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One of the great things about being in academia is that you never know for sure what each day is going to bring. Just recently I opened a letter from APS Fellow Robert Kleck, chair of psychology at Dartmouth College. He told of plans for the formal dedication, later this summer, of a new campus facility devoted entirely to the Department of Psychology and the Center for Cognitive Neurosciences. After the building is dedicated, there would be a symposium on "Psychological and Brain Sciences in the 21? Century." He wondered whether I could speak for 40 minutes on this subject. Really ?, I thought. Me? Predict the future of psychological science? What do I know about the future? Do I even know five minutes worth, let alone 40?

How do we begin contemplating the future of a discipline? Can we predict with any hope of accuracy? If we could, we'd have a chance to prepare for the future, but many are pessimistic about this entire enterprise. As one analyst put it, "there is no way to rehearse effectively for the future, any more than it is possible to rehearse for a blind date."

Although we might be experienced teachers or researchers, we have little experience predicting the future. Outside our field, however, there are individuals who have lots of experience doing just that and people pay good money to hear them. To see how they do it, graduate student and APS Student Affiliate Jacquie Pickrell and I consulted one best selling volume called *Trends 2000: How to prepare for and profit from the changes of the* 21st *century.* We wanted to find out what the "experts" say will happen in the future, and then speculate on what it might mean for psychological scientists.

First, who are these" future experts?" The author of *Trends 2000*, G. Celente, is a business consultant at Trends Research Institute. The Institute, founded in 1980, includes a consortium of scholars, scientists, writers, and thinkers, who study and analyze a variety of publications to track trends. They track in a wide array of areas "from abortion, agriculture, art and astrology, to video conferencing, voluntary simplicity, walking, water, zoning, and zoos."

Readers of *Trends 2000* are reminded early on that people who predict the future make mistakes, and these can be embarrassing. For example, in the 1960s, futurists predicted that by the 1990s we would be working less than 23 hours a week and would have a great deal more leisure time. This didn't happen. In 1977, the chairman of Digital Equipment made a prediction about computers when he addressed the World Future Society: "There is no reason for any individual to have a computer in their home." He was wrong. Back in the 1970s, some investors backed Beta, but are now wishing they had favored VCRs.

And what about predictions that were not made, and might have even been labeled "inconceivable" just a decade ago. Was anyone predicting that in 1998 the U.S. Postal Service would be handling 600 million pieces of mail daily, but that the average number of email messages sent daily in the United States would be over 2 billion?

Although mistakes in prediction are certainly possible, some of the predicted trends are well underway towards "coming true" and they will have dramatic implications for the lives of psychologists.

For example, Trends Research Institute had predicted a growing revolution in education in the form of "distance learning." Distance learning, they predict, will provide rich opportunities for entrepreneurs, scholars, educators, inventors, and others. Where students learn, how they learn, and what they learn will be transformed. Trends Research Institute invites us to imagine a future in which students can have ready access to resource libraries around the world, without ever stepping out of their dorm room. They won't need to sit in crowded lectures, surrounded by hundreds of classmates, and listen to professors who aren't particularly interested in teaching. Rather, they will have access to the best teachers. Relatively few ever saw William James deliver a series of lectures. Had he lived in the future, hundreds of thousands of psychology students might have this opportunity. In fact, simulcasts of James' lectures could be sent live or recorded in "real time" to a student's personal computer thousands of miles away. The benefits of Interactive University are many, not the least of which is that students can learn at their own individual pace, and they would have more courses from which to choose.

Distance learning could set the stage for distance research. Just as our would-be distance student is gathering information from the lessons conveyed at Interactive University, so the faculty member could gather information back from the student. Mini-experiments could be inserted within the lessons, gathering data from the students before revealing to them the meaning of the manipulations (assuming all the necessary consent issues were ironed out). With the prediction that universities will be downsizing, eliminating jobs, and imposing heavier workloads on faculty, it may be necessary for our successors to find easier ways to gather their empirical data and make the kinds of new discoveries that have invigorated the field in the past.

Another way to think about the future involves the construction of possible "scenarios" or possible future worlds. Simply put, scenarios are devices for helping people to take a long view about the future of our society. Peter Schwartz, one of the leading "futurists," has used scenarios with some of the world's largest businesses and government institutions to help them understand how the world might turn out tomorrow so that they can make appropriate choices today.

One future world is called "The Long Boom," and it would, if realized, have enormous ramifications for the lives of psychological scientists. It is based upon what we already know about technology, especially computers and telecommunication.

The long boom predicts more and more personal computers entering the home (that's an easy one), but more interestingly, with the power of computer chips growing exponentially, everything "comes with a small, cheap silicon brain." So handwriting recognition becomes a snap. Simultaneous language translation is a breeze.

The long boom thinking about education at all levels assumes clear recognition on the part of our political leaders that a strong educational system is vital to our national interest. Entrepreneurs could enter the educational world, devising new schools, new curricula, new teaching methods. In higher education, the adoption of networking technologies may have even greater benefits. Imagine "Project Gutenberg," by the turn of the century, having put tens of thousands of books online. Imagine a world a few decades later where all new books come out in electronic form, and virtual libraries are up and

running. The children who are born today — the future psychologists of tomorrow — will be children who have spent their networked lives steeped in this new technological world.

This future world will change the way we teach and conduct research, but will also bring new problems to solve. How, for example, will we protect the rights of the "inventions" of psychologists, particularly their intellectual property? The sheer magnitude of changes that will accompany our new networked, global scientific community is worth thinking hard about today. It's good to see that important institutions, like Dartmouth, are already taking the initiative to help us do this right.