Much of the research I have done since coming to Hofstra is in the area of policy research. That term puzzles some of my colleagues. What, they ask, is policy research? To me, it is a process involving: (1) identification of a public problem, (2) documentation of the issues involved, (3) development of alternative solutions to the problem, (4) incorporation, to the extent possible, of the views of interested publics, and (5) creation of a solution that both solves the problem and is politically feasible. All of this sounds rather more abstract than it usually is, at least in my experience. The generality of language is necessary because policy research varies considerably from case to case. A few examples may explain more clearly. I begin with one that illustrates the process from start to finish and then continue with another instance of policy research on which I am currently working.

**Television Captioning**

While chairing a commission for Congress shortly before joining the faculty here, I learned from engineers that it was possible to place the electronics of television captions onto a small chip. Such chips were not being made, anywhere. People who wanted captions were purchasing $200 caption decoder boxes and cabling them to their television sets. The public problem was that only 200,000 such boxes had been sold as of 1987. That was far too few. The television industry thinks in terms of tens of millions of viewers. Because captioning a half-hour program cost as much as $2,000, and there were many thousands of hours to be captioned, the industry was beginning to rethink its voluntary commitment to captioning. A representative of ABC told my commission: “Increased decoder ownership — not just more captioning — is required for a strong, self-sustaining captioning service.”

Clearly, what was needed was a way to grow the audience, quickly, to a size that would appeal to producers of television programs and to the networks that distribute those programs. Knowing that television was publicly regulated, members of the commission explored alternatives. We could recommend that Congress subsidize the cost of decoders, thus increasing sales. We could require the networks to caption prime-time programming, notwithstanding the small size of the market. Eventually, the commission settled on a third option.

On behalf of the commission, I asked Senator Tom Harkin (D-IA) if he would introduce a bill requiring that caption chips be built into all new television sets. That, the commission believed, would work. Ten to 15 million television sets are sold annually in this country; within a year or two, it would generate an audience of 20 to 25 million caption-ready homes. Once that was accomplished, captioning would be self-sustaining because the industry would see it as a worthwhile investment.

The senator told me he would introduce such a bill if I could assure him that the industry would not oppose it. I then spent two weeks in Japan and Korea, where the vast majority of televisions sold in this country are made. I met with executives of Sony, Matsushita, LG (then Lucky Goldstar), Mitsubishi, and many others. They told me many things, but their concerns generally revolved around two issues. First, they said, if the requirement for American television sets to have built-in captioning capability were imposed immediately, the costs to retool would be tremendous. However, if the effective date of the requirement were some two years in the future, they could accomplish the task at little cost. Second, they told me, small television sets were priced at cutthroat levels. They wished for television sets measuring 13” or less diagonally to be excused from any requirements.

After returning to the United States, I gave Senator Harkin a memo that included those provisions. It said that as
of mid-1993 (then a full three years away) all television sets measuring 13" or more diagonally that were made and/or sold in the United States had to come with built-in caption decoding capabilities. The senator asked the National Center for Law and Deafness to help drum up public support for the plan. Eventually, the law center produced a list of more than 100 organizations, including literacy advocates, educators, senior citizen groups and, of course, associations of and for people who are deaf or hard of hearing. The bill, called the Television Decoder Circuitry Act of 1990, passed the U.S. Senate and the U.S. House of Representatives without even one "nay" vote. It became law on October 15, 1990.

Zenith, then the sole U.S. manufacturer of television sets, introduced its first caption-ready set in 1991. The other manufacturers soon followed. Today, virtually all television sets are caption-equipped. This is why you can see captions in airports, in bars, in banks — and in every hotel room in America. New immigrants, and students who are English language learners, are using captions to help them learn to read English.

This example illustrates the policy-research process. First, a public policy problem was identified (here, the risk that television captioning might decrease or even disappear). Second, alternative solutions are defined. Third, the views of interested publics are solicited and, if possible, incorporated into a solution. Finally, a solution is generated that is politically feasible, meaning that even its opponents concede that “we can live with this.” I do policy research this way because I have learned from some rather spectacular failures. In 1977, for example, I helped an American auto company develop and demonstrate a prototype for an accessible mass-transit bus. Such R&D is a component of policy research, broadly defined. At the time, no such buses were accessible to people using wheelchairs. As the first executive director of the American Coalition of Citizens with Disabilities (ACCD), then popularly known as “the handicapped lobby,” I had worked closely with the U.S. Department of Transportation to issue regulations requiring buses to be accessible. The concrete reality of a working accessible bus would, I thought, seal the deal. What I did not do was to meet with the manufacturers of mass-transit buses. That was, in retrospect, a fatal error on my part. Their opposition ultimately sank the deal - they won a court order invalidating the Transportation rules. We were to wait 13 more years, until 1990, before accessibility would finally be required in mass-transit buses. I learned my lesson.

As this story illustrates, what makes policy research interesting for me is the challenges of 1) defining a problem and defending my interpretation of it, 2) generating alternative solutions and defending those against other possible solutions, and (most difficult) 3) creating a political basis upon which the desired policy can take hold. My hypotheses, methods and data, as well as my proposed solutions, are studied and either supported or attacked — all in a public forum and usually within a short period of time.

