certified Residential Specialist, a Certified Negotiation Expert and Graduate of the Realtor Institute. She values continuing education both for herself and for others and teaches @properties seminars focused on buyer needs. ‘I consider myself a guide, a teacher who educates clients to make the best decision for their circumstances and lifestyle,’ she says, ‘so I like to share what I’ve learned with my colleagues.’ A Chicago native, her knowledge of the Windy City’s diverse communities is extensive, making her an expert on both established and up-and-coming neighborhoods.”

Sharon Lederer writes, “I was just in Chicago…but I did not make our much anticipated reunion in September. During that time, I was on my ‘safari wedding’/honeymoon in South Africa! My kids are all grown up!! Thomas (27) is doing commercial litigation at Latham & Watkins in Chicago, and William (23) is a mechanical engineer at an aerospace technology company in San Diego. I am working hard (finance) and still taking international trips with my mom (going on 80) almost yearly.”

1992
Jon Morris made the Crain’s Tech 50 list in Crain’s Chicago Business. As the profile says, “Morris founded Rise Interactive, his second digital marketing agency, while at the University of Chicago’s Booth School of Business in 2004. Rise exploded in the past five years, along with digital advertising, with a ninefold increase in revenue and headcount. The company now employs more than 200 and has a client list that includes Ulta, Reynolds, Pandora and TransUnion. He just raised $12.3 million.”

1993
Justin Hall and his partner, Ilyse Magy, are delighted to announce the birth of their daughter, Delia Joy Orion Maghally, born on Saturday, June 4, at 3:42 p.m. She was the first baby to be born at the new San Francisco Birth Center. With mother and baby healthy, and father weepy with gratitude, they’ve settled into a new life ruled by the primal diktats of an enchanting preverbal roommate.
1999

John Raskin writes, "I happily married Eric Schneider, a third grade teacher at Grace Church School in Manhattan. We were joined by my sister, Julie Raskin ’04, and Alex Franke, who delivered toasts, as well as Jenna (Blick) Martin, Rachel Terp ’00 and cousin Maia Belic ’06. Our whole marriage has deep Parker roots; we were set up three years ago by dedicated matchmaker Annie Decker ’91!"

(L–R) Annie Decker ’91, Jenna (Blick) Martin, Eric Schneider, John Raskin, Julie Raskin ’04, Rachel Terp ’00 and Alex Franke.

2003

Margot Glasspiegel began a fellowship last summer at the Yale School of Medicine’s Child Study as an advanced clinical social worker.

2006

Jeremy von Halle donated his prized family documents, his grandfather’s World War II-era papers, to the United States Holocaust Memorial Museum. The first scholarship he did with these papers was an independent study, in which he worked with Parker faculty member Jeanne Barr to catalog what he had and make sense of the narrative. The work became his senior thesis at Duke, and now it’s part of the national heritage at the Museum.

2007

Graham Lazar, who was class president, had a chance to hang out with current senior class president Will Polsky.

Graham Lazar (R) and Will Polsky ’17.

Emily Mason became engaged to Jesse Chapman in Vienna last March.

2013

Moiz Rehan discussed his year as an exchange student at Parker with the Pakistan-U.S. Alumni Network in the article, “A Conversation with Moiz” (pakusalumninetwork.com/2016/06/28/moizrehan/). Parker’s AFS program truly changes people’s lives!
In Memoriam

Francis Heller ’44, according to a Chicago Tribune obituary, “was a lifelong champion of his community, sharing his love of place through his many volunteer activities and interactions with his fellow North Shore residents. Born and raised in Chicago, Mr. Heller graduated from Francis W. Parker School (1944) and Yale University (1948, Chemical Engineering), followed by service in the Navy on an aircraft carrier, mostly in the Mediterranean (1952–4). In 1954, he married Nancy Keegan Otto, of Crawfordsville, IN, and they lived in Chicago and Hammond, IN before settling in Winnetka, IL, where they lived for 54 years before relocating to Columbia, MO. His professional life was in sales and marketing for several chemical process equipment firms, a career that made the most of both his academic training and his natural, understated charm. Mr. Heller was active in local affairs, over the decades serving as Chairman of the Village Caucus, President of the Chicago Chemists’ Club, member of the Winnetka Library Board, and as a Deacon, Elder, and 30-year choir member of the Winnetka Presbyterian Church. He also served as an alumnus interviewer for Yale for 41 years, which he enjoyed enormously. His retirement plan was a perfect metaphor for his life. He chose five volunteer positions: one for the block, one for the village, one for Chicago, one for Cook County, and one for the country. On the ground, these worked out to be helping out at the Winnetka Public Library, recording chemistry textbooks (as he was “familiar with the lingo”) for Learning Ally, tutoring in the Chicago public school system, repairing toys for Lekotek, cataloguing at the Field Museum, and finally working as an archivist at the Chicago Botanic Garden. Besides his wife of 61 years, Mr. Heller leaves three daughters, Lucy (Thaddeus) Smith of El Cerrito, CA, Mary (William) Gridley of New York, NY, and Catherine (James) Terry of Columbia, MO, and four grandchildren.”

