

We need a citizens' forum on science and technology

BY GARY CHAPMAN

Last month, the University of Texas at Austin, where I work, was host to a unique and potentially historic gathering of citizens. Four hundred and fifty-four Americans of all ages, all walks

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of life and many points of view assembled at the National Issues Convention to discuss the broad themes of this election year. The process was called a "deliberative opinion poll" by Prof. James Fishkin of the university, who conceived the plan, and was broadcast nationally on PBS.

What stood out most from this experiment was the inspiration it seemed to provide the participants. "It's been a very positive experience — nothing like I ever could have imagined before coming here," Harry Roderburger, a delegate from Blaine, Wash., told the Dally Texan. "We felt refreshed because someone was out there listening to us and cared that we had an opinion," added Mary Schmutz, an office supplies salesperson from Austin. "I'm going home with a new hope for our country," declared Emily Salmons-Pezely of Seattle.

Here's an idea: Why don't we have a national citizens convention about science and technology?

At heart of any vision

Scientific and technological innovation is obviously at the heart of our "national project" today. Any kind of vision we might have for our future is tied to developments in technology. But Americans have about as much say over the direction of science and technology as they do over who should be the king of Tonga. In no other area of public policy is there as wide a gap between the significance of the impact and the opportunities for democratic participation and oversight.

This is not a new problem. President Eisenhower, in his fa-

mous farewell speech of 1961 — the one in which he warned us of the power of a "military-industrial complex" — said a danger to democracy is that "public policy itself could be captured by a scientific and technical elite." President Kennedy followed with this admonition: "Scientists alone can establish the objectives of their research, but society, in extending support for science, must take account of its own needs."

These values of past presidents seem to be lost to history. We now have a "priesthood" of scientists and engineers who, in alliance with corporate executives, shift ordinary people around as if they were markers in a giant board game.

Outside the debate

Technology is transforming the lives of working Americans, but it is still considered outside the boundaries of democratic debate. An out-of-touch priesthood of power was on display at the National Issues Convention. One point of consensus among both the participants and the journalists covering the event was that the quality of discourse was dramatically lowered by the appearance of political candidates, who were invited to speak to, and take questions from, the delegates. Delegates thought the politicians delivered flat, canned answers crafted for generic audiences.

At least politicians have to get out and meet people, however "managed" their campaigns have become. But the growing divisions in our society mean that many scientists and engineers never encounter the people who are affected by what they do.

They are starting to pay a price for their isolation. The American Association for the Advancement of Science has calculated that proposed budget cuts will slash U.S. spending on research and development by a third over the next seven years, creating "thin ice" for the scientific and technical communities.

Already, it's nearly impossible for new holders of doctorates in physics, biology, mathematics and other fields to find jobs. New federal budget cuts could empty out some graduate programs in science and engineering. But the high priests of science and technology cannot turn to the public for help because they haven't bothered to build opportunities for citizens to feel part of the decision making in scientific and technological investment.

Exactly one year before the National Issues Convention, a smaller group of 20 citizens also met in Austin, at my invitation, to map out a plan for a new national citizens forum on science and technology. This is an idea adapted from a recommendation made in 1992 by the Carnegie Commission on Science, Technology and Government. A citizens forum might be modeled on Fishkin's deliberative opinion poll, perhaps with a smaller sample of participants.

There are also working examples in Europe that might be useful models, like Denmark's "consensus councils," in which citizens, recruited through newspaper ads, publicly study and debate issues of science and technology such as the impact of biotechnology on dairy farms. A majority of the members of Sweden's Council for Planning and Coordination of Research are lay citizens.

As the U.S. confronts mounting public controversies in areas such as computers in education, the ethics of biotechnology, workplace automation and access to the information superhighway, it is increasingly important to explore new ways for ordinary Americans to get involved in how we construct our future. Democracy, after all, is more than a creed — it is the best hope for us all.

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