

Diane Sullenberger: Learning and Training



Diane Sullenberger, the executive editor of the *Proceedings of the National Academy of Sciences of the United States of America* (PNAS) in Washington, DC, has a passion for learning that motivates her at work and in her free time. When she took her border collie–Labrador retriever puppy, Parker, to dog-training class more than 8 years ago, Sullenberger became intrigued by the positive-reinforcement methods used in the class and the animal behavior and learning theory behind them. That was how she found her second calling, as a pet-dog trainer.

Sullenberger apprenticed at the dog-training center while studying for her pet-dog trainer certification from the Association of Pet Dog Trainers. During her 6-month apprenticeship, Sullenberger says she learned a great deal about animal handling, instructing people, basic veterinary issues, and animal behavior. “My interest in dog training is in the science and the learning theory behind [it],” Sullenberger says. “It’s fascinating.”

The examination for the certification tested a wide knowledge base, covering teaching skills, animal nutrition and diseases, ethology, classical and operant conditioning, and reinforcement training. Sullenberger says it was “a nice challenge to study so many fields that influence dog training”. She has since dedicated herself to teaching others what she has learned as a Certified Pet Dog Trainer.

Laura Sharkey, owner of WOOFs! Dog Training Center, where Sullenberger has been teaching one or two nights a week since 1999, explains that dog training is “half nuance and communicating with people and dogs, but the other half is science based on learning theory”.

Sharkey and Sullenberger met while working as trainers before Sharkey purchased the dog-training center from its previous owner. Although Sharkey is now the center’s owner and Sullenberger an employee, their relationship has remained more of a friendship, and Sharkey values

her friend’s commitment to WOOFs! “She stayed on during the transition from one business to another and helped us to grow and change.”

Sharkey, who has implemented new teaching methods to keep the material fresh and progressive, attributes much of her knowledge in the field to Sullenberger. “Understanding how creatures—humans, dogs, dolphins—learn is critical to being a successful dog trainer,” Sharkey says. “Diane understands that, is up to date, and is always sending me the most recent research in the field of animal learning.”

Sullenberger’s devotion to learning, consistency, and commitment to her classes are important, according to Sharkey. “She’s helped a lot of people and a lot of dogs,” Sharkey says. “She’s a great trainer to have on my team and she’s a very important member of my staff. I hope she never leaves me!”

Eager Editor

Sullenberger’s love of learning has also been an asset in her editing career. After graduating from James Madison University in 1986 with a double major in biology and English, Sullenberger enrolled in graduate school for microbiology but, before classes started, instead decided to try her hand at publishing. She landed a job as editorial assistant for the National Academy of Sciences quarterly science-policy magazine, *Issues in Science and Technology*.

By 1989 Sullenberger had become director of publications for the Society for Neuroscience. She implemented the society’s first desktop publishing system, with which she managed the society’s newsletter. She left to pursue other opportunities in publishing after 2 years, acting as managing editor for both Fidia Research Foundation and CSR, Inc.

In 1993, Sullenberger was asked to return to the Society for Neuroscience as a science writer, and she agreed. But before she returned, the society decided to self-publish the *Journal of Neuroscience* and thought she would be a good person to organize and oversee the effort. She became director of publications, creating the society’s first journal department and first online jour-

Other Than Editing

continued

nal. “The Society for Neuroscience was a door opener for me,” Sullenberger recalls. “Working there was very exciting. The neuroscience research and the journal itself were really cutting-edge.”

While at the Society for Neuroscience, Sullenberger met Morna Conway, founder of The Conway Group, who as a consultant was helping the society to move its journal in house. The two struck up a relationship that has enriched their professional and personal lives. “Morna has been a tremendous influence on my career over the years,” Sullenberger says. Conway recalls their first meeting fondly: “The first time we met we had a lot in common—a great love of horses and dogs. We were kind of kindred spirits.”

Conway introduced Sullenberger to CSE (then CBE) in 1995 and encouraged her to join the Membership Committee. Conway also convinced her to join the faculty of the Short Course for Journal Editors, which Sullenberger says has been a high point of her experience in CSE. “I learned a lot about what editors need to know about publishing, about how to structure and give a presentation, and about the concerns of incoming editors,” Sullenberger says. For her, the learning involved in that endeavor was as rewarding as the teaching.

In the next year, Sullenberger was hired as managing editor of *PNAS* as part of a reinvigoration of the journal. According to Ken Fulton, executive director of the National Academy of Sciences, this revitalization represented the start of a “new era” for *PNAS*. He was appointed as the journal’s first publisher shortly before Sullenberger joined the staff.

Fulton says Sullenberger has had a substantial impact at the journal. “She’s really imaginative about the ways in which the journal can operate and how the organization of the staff can work better,” Fulton observes. “She’s vastly knowledgeable about virtually every aspect of science publishing.”

The journal gained momentum, and “it became obvious that we needed an executive editor who could manage the entire office process,” Fulton says. So the

position of executive editor was created, and Sullenberger naturally slipped into the role. “As I gained experience at the journal, I grew into the position of executive editor, which combined the editorial aspects of the position with the publishing aspects—financial, marketing, subscriptions, advertising, and so on,” Sullenberger says.

Fulton describes Sullenberger as having impeccable taste. “Her taste in terms of science and publishing and what’s right is a great asset in her position,” Fulton says. “She is willing and eager to learn from others. I’m thankful every day that Diane is at *PNAS*.” According to Fulton, it is this eagerness to learn that makes Sullenberger so valuable because it allows her to make important and imaginative improvements in the journal.

Since joining the staff at *PNAS*, Sullenberger has streamlined the production process and reduced turnaround times. She also was responsible for launching the online journal and a recruiting program for papers outside the biologic sciences.

Bridles and Bikes

Horses, like most animals, have been a lifelong interest of Sullenberger’s. As a teenager, she took a few horseback-riding lessons, but she began working closely with horses only about 5 years ago. She now volunteers with the US Park Police Horse Mounted Unit in Washington, DC, doing everything from basic barn and stable work to helping the officers by riding and exercising their horses.

An encounter with one especially pushy horse, named Newcastle, prompted Sullenberger to take some of her expertise in dog training to the stables. Because learning theory can be applied to many animals (Sullenberger had previously tried to train her cat, with somewhat limited success), Sullenberger attempted to train a few horses by using the same techniques and tools. “I started to introduce Newcastle to the clicker we use in dog training to mark desired behavior. I wanted him to stop shoving me with his head and trying to bite when I opened his stall door, so I clicked and gave him carrots if he turned



his head away from me when I entered his stall. It was interesting so see the light turn on in his head when he found that he would be rewarded for not being pushy.”

Another recently renewed interest is motorcycling. After learning to ride in 1990 and letting her riding skills lapse, Sullenberger started riding a Ducati motorcycle in 2004 and is now active with a large group of Ducati riders in the DC area. She’s taken some riding courses at Virginia International Raceway and expects to take a few more “to get some of the technical issues like visual reference points, corner entry speed, and lean angle nailed down”, she says.

But this hobby isn’t all speed and danger for Sullenberger. “Once I started motorcycling, I found I really enjoyed reading books about the physics of motorcycling and understanding how the machine operates,” she explains. Sullenberger says understanding the technical aspects of riding and maintaining a bike are almost as important to her as the actual riding.

Laughing about her obsession with learning the theories behind, well, everything, Sullenberger revealed a secret: “A friend once told me I can’t just have a hobby; it has to be a job.” Whether she is engaged in editing or absorbed in an avocation, the pursuit of excellence through learning drives Diane Sullenberger to learn the science behind all that she does.

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