

Serving as a catalyst for intellectual and creative growth among high potential youth

## FROM THE PRESIDENT: TOUCH THE FUTURE

By Elizabeth D. Jones

Dear Friends,

When I was 16, my boyfriend at the time gave me a license plate holder that said "Touch the Future, Teach a Child." (He had listened to my rants about changing the way we educate our nation's children for quite some time by then.) I dare not say how long ago that was, but eight cars later, I still have that license plate holder on my car.

As a nation, we need to do more than touch the future—we need to embrace it. Our children need our attention. They need to be taught how to learn, reflect and process new ideas. Our programs focus on providing opportunities for the acquisition of knowledge and purposeful ways to apply their individual and collective talents. The *Apprenticeship Program* and *Yunasa* are fertile ground for creating the future.

Unfortunately, with the increased number of applications comes an increase in the number of requests for financial assistance. Parents, teachers and community members are recognizing the value of programs that integrate mind, body and spirit to support the healthy development of happy, productive citizens. Gifted education often emphasizes achievement, but neglects critical aspects of personal growth. We believe that it is vital for the individual, the culture and our future to provide these children with a deeper, more balanced experience leading to awareness and

understanding of self, others and the world.

In past years, we have been able to provide up to 60% of our qualified applicants with financial assistance. Our mission guides us to ensure that no child in need of our services will be turned away due to lack of financial resources. We need your help this year more than ever.

The following Cherokee story illustrates the impact we can have if we respect and nurture the good in us individually and collectively.

An older Cherokee man is teaching his grandson about life. "A fight is going on inside me," he says to the boy. "It is a terrible fight and it is between two wolves. One is evil. He is anger, envy, sorrow, regret, greed, selfishness, arrogance, and self pity. The other is good. He is love, joy, peace, hope, serenity, humility, kindness, benevolence, empathy, generosity, truth, compassion and faith. This same fight is going on inside you and inside every other person."

The grandson thinks about it for a minute and then asks his grandfather, "Which wolf will win?" The old Cherokee replies, "The one you feed."

Join us in feeding the good wolf inside all of us.

Touch the future.



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# 2009 BRADLEY SEMINAR: “MAKING A WORLD OF DIFFERENCE”

By Bonnie Raskin, *CDB Scholarship Administrator*

Close to 120 members of the *Caroline D. Bradley Scholarship* community—Scholars, parents and *IEA* staff—gathered at the historic Hotel Whitcomb in the heart of San Francisco’s mercantile district the weekend of March 27-29. The weather was glorious with spring in bloom. The participants enjoyed having an open Friday afternoon to explore many aspects of this diverse, energized city.

The Seminar got underway Friday evening with the re-kindling of friendships and the introduction of this year’s seminar theme: “Making a World of Difference.” It was a special treat to welcome back five *CDB* Scholar graduates. Several sessions throughout the weekend were devoted to the *CDB* alums talking candidly about their first year of college to an engaged, attentive audience.

Saturday morning included guest speakers from Project Happiness, a Palo Alto-based think-tank devoted to spreading the positive benefits of understanding the many aspects of personal, societal and global happiness. *IEA* President, Betsy Jones, elaborated on the subject and opened cross-generational discussions and group collaborations.

The afternoon had the Scholars travelling—via double decker bus—to visit the California Academy of Sciences in Golden Gate Park. One of the hottest tickets in town, CAS was designed by Pritzker Prize winning architect Renzo Piano, and has enjoyed sellout crowds every weekend since opening in September. CAS brings the entire universe under one roof and features an aquarium, planetarium, natural history museum, four-story rain forest with a two and a half

acre living roof, an expansive solar canopy and walls insulated with recycled blue jeans.

Back at the hotel, Betsy Jones conducted several afternoon sessions with the *CDB* parents and introduced *IEA* Senior Fellow, Betty Meckstroth, a recognized expert in the field of gifted education. Parents discussed issues of concern regarding raising a highly gifted adolescent. Following these sessions, parents divided into four tour groups, expertly planned and led by local Bay Area parents. Tour One included North Beach and Telegraph Hill, which showcased one of the oldest streets and neighborhoods in San Francisco. Tour Two visited the Golden Gate Bridge with a cable car leading to Lombard Street—and an Irish Coffee at the Buena Vista Café.