Lee Strong ’51, according to an obituary in the New York Times, “was a devoted wife, mother, grandmother, sister and aunt, gracious, loving and charming to all who met or knew her. She was born on July 11, 1933, to the late Joseph L. and Leanore (Purvin) Strauss Jr. of Chicago. She graduated from Francis W. Parker School and Wellesley College. She embarked on a 60+ year love affair with her husband, Roger L. Strong of New York, which never ended. Lee was an unparalleled mother to Roger L. Strong Jr. and Nancy E. Strong of Armonk, NY; Jeffrey L. and Kerry L. Strong of Brooklyn, NY; and Thomas and Catherine Strong of Chevy Chase, MD. She was a doting grandmother to Sarah Strong, Nicholas and Catharine Strong, and Cayla and Kate Strong, and a loving sister to Mary Allen of Scottsdale, AZ, and Jane Holzkamp of Fernandina Beach, FL. Lee loved tennis and Barbra Streisand, Paris and Phoenix, beaches and lakes, Book Group and the National Enquirer, pizza and Jujyfruits, but nothing could compare with her love for her family.”

Jerry Tagami ’61, according to an obituary in the Los Angeles Times, was “an extraordinary teacher at [Newport Harbor High School] for 33 years…. Jerry was born in 1943 in Gila River, Arizona, in an internment camp for Japanese-Americans during World War II. His father fought with the American army in Europe as part of the illustrious 442nd battalion. After the war, his family moved to Chicago where Jerry excelled in school. He came west after high school to attend Cal State University Los Angeles, and his academic abilities eventually
brought him to UC Irvine for a Masters degree in English Literature. He began work on his PhD, but fate had other plans for this talented young man. In 1970, he was offered a job at Newport Harbor High School, and at first he saw this as a temporary detour on his path to teaching university-level English. But then something unexpected happened—he fell in love with teaching high school. His erudition was immediately obvious to his students and to fellow teachers. He truly loved the written word, and saw it as his goal to inspire that same love in his students. He was a strong academic, but was also open to new thinking about the best ways to motivate students. For example, he brought Simon and Garfunkel lyrics alive as poetic verse. His classroom was exciting with an air of unpredictability—he would spontaneously bring his class outside to view and discuss his motorcycle, then have them read passages from Zen and the Art of Motorcycle Maintenance. This would of course trigger an interesting writing assignment. Jerry was a leader in innovation, and in an effort to attract students who were not interested in standard English literature classes, he offered electives in 'Rock Poetry,' 'Pop Culture,' and 'American Film.' Whatever class he offered was wildly popular, with a waiting list of students eager to enroll. In the 1980s, Jerry was elected Department Chair and served in this position for the next 20 years. During his tenure the traditional tracking program classes was abolished, and students were encouraged to challenge themselves. He advised the student literary journal, Flotsam & Jetsam, and anchored the Honors program in the 10th and 9th grade. Later, Jerry was a core teacher in the highly regarded Da Vinci Academy. Over the years, he won numerous awards, and was named ‘Teacher of the Year’ during the time when every student voted for this honor. To his great joy, in July of 2002 Jerry married Diane Arvizu, who is an essential part of Newport Harbor High School’s staff. They traveled together to Paris, and had plans for a trip to London when tragedy struck. On February 3, 2003 Jerry suffered a brain aneurysm, which nearly took his life. The waiting room of the hospital overflowed with students, colleagues, and friends. His condition stabilized, but he lost much of his short-term memory, although his memory of the past remained vivid. He retired in 2004 because of this condition, otherwise he would have stayed in the classroom he loved. In June 2015, Jerry was diagnosed with terminal lung cancer, which eventually took his life. He is survived by his wife Diane, his stepdaughter Jessica and her husband Jake, their two sons Chance and Miller, and by the generations of students whose lives he touched. By using words to reveal a wonderful world beyond the classroom, Jerry Tagami helped his students see the power of learning—to affect change, to create beauty, and even to escape the grips of difficult times. He will be missed.

