

Celebration of the Life of Alan Felzer January 31, 2009

Thank you all for coming today. Alan Felzer's life was characterized by a love of family, high ethical values, great teaching skills, enormous scientific and social curiosity, and a heart of gold. My name is Harvey Leff. I am a long-time friend and Cal Poly colleague of Alan's, and it was his wish that I officiate at this event. I am greatly honored to do so. We are here today to celebrate Alan's life. The planned format is that I will speak about Alan and will then hand the microphone to others who wish to share their thoughts.

Alan was born August 16, 1944 in San Francisco and was raised there. As an undergraduate at UC Berkeley he majored in engineering mathematics, an exceptionally difficult major with only a small number of students. He remained at Berkeley for his graduate work in electrical engineering and earned a Ph.D. in 1969. He joined Cal Poly directly after receiving his doctorate. He remained at Cal Poly until 2007, except for a leave at Hewlett Packard in 1977, where he hoped to learn how to better prepare students for positions in industry.

Alan met Laura in 1970 at a dance. It was love at first sight for both of them, and they married 7 months after meeting. Six years later Karen was born and in 1977 the family moved to Claremont. Karen, Laura, and Alan were an unusually closely-knit family. At age 7, when Karen wanted to adopt a vegetarian diet, Laura and Alan followed suit – and the entire family became vegetarians. Consistent with this diet, Alan loved gardening and grew tomatoes, zucchini, butternut squash, and snow peas. He also planted fruit trees, which supplied plums, oranges, lemons, grapefruit, apricots, and peaches. The whole family had an active lifestyle, walking whenever and wherever it was feasible.

To assure that Karen learned mathematics well, Alan arranged with the Claremont Unified School District for him to home school Karen in mathematics in grades 6 - 12. Alan's teaching prowess, combined with Karen's learning capabilities made this a highly successful venture. One indicator of that success is that Karen went on to earn a PhD in geology at Harvard.

During summers when Laura taught summer school in Los Angeles, Karen and Alan prepared food and walked to the Metro train station in downtown Claremont (about 1.5 miles) to meet Laura. When she arrived they all walked to a park for a picnic, and then all walked home. Other times of the year they frequently picnicked at a Claremont park, getting there by foot, of course.

Although not religious in the traditional sense, on Friday nights the Felzers lit sabbath candles

and shared personal thoughts. They shared good meals and Alan referred to himself as a *gastronomic Jew*.

The family did many other things together, including bird-watching at the Rancho Santa Ana Botanical Gardens, lectures at the Claremont-McKenna College Atheneum, and musical concerts. Even after Karen left home to attend college, pursue graduate study, and begin her married life, Laura and Alan continued to walk regularly. It was common to see them wearing their traditional sporty cotton hats, walking down streets quite far from their home.

Alan's interests were eclectic. He loved science and often researched new developments. He spent much time in the Cal Poly Library. He read voraciously, and was particularly fond of history. He liked to listen to classical music – which inspired the background music that preceded and will follow this portion of our celebration of his life. He loved to feed birds outside his house; the birds learned to recognize when he whistled, and would immediately land near him to receive their food. Alan's interest in, and love of, San Francisco endured over the years and he revisited his city many times. He particularly enjoyed the sour dough bread and Chinese noodle soup.

I first met Alan shortly after joining Cal Poly in 1983. I had become involved in a program to establish a working relationship between Cal Poly and the Kellogg Polytechnic Elementary School, which was within walking distance of the university. When I visited the elementary school, I was told that another Cal Poly faculty member was tutoring students. They led me to a room and introduced me to Alan, who was tutoring a student in reading – one on one. I asked him how he became involved with tutoring and he said that he wanted to help, so he simply contacted the school and volunteered. They gladly accepted his offer. This incident showed me immediately that Alan was special; I knew of no other faculty who volunteered to tutor kids.

Thereafter, I occasionally met Alan walking around the campus – he walked a lot there too. He regularly walked to the Metro station and took a bus to school. Alan tried to convince his friends to do the same.

Once he told me that he saw a Harvard physicist, Eric Mazur, at a meeting. Mazur described a teaching technique that replaces lecturing to a *passive* audience with one that fosters an *active* learning environment. The technique, called *Peer Instruction*, sounded fascinating. As it

happened, over the years, *Peer Instruction* became widely adopted by the physics teaching community. Mazur was awarded the prestigious Millikan Medal by the American Association of Physics Teachers in Summer 2008. I am still impressed that I first learned of this great teaching technique, created by a physics professor, from Alan, a professor of electrical engineering.

