



Bertram (Chip) Bruce

Survey for the Class of 1968 50th reunion commemoration book

Career and Retirement

After Rice, I went directly to graduate school at UT Austin, finishing with a PhD in Computer Science in 1971. My first full faculty position was in Computer Science at Rutgers University, for three years. I then became a Principal Scientist at Bolt Beranek and Newman (BBN) in Cambridge, Massachusetts for 16 years. This was a high-tech, research firm, where I got to see a lot of early Internet development. I played volleyball with the guy who chose the @ sign for email.

In 1990, I moved to the University of Illinois, where I taught in Curriculum & Instruction, with appointments in Bioengineering, the Center for Writing Studies, and the Center for East Asian & Pacific Studies. After ten years I switched my primary appointment to Information Sciences. During 2007-08, I held a Fulbright Distinguished Chair at the National College of Ireland in Dublin. Over the years, I've taught courses in Australia, Finland, Sweden, Turkey, Germany, and Nepal.

My early focus of research was artificial intelligence, especially computer natural language understanding. I later began to work on applying computers in education. I developed computer software, such as Quill, for teaching reading and writing, and helped implement that in village schools in Alaska. My three trips there were very significant for me and led to one of my books.

I began to broaden my work to include literacy, math and science education, generally, and especially to promoting democratic, or progressive education. This drew inspiration from the work of progressive educators and philosophers such as John Dewey and Jane Addams, as well as international work not so well known in the US, such as Célestin Freinet in France.

Much of my later work was in marginalized communities, especially with teenagers. My projects helped them use new digital technologies to address problems they identified in their own communities. One example was in an African American community, where middle-and high school aged youth would create online maps containing oral histories they had done with older community members.

Right now, I am doing

I live with my wife Susan in Wellfleet, Massachusetts, where we enjoy a great natural and cultural environment here—hiking in the forests or along beaches, canoeing, observing diverse wildlife, gardening, enjoying arts and music, film, and literate life. We're active with the conservation trust, the library, and other community organizations.

We participate in local Town Meetings, a climate mobilization group, work on environmental sustainability, and other political activities, but are not nearly active enough for the level that seems needed today.

I am in the midst of several book writing projects and teach in various formats—regular semester courses, short courses, and online. We travel a good amount, including two and three month work projects in Nepal, where I've led workshops on progressive education.

Share your story of how your Rice journey has taken you far

I was, to put it gently, a poor student at Rice, especially in the first couple of years. I failed to respond productively to the very freedom that I've espoused in my work on democratic education. Despite that, I learned things from coursework and other students that I rely on every day. Even my "wasted" time taught me a lot about myself. I can't imagine a better university experience.

Name something you still have from your Rice days

Class ring, beer-bike race shirt, photos, come to mind, but many of us have those kinds of things.

Memories, of course. I still refer to books, such as Prof. Radoslav Tsanoff's *The Great Philosophers*. But I think the strongest takeaways are images, such as of Prof. Joseph Davies befriending me on a pre-college visit and arguing passionately for international government. Perhaps Rice's smaller size encouraged that kind of cross-disciplinarity, extending well beyond the classroom hours.

Enduring Rice Friendships

There are too many to list here. During graduate school, I shared a house with three Rice classmates: Dan Hyde, Gary Shapiro, and Roy Scudday. They were in law school, while I was in computer science. I remember being called on as the "reasonable man" for some of their assignments, especially for torts class. Mickey and Margaret Alexander are long-time friends and almost neighbors in Massachusetts; Phil and Lillie Crowley are also enduring friends, despite living way off in Kentucky.

Classmates would be surprised that I...

When I entered Rice, I had traveled only briefly to Canada and Mexico, never even to Europe, or exotic places like California and New England. I spoke with a strong Fort Worth accent, and frankly didn't know much about anything. I wasn't even much of a sports guy, as most Texan males

were expected to be, so I really appreciated the PE class introduction to a different sport each week.

Rice helped me to understand that there was a lot to learn, even if I was slow to pick up. It made me more open to learning from other cultures, other languages, and ways of being. I've been blessed since with opportunities to live and work in settings I'd only imagined during college days and the good health to experience them.

My most exciting adventure so far

Two weeks before my senior year in high school, I went with an Explorer Post group on a wilderness canoe trip in the Quetico Provincial Park, just north of Minnesota. We paddled all day, carried canoes between the lakes, enjoyed the Aurora Borealis at night, and discussed the big questions of life around the campfire.

Near the end of the planned trip, a sudden storm came up. To escape the waves, we pulled into a cave on the side of the lake. Lightning struck a tree at the top of the cliff, ran down the rock, and shattered our guide's canoe. He was killed instantly, and two boys were severely injured. If I hadn't released my hold on the cave rock just before the lightning, all 12 of us might have died.

The tragedy seems fresh in my mind, even today. It was, of course, frightening and sobering. However, the trip as a whole, also held beauty, adventure, and insights about nature, religion, politics, and friendships. It shaped who I am today.

Two years ago, Susan and I retraced that earlier trip, taking much the same route that I had done 53 years before. This time, we did it earlier in the season when there was still ice on the smaller lakes. We had some challenges with wind, cold, and sore muscles, but fortunately we didn't experience any lightning. I wrote about the two trips in *Outpost* magazine.

Travel

My work has led me to collaborate on extended projects in China, Australia, Haiti, Turkey, France, Germany, Ireland, Romania, Finland, Sweden, and many other places. Three of these were year-long projects abroad, and others were for one to several months.

Recently, I helped set up the *Progressive Educators Network of Nepal* , which brings together teachers, engineers, development workers, and others who see learning as part of full participation in society and the natural world, rather than as individualized learning removed from the daily life. This has been carried out through two-three month-long trips to Nepal in Fall 2016, Spring 2018, and Winter 2019 (scheduled). The most exciting part has been the work, but we've also had the chance to do what I consider daunting climbs in the mountains. Nepalis would consider those to be gentle walks in the woods.

Community and volunteer involvement/hobbies/interests

Susan and I do many outdoor activities, including canoeing, hiking, beachcombing, sailing, and bird watching. We've worked on various nature projects, such as counting endangered river herring, CoastSweep, the Food Forest Initiative, and beach plant phenology. I've served on the boards of the local library and also the conservation trust, managing its website and making trails.

I enjoy many kinds of music. For many years I've found myself somewhere in the broad range of intermediate piano, with special interests in classical, jazz, and country-western music.

We spend a lot time with our children. Emily is an assistant professor of history at the U. of Minnesota, Morris. Stephen is a PhD student in Slavic Languages and literature at Columbia. They're both deeply engaged in music and community, and give us hope for saving a world we haven't served so well.

Anything else that you want to share