Classmate Joseph Davis writes, “Many years have passed since I’ve had the opportunity to see or speak to Jerry. His major illness prevented regular communication, except through his devoted wife. My memories of Jerry have always fondly lingered in my thoughts as our teenage lives became closely entwined. We retrospectively look back and wonder how the years have passed and how life itself, and our new ventures and exposures, consume us. Jerry was an integral part of our loosely structured, but close-knit group, ‘The Big Nine.’ Just a group of guys that had many common activities and interests, that gave us an ‘all for one and one for all’ idealism. Jerry and I shared the backfield of our successful football team. After late night practices, he would often hang out with me while I waited for a ride to the distant South Side. Even though
he just lived blocks away, he hung out. That was just who he was. We often exchanged personal thoughts and sometimes shared the internal struggles of our different, but common, social adjustments we had to make as we matured. Of course, that was what Parker was all about. The melting pot of various cultures and backgrounds that allowed us to be prepared for this big world and be as successful as we could be. That world pulled apart in different directions, but we were prepared to meet it. Even though we didn't communicate later in life, I will forever hold that bond close to my heart as well will the hearts of all of his classmates at Francis W. Parker School.”

James “Terry” Arvey '64, according to an obituary in the Chicago Tribune, was the “loving father of Jason and Allison, brother of Steve Arvey, and dear friend to many. An attorney and administrative judge, Terry was a respected practitioner and an exemplary jurist. Terry is also survived by Judith Arvey and many half siblings and cousins.”

Jana Smith ’72, according to an SFGate obituary, “was a devoted wife, loving stepmother, and a bright star in the sky…. She lived a life of style, substance and spirit. She was gifted, tender of heart, generous, compassionate, creative and committed to making a difference and a contribution. She laughed easily and delighted in creating venues and opportunities for family and friends to spend time together. Jana loved life and the people in it with her, especially her family. Jana always looked at the bright side of life and demonstrated the power of positive thinking. She displayed effortless grace throughout her life. She had a levity that was intoxicating, was an incomparable storyteller, an easy conversationalist, and took a sincere and deep interest in others. Jana was born in Oak Park, Illinois on February 15, 1954 and took with her from Oak Park a life long interest in architecture and design. She was raised in and loved Chicago. After graduating from Francis W. Parker School, always adventuresome, she headed to California, entered nursing school, picked up nursing and counseling degrees at San Francisco State and embarked on a 25-year career at University Health Services of U.C. Berkeley. She was a devoted nurse. Her brownies were unrivaled. She loved her colleagues. Jana met and later married her husband, David. She was open to everyone and everything. Her varied interests included art and design, music, theatre, dance, Giants baseball and all of the fine arts. She was particularly passionate about her family and friends, and there are many. She is survived by David, her mother, Marilyn Kincaid, and her very attached stepsons, Simon and Sasha.”

Classmate Jan Menaker Brock writes, “She was adored by many long-standing friends and especially her loving husband, David Zalob, and her mom, Marilyn. Jana brought joy to all who knew her—even as she fought the courageous battle against cancer. She contributed a beautiful smile, a nuanced sense of humor and an understanding of other people’s conditions. Accompanied by her devoted husband, David, Jana savored the wonders of travel, movies, theatre and culinary excursions. Jana will be missed and loved forever by her family and those of us lucky to have shared her life.”
Laura’s Story: Planned Giving at Parker

I started at Parker in Junior Kindergarten in 1975 and graduated in 1989. I spent 14 years here with amazing classmates who were smart, interesting, compassionate… a really special group of people, whom I now consider much closer to family than friends.

When I think about the experience I had here, I think about how each of my teachers—Mr. Dreuth, Mrs. Greenberg, Mr. Dure, Mr. McCutcheon, Mr. Duffy, too many to name—found ways to encourage me and created a classroom environment that made learning interesting and fun. They pushed me to think critically about the world around me and ultimately inspired a sense of confidence that I rely on and value to this day. For so many reasons, Parker is my foundation.

I’m now the parent of two curious, creative young girls, and the thing that I want for them, above everything else, is to experience that same love of learning Parker gave me. “Maximize your experience here.” That’s what I tell my daughters and what I would encourage every student to do. Join clubs, perform in a play, challenge yourself to do something you might not have the chance to do again.

As an alumna and parent at Parker, I feel strongly that I owe more to Parker than I received. It’s a philosophy I’ve begun to instill in my daughters, who already understand what it means to give back to their school, as they do each year. I believe that, as an alum, I am a steward of this place I love, and as a parent, I am here to complement the things that others before me have done. So when Parker asks me to do something, I say “yes.”

Laura P. Maloney ’89 is a proud member of the Anita McCormick Blaine Planned Giving Society benefiting Parker’s endowment fund, which impacts students today and for years to come. She is a trustee, parent to Cecelia ’28 and Peyton ’28, a 10-year board member of Parker’s Alumni Association and volunteer on several school committees.

For more information regarding Planned Giving at Parker, please contact the Development and Alumni Office at 773.797.5520.
“What the live creature retains from the past and what it expects from the future operate as directions in the present.”

John Dewey