*Laura Ball, Anna Loup and Tara Adishesan  
at the 2009 Bradley Seminar.*

“I think what I appreciate the most about *CDB* is that it is one of the few programs to recognize gifted youth early on in their academic careers. This often gives the student the confidence and direction to continue to excel in all aspects of school.”

– *CDB Parent*



*Byron Udegbe, Desi Petkova and Carson Witte*

“In my life, so far, becoming a *CDB* Scholar has been probably the most amazing thing that has happened to me. In seventh grade, I felt like the grade (the A) mattered to me more than anything else in school. However, thanks to the *CDB Scholarship*, today I’m able to attend University High School. A fountain of words come to mind like challenge, hard work and stress. Because of these challenges, I have learned that character is what matters, not the grade. Also, I have learned that one should focus on the things with meaning, on the things that really matter in life.”

– *CDB* Scholar

Tour Three headed via cable car to Chinatown and Tour Four ventured to Golden Gate Park and the DeYoung Museum. From all indications and feedback, an outstanding time was enjoyed by all.

Saturday evening brought our Third Annual Game Night with the winning team being a trio of *CDB* Scholar alums! Second place went to a team of current *CDB* Scholars. Parents had their work cut out for them.

Sunday sessions focused on the college application process and featured an early morning session between junior and senior high school *CDB* Scholars talking about their experiences and what the juniors have ahead of them, while junior/senior parents met separately to discuss and share their own thoughts on this year of transition. Guest speaker Juana Barrios, Morehead-Cain Scholar and independent college counselor, shed light on ways to minimize the stress and anxiety of the college application process as well as defining “fit” for Scholars and parents alike.

The weekend ended all too quickly as certificates of achievement were presented to all of the *CDB* Scholars. Senior speeches were met with awe, tears, and laughter from an audience eager to hear the distinctively unique perspectives and reflections of 13 of the *CDB* soon-to-be-graduating Scholar Seniors.

Plans are already underway for the 2010 Bradley Seminar. Perhaps a change in scenery and coasts—maybe Boston?? Stay tuned!



*Susan Barsamian and Sophie Romans*



*Nam Hee Yang and Jenny Choo*

## GUIDING THE GIFTED: STEPHANIE TOLAN

By Lori Anne Edwards



Stephanie Tolan

"Unless we make a commitment to saving these children, we will continue to lose them and whatever unique benefit their existence might provide for the human species of which they are an essential part."

—From Stephanie Tolan's article  
"Is it a Cheetah?"

Stephanie S. Tolan began working with the gifted in 1992 after co-authoring *Guiding the Gifted Child*, and soon after became known as someone who understands the needs of gifted children. Ms. Tolan says, "I was contacted regularly from parents all over the country to provide a listening ear, a shoulder to cry on, an awareness of what they were dealing with, and some thoughts about what had worked for other gifted kids." Ms. Tolan became an advocate for extremely bright children, writing articles about the challenges of being gifted and giving lectures throughout the country to audiences of parents, educators, and counselors attempting to find ways to meet the needs of gifted children.

Ms. Tolan's greatest contribution to gifted education is as an author of books, plays, and articles that inspire and educate the families of gifted children all over the world. Ms. Tolan has won numerous awards for her work, including the

2003 Newbury Award for her novel, *Surviving the Applewhites*, and most recently the Christopher Award for *Listen!*. Ms. Tolan's article "Is it a Cheetah?" is a poignant look into the unique challenges gifted children and their families face and has been published in over 40 different languages. Her work with the gifted has also inspired many of her books, including *Welcome to the Ark* and *Flight of the Raven*, the first two books in a trilogy about "four brilliant young misfits in a world teetering on destruction." Ms. Tolan is currently working on the third book in the *Ark* series.

Ms. Tolan believes that it is essential to make an effort to help all children, including those children who have the unique, and often misunderstood, label of "gifted." She says that, "highly gifted kids are very different from what we think of as the norm, and their differences have a purpose in the overall scheme of things. They have just as much right to have their needs met as any other children. When a child learns more quickly, more deeply and more broadly than his or her age peers, it is necessary to change the way we present material for them to learn. It's important to speed up the presentation and allow them to move through it more quickly, but it is also important to give them more complex and more wide-ranging material." Unfortunately, our educational system fails to provide adequate programs, teachers, or solutions to help our nation's brightest young people reach their full potential. Parents are often left frustrated with the lack of resources available that address the specific needs of a gifted child.