For several summers, Alan, Peter Siegel (Physics Department), and I team taught in Summer Institutes for middle school teachers. The topic was Electricity & Magnetism. We alternated doing some standard lecturing, but most of the class time was spent with the teachers doing hands-on activities. Alan was instrumental in the design, equipment purchase, construction, and teaching of these activities.

Each morning, Alan would review the material of the previous day. My own ignorance caused me to question whether his lengthy review was needed. Wouldn't it have been better to move on to new material? Well, I was very wrong. We ultimately learned from the teachers that Alan's reviews were pivotal to their learning. Indeed his reviews were precisely where the material really began to make sense and get properly digested. Of course, Alan knew this all along.

The middle-school teachers really liked Alan's teaching style. Very informal, but very focused. When discussing an equation, Alan would refer to individual symbols such as those for electric current, resistance, or voltage as "guys." For example, "What is this guy? What's it called? What does this guy represent?" This tended to personalize the subject, turning abstract symbols in equations into living entities. Alan continually asked the class questions. He'd often point to something he had written on the board, and say "This is a what?" His audience's eyes would open wide, showing that they were in deep thought. He always kept those he was teaching actively engaged.

I learned later that many Cal Poly students kept in touch with him well after they graduated. He had the opportunity to meet with some recently. After observing Alan teach during our middle school summer institutes, I am not surprised that Alan had a positive, lasting impact on electrical engineering students.

On Alan's website, he described in great detail how his teaching philosophy and techniques changed over the years as he assessed his successes and failures and learned of methods devised by others. He always kept an open mind and always worked toward making his teaching better.

Alan was generally quiet and unassuming. He was much more interested in ideas than self-promotion. But when he felt strongly about something, he would make his opinion known. At one point, he decided to run for the position of department chair. He did not win the election, and on his website he wrote in a self-deprecating style,

"I didn't win when I ran for Department Chair. Actually I came in last in a field of six. But I think my ideas are worthwhile and so here are a number of them taken from my presentation, from my responses to questions and from some additional thoughts."

This is a great example of Alan's love of *ideas*. Others might have tried to shield their loss of an election and simply shelve their ideas. Alan chose to *broadcast* his election loss in order to *promote* his ideas.

In August 2007, Alan was diagnosed with amyotrophic lateral sclerosis – ALS – commonly referred to as Lou Gehrig's disease. Despite this shocking news, Alan maintained a remarkably positive attitude. He decided to make the most of his remaining days – and he did that with gusto. Among other things, he and Laura drove to Las Vegas, which they had never visited. He and Laura also drove to San Francisco, Alan's favorite city.

After we learned of Alan's diagnosis, my wife Ellen and I began going to movies with Laura and Alan weekly or biweekly. Each movie was followed by dinner at a local restaurant. We saw a lot of movies together and had many wonderful dinner conversations during the last 16 months.

Alan was always the most well informed of us on important domestic and national issues, and he frequently made incisive comments on them. We enjoyed the many hours spent with Laura and Alan, and in all those hours, Alan never – not even once – complained about the continuing progression of his disease. His demeanor throughout his illness was a remarkable display of courage. Indeed, Alan was one of the most courageous people I've even known.

Sometimes, Ellen and I had gone out of town between our movie-dinner dates. Alan always asked us how our travels went. He and Laura always asked us about our 2 granddaughters. Alan was always interested in *our* well being. Of course, Alan would also tell us – or ask Laura to tell us – about their wonderful grandson Emmet and what cute and smart new things he did during that week. Alan truly adored Emmet.

Alan believed he had lived a good life and recorded some thoughts recently using his high-tech

computer, which enabled him to communicate his thoughts. I would like to read what he wrote:

I, of course, do not like having and dying from ALS. It's a bummer.

- *I would so much like to watch Emmet grow up.*
- *So much like to be there when Emmet's siblings are born.*
- *So much like to grow old with Laura.*
- *So much want to be there when Laura needs help.*
- *And so much like to be with and hug everybody.*

But I have lived a very good life. I grew up in San Francisco with very good and loving parents. Grandma made the greatest Sunday dinners. I can still taste them. Grandpa could be too serious and too overprotective but we were close. We took one hour walks every Saturday and Sunday. As I grew up I had some very good teachers, some really good math and science in the days after Sputnik and some good friends.

I went to Berkeley. I had some very good classes. I always loved the campus from the days I went to Berkeley's bookstores and track meets with Grandpa. I had a dorm room for three years with a million dollar view of San Francisco and the bay with its bridges. I learned how to kiss.

