

In This Issue



A few years ago, I spent a couple of days driving from meeting to meeting with a woman responsible for coordinating critical activities of a large organization. She spent a lot of the travel time talking on her cell phone and wondered aloud how her predecessors managed the job before that technology was available. But then she added, “The problem with cell phones is they make you think you’ve had a conversation.”

That remark comes to mind now because so many of the articles in this issue of *ASK* make the point that successful communication involves much more than sending messages by phone or e-mail and assuming you’ve been heard and understood. What needs to be communicated is often more varied, complex, and subtle than the exchange of words those media allow. In “Managing a Critical, Fast-Turnaround Project,” Kim Ess discusses the importance of full and honest communication with management and within the team and emphasizes the importance of meeting in person and traveling to the NASA and contractor sites where the work is being done. Given the availability of intranets, e-mail, and videoconferencing, leaders of some organizations think traveling to talk to someone is a waste of time and money, but Ess understands that *being there* is the only way to fully know what’s going on (including the things people are afraid to mention) and to create the trust and mutuality that teamwork depends on. All of that supposedly inefficient travel made it possible to build the Orbital Boom Sensor System quickly and well.

Richard Shope (“Communicating Science”) says that communication between scientists includes not only words and images but body language and vocal qualities that help express ideas and the emotions connected with them. (Eugene Meieran and Harrison Schmitt’s “Imagination, Motivation, and Leadership Make Visions Real” implies that communicating passion and commitment is essential to great accomplishment.) Shope also notes that asking

the right questions is key to understanding. That raises an essential point: good communication involves talking *and* listening. In this issue’s interview, Eileen Collins emphasizes the importance of genuine listening—that is, really hearing and considering what people say (as opposed to just letting them talk when your mind is already made up). Listening means openness to new ideas from new sources. That kind of openness allowed the Space Infrared Telescope Facility project team to develop a new, dramatically less expensive plan for getting their instrument far enough from the earth (“Finding a Way: The Spitzer Space Telescope Story”).

Brian Cooper’s description in “Learning to Drive the Mars Rovers” of what trainees go through before they are allowed to direct Spirit and Opportunity, the Mars exploration rovers, shows that communicating complex skills goes far beyond conversation, though conversation with veteran “planners” (as they are called) is part of how they learn. In this case, the communication process includes the experience of analyzing transmissions from the rovers, practicing by way of simulations, and observing and then being observed by people who do the job.

Vincent Bilardo reports in “Seven Key Principles of Program and Project Success” that NASA’s Organization Design Team identifies facilitating “wide-open communication” as one requirement for successful projects. This issue of *ASK* makes clear that communication involves observation, attention, and openness as well as talking or writing, and it includes conversation in the way my colleague with the cell phone meant the word: a social act of speaking and listening that, through the sharing of ideas, fosters trust, understanding, and cooperation.

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