In 2000, Ms. Tolan met Betsy Jones and Jim Davis from *IEA* at a gifted conference and the three of them began to talk about how it might

be possible to help extremely gifted children deal with all of their complex needs. They gathered experts from the field of gifted education at a retreat to discuss possible solutions to accomplish this task. From the retreat came the initial idea for the *Yunasa Summer Camp for the Gifted*. *Yunasa* is the Lakota word for "balance," and the camp's mission is to help highly gifted children and adolescents balance their social, emotional, spiritual, physical, and intellectual lives.

*Yunasa* is in its eighth successful year, bringing together bright 10 to 14 year olds from all over the country to learn, share and grow in a community of supportive and understanding peers and adults familiar with the unique challenges and sensitivities that often accompany the term "gifted." Ms. Tolan shares her talents and insight with *Yunasa* campers every summer by leading workshops in creative writing and the power of imagination. Most importantly, Ms. Tolan serves as a role model, friend, and inspiration to the children who will become tomorrow's leaders. Ms. Tolan says, "My greatest accomplishment is the journey I have taken in service to my own life's balance. This is not something that the world would recognize, notice or value, but it is central to me and parallels what we try to help our *Yunasa* campers discover. Who we can be, who we can become, is perhaps more important than what we do."

Ms. Tolan has been affiliated with *IEA* for the past eight years as a Senior Fellow and *Yunasa* faculty member. We are honored to work with her and grateful to her for enriching the lives of gifted children through her tremendous body of work. To learn more about *IEA*'s Senior Fellow, Stephanie Tolan, please visit:  
[www.stephanietolan.com](http://www.stephanietolan.com) or  
[www.educationaladvancement.org](http://www.educationaladvancement.org).

# PIPELINE TO SUCCESS: MOUSEY THE JUNKBOT SPRING COURSE

By Joe Carroll, *Pipeline* Instructor



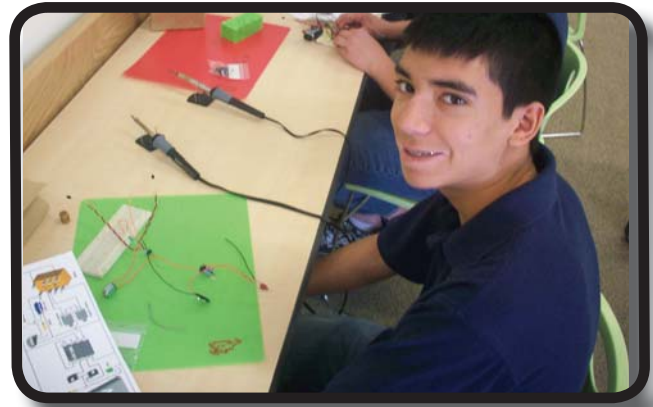
*Alysa and Bryan work to build their robots.*

In Spring 2009, nine students from public high schools in Pasadena came together in Northwest Pasadena. Their mission: to use common parts from everyday electronics to build Mousey the Junkbot.

Mousey the Junkbot was originally created by Gareth Branwyn for his Street Tech Blog ([www.streettech.com](http://www.streettech.com)). Adapted from earlier designs, Mousey is a light-seeking robot that uses the body of a common computer mouse to skitter across the floor and steer toward sources of light.

*IEA* sponsored the weekend enrichment class, which included four students from the *Pipeline* Program. Materials were provided, from soldering irons to motors to op-amps; all the students had to do was bring an old mouse (if they had one) and their passion for learning!

Joe Carroll has tutored Apprentices and *Pipeline to Success* students in math, science and physics for almost two years. He is a graduate of Caltech and generously donates his time and resources to *IEA* and the gifted students we serve. *IEA* is grateful to Joe and other mentors and volunteers who provide their time and effort to our organization. If you would like to mentor, volunteer or donate, contact *IEA* today!



*Bryan Monroy*

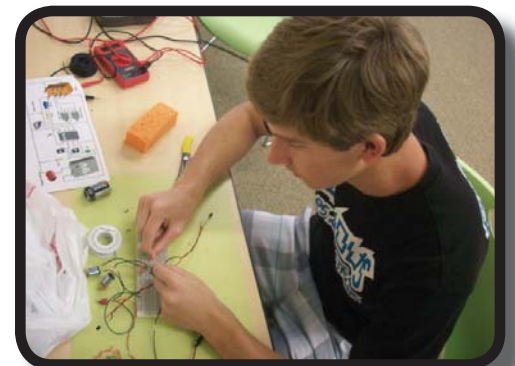
None of the nine students had any previous electronics experience, but they were all excited to get their hands on the project. By the end of the very first class, they had learned to solder and had watched the LEDs light up on their very first circuits.

