Frank Curran: An Appreciation and Remembrance

Jim Gips

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EagleEyes is a technology that two colleagues, Peter Olivieri of the Computer Science Department and Joe Tecce of the Psychology Department, and I developed in 1991.

EagleEyes allows people to control the computer by moving their eyes. It works through five electrodes that are placed around the eyes. The electrodes sense horizontal and vertical movements of the eyes in the head. The electrodes are connected to two electrophysiological amplifiers, which are attached to a data acquisition board in the computer. Special software that we developed allows the mouse pointer to be moved by movements of the eye. Look left and the mouse pointer moves left. Mouse clicks are specified by "dwell time". Look at a certain spot on the screen for half a second and a mouse click is generated.

This all sounds very technical and so it was. We had no purpose in developing EagleEyes other than that it seemed cool to be able to control the computer through electrodes by moving your eyes. We didn't know what to do with it. We wrote up a paper for a professional conference and used the technology to play video games. The paper caused some buzz in the media. A few months later we were nominated for a Technological Innovation Award in Discover magazine. Discover is part of Disney. They sent a film crew to Boston College to film people using EagleEyes. The producer wanted to know of what use the invention was. We said we used it to play video games. He said "No, really …" We said maybe it would help people with disabilities. He asked if we could find someone with disabilities to use it.

The Campus School is part of the School of Education at Boston College. The Campus School has 42 students between the ages of 3 and 21. These are youngsters with multiple, profound disabilities. I contacted Phil DiMattia, the Director of the Campus School, and we had a student there try out EagleEyes in front of the camera crew. She did amazingly well.

After the crew left we started talking seriously about collaboration. Truth be told I was very uncomfortable at the Campus School and had avoided it throughout my years at Boston College. I could not handle seeing 42 children and young adults with profound disabilities. For me it was like visiting Calcutta for the first time. Too emotionally overwhelming; too much human misery, at least that is how I perceived it initially.

Phil immediately suggested that Frank Curran take charge on the Campus School side. We set up an EagleEyes facility in a large room in the Campus School. I and my students were in charge on the technical side. We ran the people on EagleEyes, at least in the beginning, and provided technical support and made technical improvements and developed new software. In the morning we had students in the Campus School use EagleEyes. In the afternoon, as word spread, we let children and young adults, indeed anyone, from the greater Boston area and then from around the country use EagleEyes. Frank was the anchor. Frank was the reason the project succeeded in drastically improving the lives of so many youngsters with profound disabilities and their families.

Frank Curran is the most astonishing person I have ever met. Frank treated every person who came through that door, parent and child and caregiver, indeed every person he ever met, with the utmost reverence and respect. Frank treated every person as sacred.

This isn't to say he was stuffy. Just the opposite. He was not embarrassed to play his toy ukelele and sing silly songs when someone needed a rest from EagleEyes or we were waiting for a caregiver or just when he felt like it.

Frank knew the life story of the woman who picked up the trash. He knew that the guard at the gate of the parking lot had once played on the line for Bear Bryant at Alabama.

We met children and young adults whom just about everyone had given up on. They couldn't speak and had no voluntary muscle control. All they could do is move their eyes. They were rolled in in their wheelchairs. Neurologists, psychiatrists, psychologists might have pronounced that they have the intelligence of a three-month old. Their mothers didn't believe it. Frank never considered it. They have souls. God is in each of them. "There may be damaged senses but there are no damaged intellects." I still hear Frank saying it.

As one of the mothers observed: "When you treat a person as an intelligent being he acts as an intelligent being." People flocked to the room because they wanted to be in Frank's presence. He treated the children and teenagers as intelligent and sacred. They responded accordingly. Often they had shut down for years, maybe for a lifetime. Frank worked with them and treated them with kindness and respect and gradually they emerged from their shells.

Miracles took place in that classroom and still do. I remember being in the classroom when the uncle of a young man with profound cerebral palsy reluctantly visited. He watched his nephew using EagleEyes to move the mouse pointer around the screen, answering questions, picking out objects. He watched how Frank treated his nephew. After a while, the uncle began to weep. "That is my nephew!" he kept repeating. The uncle had never regarded his nephew as a person. From his birth he had been regarded as a non-person by most of his extended family. Now watching him move the mouse pointer around with his eyes the uncle realized that his nephew was an intelligent person. That all these years he had just been locked in to a totally non-responsive body. Through kindness and respect Frank had found the path to unlocking the intelligence of this young man, who had just shut down in the face of so many obstacles and such overwhelming rejection. And the path to his uncle.

Computer Science students would come to me and volunteer to work on EagleEyes because they wanted to help the people using EagleEyes. They would come to my office and say "Please tell me what program to write." I would tell them first they had to do some observation and get to know the people they wanted to help. I would send them over to Frank so they could get to know the people in the wheelchairs using EagleEyes and their caregivers and the process of using EagleEyes and see what software was being used. After a couple of sessions at the EagleEyes room at the Campus School, the student would come back to my office and say "You know program X? Why doesn't it do Y?" Or, "Why isn't there a program that does Z?" I would tell them "Now you have your project." Or maybe they would say "I just want to work in the EagleEyes room," which was fine.

The students who wrote software and worked with Frank contributed tremendously to the effort. But I knew that what they would personally gain would far outweigh their important contributions. Being in the EagleEyes classroom with Frank was a life-changing experience. The students would emerge as different people than when they entered.

"When the heart is touched by direct experience, the mind may be challenged to change. Personal involvement with innocent suffering, with the injustice others suffer, is the catalyst for solidarity which then gives rise to intellectual inquiry and moral reflection. Students, in the course of their formation, must let the gritty reality of this world into their lives, so they can learn to feel it, think about it critically, respond to its suffering and engage it constructively." -- Rev. Peter-Hans Kolvenbach, S.J., Superior General of the Society of Jesus, in a talk at Santa Clara University, October 2000.

The world shifts in perspective when you work with children in wheelchairs and when you work with a person like Frank and feel the radiance of his soul, when you feel that he recognizes the radiance of the soul in you and everyone else. You cannot help but be a kinder, stronger person because Frank Curran just knows that is the person you are and treats you accordingly.

Frank was my spiritual mentor. It was nothing formal or stated. I would stop in the room every day ostensibly to see how the equipment was working but actually to be in Frank's presence. With his clear example but with only the very subtlest of nudges and hints from Frank, my attitude went from one of hidden fear at being in the presence of the children to empathy with their parents (I could have a child with disabilities like that) to empathy with the children (I could have disabilities like that; they could be me) to a sense of oneness with the children (they are me; I am them). I feel only part way down the path of my spiritual journey.

Frank's death was a terrible loss. He touched so many lives in such important ways. The chapel was filled to overflowing at his funeral. There were students and former students from the Campus School and their families. Many of the Computer Science undergraduates who had worked with Frank and had since graduated were there. Of course I knew only a small corner of Frank's life so there were many, many people there I had never met. Everyone was grieving. Everyone was in shock. The holiest man I ever knew had died.