Laura has been a fabulous wife, so loving and caring. I could always completely depend on Laura no matter what. Karen has always been a fabulous daughter. I will always cherish our time together and the sound of her laughter. And now Karen has her two guys, Mike and Emmet. I get so much pleasure seeing Mike and Karen together and seeing them playing with Emmet. And I'm so glad that Mike has such a terrific family.

I always felt very lucky to be at Cal Poly. I learned so much. I enjoyed interacting with the students. I sparred with a few faculty but overall made some very good friends.

I really enjoyed living in Claremont. It took a little while to get used to after growing up in San Francisco but now I really like it. I especially like our house being around the corner from the park.

Alan's words are indeed poignant, and complete our snapshot of his life, how he viewed it, and how he was viewed by others. I thank Laura and Karen for providing much of the information. Before handing the microphone to others to share their thoughts, Chris Caenepeal from Cal Poly's College of Engineering will read Psalm 23, which Alan liked very much.

The LORD is my shepherd; I shall not want.

He maketh me to lie down in green pastures: he leadeth me beside the still waters.

He restoreth my soul: he leadeth me in the paths of righteousness for his name's sake.

Yea, though I walk through the valley of the shadow of death, I will fear no evil: for thou art with me; thy rod and thy staff they comfort me.

Thou preparest a table before me in the presence of mine enemies: thou anointest my head with oil; my cup runneth over.

Surely goodness and mercy shall follow me all the days of my life: and I will dwell in the house of the LORD for ever.

Karen will now describe some of the many enduring non-material gifts she received from her father.

Gifts From My Father

Written on April 27, 2008. By Karen Felzer

1. *How to love. How to love deeply, unconditionally, and always, from the very center of your being. How to marvel continuously that someone is yours, and that they are so amazing and wonderful.*
2. *How to laugh. And how to find the humorous wherever it is hiding.*
3. *How to enjoy a good Sunday morning sitting on the front porch and staring at the trees, the lizards, and the scrub-jays.*
4. *How to enjoy a really good plum from the backyard tree. And how to enjoy a really good backyard tomato.*
5. *How to love San Francisco.*
6. *[..]*
7. *How to stick by what you believe in, research and see it, let the chips fall where they may.*
8. *How to enjoy a good walk.*
9. *How to play catch.*
10. *How to serve a volley ball.*
11. *How to do careful research, critical thinking, double check the math, and use the right statistics.*
12. *How to re-write re-write re-write...*
13. *How to be a good teacher. How to be a teacher who really works at the craft and really focus on the students.*

14. *How to listen to constructive criticism and really improve your work from what others tell you (yes, I know that teaching me this was a struggle!)*
15. *How to have joy in life.*
16. *How to be a good friend.*
17. *How to enjoy a good book.*
18. *How to Do the Right Thing.*
19. *How to have a close family.*
20. *How to talk back and forth and have so much joy in talking with each other.*
21. *How to enjoy classical music.*
22. *How to accept what in life cannot be changed, and how to live to the fullest every minute that can be lived.*
23. *How to find true love.*
24. *How to savor every minute with a loved one.*
25. *How to love your children.*
26. *How to be there for your children. Always, Always, Always.*

My wife Ellen will now read a relevant memorial poem, whose author is not known.

You can shed tears that he is gone,

Or you can smile because he lived.

You can close your eyes and pray that he will come back,

Or you can open your eyes and see all that he has left.

Your heart can be empty because you cannot see him,

Or you can be full of the love that you shared.

You can turn your back on tomorrow and live for yesterday,

Or you can be happy for tomorrow because of yesterday.

You can remember him and only that he is gone,

Or you can cherish his memory and let it live on.

You can cry, close your mind, be empty, and turn your back,

Or you can do what he would have wanted,

smile, open your eyes, love and move on.

Michelle Horswill-Johnston, a former teacher of Karen's – who married Karen and Mike – wrote on January 27, 2009:

I love you, Alan. I love you so much.

I can't ever thank you enough for all you did for me and my career and my understanding of life. I have a candle lit on my desk right now in your honor. You were an extremely gifted visionary in the field of education. I have truly been blessed knowing you.

With love and hugs as you go forth onto your next chapter,

Michelle Horswill-Johnston

Now, I would like to invite others to say whatever thoughts they would like about Alan in a continuation of this *Celebration* of Alan's life. [This segment went on for about one hour, with many heartfelt, moving statements from friends and family.]