Before long, the new engineers were stripping wire, breadboarding, and following Mousey's circuit diagrams like old pros. The gasps of delight were audible as they connected Mousey's "brain" and watched their motors turning for the first time.

As I write this, we have one class remaining and the students are prepared to put everything together and let their robots run for the first time. I've been amazed at their enthusiasm for the project and how quickly they grasp new concepts. Some of them solder better than I do!

By sponsoring this class, *IEA* has given these students a glimpse into a world they'd never seen before. They've had a chance to develop new skills and get comfortable with more than one area that could be attractive to them as they make critical life decisions about colleges and majors in the next couple of years. The more they explore now, the better informed they'll be, and the better chance they'll have to find a path that stimulates and fulfills them.

And meanwhile, no matter what path they take, their Mouseys will be moving toward the light.



*Stephen Loesch*

# APPRENTICE GOES FOR THE GOLD IN THE 2009 SCIENCE OLYMPIAD

By Julie Jester, 2008 IEA Apprentice



*Julie Jester competing in the Electric Vehicle Event.*

Science Olympiad is a nationwide competition that challenges students interested in science and engineering through a variety of events ranging from “testing events,” which allow participants to demonstrate their knowledge about a certain subject, to “building events,” which require competitors to design and build a variety of projects. Each school wishing to participate forms teams of 15 students who compete for individual awards and the highest score among all teams. The competition consists of three stages: a regional competition, which was held in February; a state competition, which was held in April; and a national competition. The highest scoring teams at the regional competitions move on to the state competitions and, in turn, the best state teams go to nationals to compete for the national championship. This year, there were 57 teams at the San Diego regional competition.

I have been participating in Science Olympiad since 6th grade and have relished every minute of it. Through my experiences with Science Olym-

piad, I have discovered my passion for engineering and everything that involves science. I have particularly fallen in love with the building events and have a garage full of past projects to show for it. This year I decided to tackle four building events.

The first event that I did was called Electric Vehicle. For this event, I had to build a small electric car that would drive between five and ten meters and then stop. The distance to be driven was kept secret until the day of the competition, so I had to be ready for anything in this range. The object of the competition was to get the vehicle to stop as close to the announced distance as possible. I also had to be able to give an accurate prediction of how long my vehicle would take to go the distance. The vehicle had to run only on electric power and could not be actively steered or stopped by a person; the vehicle had to be autonomous.

Through my years in Science Olympiad, I have built precision pieces for my various projects at a machine shop. An engineering company in San Diego has graciously taught me and allowed me to use their various machines, including milling machines, lathes, band saws and belt sanders. I constructed most of my electric vehicle in the machine shop. I also programmed a small microprocessor to run the motors on the vehicle. I spent hours collecting data to fine-tune the programming for each distance and recording the time each run took. The competition went very well and

I managed to stop the vehicle within one centimeter of the announced distance. My predicted time was about one second off. The San Diego regional is known for having some pretty stiff competition, but I was more than content when this performance gave me 8th place in the event.

My next event, Elevated Bridge, was a very different challenge. This event focused on building a small bridge out of balsa wood that would have the highest efficiency, or be able to hold the greatest load per unit weight of the bridge itself. These aren't your average bridges, though: the bridge itself might weigh just 10 grams and then be able to support a 15 kilogram load. This event stressed the importance of designing and refining an engineering project. I built and tested more than 30 different designs of bridges before finally achieving the design that I used at the regional competition. Each bridge took about four hours to make and required time overnight for the glue to cure. One important skill I learned from this event is to take extremely detailed notes on each design, because keeping the record straight between the performance and design of each bridge was extremely difficult without a record for each individual bridge. The work paid off, though, at the regional competition, where I was able to get an efficiency over one thousand that earned me fifth place.

The third event that I did was named Trajectory. For this event, I had to build a device that would

use a nonmetallic, elastic solid—such as rubber bands—to throw a ball at new targets that could be up to ten meters away and up to two meters high. The object was to get as close to the center of each target as possible. Much like my electric vehicle, I constructed my Trajectory device at the machine shop. I spent about fifty hours at the shop building and another fifty testing my device. As the saying goes, “practice makes perfect”, and Trajectory was no exception. There were hundreds of possible target positions for which I needed to collect data in order to hit the target accurately in each configuration. Engineering always involves some bumps along the way. About a week before the competition, part of my device broke. I was able to fix it, but it no longer shot the exact same way it did before, thereby making all of

using a one liter plastic bottle. The rocket had to carry an egg (hence the name) and return it safely to Earth without cracking it. The rocket that kept the egg aloft for the longest period of time would be the winner. I tried a multitude of designs, varying the size of the parachute, the shape of the nose cone, and the number of tail fins. The key to this event was consistency. If a rocket isn’t reliable, then Murphy’s Law tells us that if it can fail, it will—and this failure might happen right at the competition. From my experience in Science Olympiad, I have found that one of the most important things about any project I build is that it be reliable. There is nothing more heartbreaking than spending hours upon hours working on a project, only to have it malfunction right when it counts the most. I built about 30 rockets until I managed

to find the perfect design that kept the egg safe, kept the egg in the air for a fairly long time, and was very reliable. All of the work paid off and my rocket performed perfectly in competition. My rocket flew to almost 100 feet high and came down so slowly that it earned me the gold medal in the event.

This was one of the most successful years I have ever had at Science Olympiad. The rest of my team had similar outcomes and we earned third place overall in the regional competition. Because we scored so high, we will also be able to compete in the upcoming state competition. We are more motivated than ever and have continued to increase our knowledge and improve our devices for this next challenge.



*Julie smiles with her trophy from the Science Olympiad.*

Science Olympiad has been one of the most important things in shaping my life. It has taught me so many skills that I will need in order to pursue science and engineering in the future. Competitions like Science Olympiad and programs like *IEA's Apprenticeship* are doing their part to expose students to the wonders of science and engineering. I hope that anyone who enjoys science and engineering will seize the opportunity to participate in something like Science Olympiad or an *IEA Apprenticeship* because I can guarantee that it will change your life forever.



*Julie competes in the Egg-o-Naut competition.*

the data I had collected incorrect. However, I was able to extrapolate the precise offset in throwing that the repair caused and utilize my old data. At the competition, I managed to hit within about 15 centimeters of each target and took third place in the Trajectory Event.

The final event that I competed in was Egg-O-Naut. For this event, I had to build a bottle rocket propelled by water and air pressure

On April 18th, 2009  
Julie won  
2nd place in Trajectory  
1st place in Elevated Bridge and  
1st place in Egg-O-Naut  
at the Southern California Science  
Olympiad State Competition.  
Congratulations Julie!



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**Apprenticeship Program Dates**

May 18: Final Application deadline  
 July 12–August 8: Four week Program dates  
 July 19–August 8: Three week Program dates

**Pipeline to Success Dates**

May 12–May 13: PEPs at Pasadena High School  
 May 13–May 14: PEPs at Blair High School  
 May 20: Spring Event for Pipeline students and their families

**Yunasa**

**Summer Camp for the Gifted Dates**

June 2: Final Application deadline  
 July 26–August 2: Camp dates

**Just Announced!**

**IEA Summer Courses for  
 8th, 9th and 10th grade students**

**Cognitive Psychology**

Explore the mental processes through which we, as individuals, experience and make sense of the world. Topics to be covered include attention, perception, memory, judgment and decision making, problem solving and language.

**Philosophy of Knowledge**

Explore the nature, scope, and sources of knowledge by grappling with questions such as:

- When is an individual justified in claiming to know something?
- What do we know? What is the extent of our knowledge?
- What is certainty?

Various theories of epistemic justification will be studied, along with related concepts such as belief, truth, certainty, skepticism, and naturalized epistemology.

**Course Dates: July 6–24**

**Classes: Monday through Friday**

9:00 am–11:00 am Cognitive Psychology

11:00 am–1:00 pm Philosophy of Knowledge

**Location: IEA Office, South Pasadena**

**Class Fee: \$300 per class**

Enrollment deadline is June 15. Please contact us at:

(626) 403-8900 or [ieagifted@educationaladvancement.org](mailto:ieagifted@educationaladvancement.org) for additional information. Space is limited, so call or email to register today!