Below, I describe another example of policy research. By way of introduction, note that the Telecommunications Act of 1996 requires broadcasters and cable companies to caption programming. The current requirement (2003) is 50 percent of such programming. By January 2006, all (100 percent) must be captioned. Thus, this law did what the 1990 law did not — because, by 1996, so many people were benefiting from captioning in so many ways that opposition to a mandate to caption programs had dissipated. My recent policy research involves this 1996 law.

Broadband

One of the hottest buzzwords in Washington today is “broadband,” which refers to very high-speed, always-on, multimedia communications. Broadband lets people see each other, in full-motion video, conversing on the phone. They also hear each other, of course. They can even exchange faxes and share other data. So broadband conveys video, voice and data on the same phone line at the same time. It is already available in some localities -- and will become available elsewhere within the next few years.

Telecommunications in this country is governed by the Federal Communications Commission (FCC), an independent federal regulatory agency. The FCC is, in turn, governed by Congress, notably by the Commerce committees in the House and Senate. The FCC has proposed that because broadband is a new technology, one that the nation wants to encourage to develop as rapidly and as widely as possible, the proper regulatory stance is "hands-off" -- to use the jargon, broadband is an information service, not a telecommunications service. Information services, including the Internet and most of what is conveyed over it, are almost 100 percent unregulated. Telecommunications services, by contrast, are heavily regulated.

This strikes me as fine as far as it goes. However, it falls short on one measure important to me: it means that broadband would develop without being accessible to and useable by tens of millions of Americans with disabilities (see, for example, Bowe, 1993). For more than a quarter century, I have advocated for accessibility and for nondiscrimination on the basis of disability. The policy problem, for me, then, was: How can broadband be required to offer disability access while remaining unregulated in most other respects?

I became engaged with broadband when the U.S. House of Representatives prepared to vote on a bill that would deregulate broadband. The bill's wording could be read, in one interpretation, as undercutting a provision in the 1996 Act that was important to Americans with disabilities. This was section 255, in title II of the Act. Section 255 requires telecommunications products and services to be accessible to and useable by people with disabilities. One provision of the House bill could be interpreted as revoking those requirements. Since the bill was ready for a floor vote by the time I recognized this threat, all I could do was to write “colloquy” language for use during the floor debate preceding the full House vote. Working with the general counsels for the majority and minority staff of
the House Energy and Commerce Committee, I prepared a scripted dialogue between the bills floor manager and the ranking minority member of the authorizing committee. In the colloquy, the two agreed that the offending provision did not affect section 255 in any way, shape or form. Committee Chairman Billy Tauzin (R-LA) and ranking member John Dingell (D-MI) concurred with this colloquy language. Then, shortly before the floor vote, an amendment prepared by Tauzin placed my interpretation into the legislation itself, obviating the need for colloquy language. The bill passed the House in December 2001.

All we had done there was to play defense: to protect what was already in law. It was time to start playing offense. Could we extend the requirements of section 255 to cover broadband? Telecommunications attorney Karen Peltz Strauss helped me and others to draft legislative language for this purpose. This new language would require manufacturers of equipment used for broadband, and providers of broadband services, to make their offerings accessible, unless the manufacturers or providers could demonstrate that doing so would impose an undue burden on their businesses. That would represent a step forward — manufacturers and providers of broadband-related products and services would have to take affirmative steps to be sure devices and services were accessible.

Karen and I shared the draft wording with leaders of major disability organizations, including the American Association of People with Disabilities, the American Council of the Blind, the American Foundation for the Blind, the National Association of the Deaf, Self Help for Hard of Hearing People, and TDI. The association leaders supported our efforts. The next step was to meet, accompanied by representatives from these groups, with industry executives. Those officials’ companies would have to spend money to comply with the requirements were these to be enacted into law. We did not expect industry representatives to embrace our proposals. However, we were encouraged by the positive response of some leaders to our efforts. The next step was to meet, accompanied by representatives from these groups, with industry executives. Those officials’ companies would have to spend money to comply with the requirements were these to be enacted into law. We did not expect industry representatives to embrace our proposals.

What we hoped for was what we got: a commitment from them not to oppose our language.

Most Americans know what captions are. The technology is not complex. “Broadband” communications, by contrast, are not well-understood. Many people who would benefit from broadband either do not know what it is or do not recognize that it is right around the corner. If people have seen broadband at all, they have noticed it in futuristic movies such as the “Star Trek” series. Even those viewers tend not to understand that what they are seeing are telephones rather than television sets: broadband is a telecommunications technology, one that connects people over phone lines. Thus, I thought, there was a need to explain broadband to its potential interested publics. A report I wrote, Broadband and Americans with Disabilities, was published in May 2002. It described the technology, outlined the issues, and proposed several possible policy alternatives. The paper was distributed widely in Washington: to Congress, the White House, the FCC, the U.S. Department of Commerce, and to key advocacy organizations headquartered in the nation’s capital. Together with the disability group leaders, I met with FCC, Commerce and Congressional staff to give them copies of the report, explain our needs and answer questions raised by the policy paper.

The next step was to get our language introduced into a bill. Because I was already talking with the staff of Senator Edward Kennedy (D-MA) about other legislation (the Individuals with Disabilities Education Act), I approached them with the disability language. At about the same time, Karen took this language to the staff of Senator John McCain (R-AZ). Both Senators agreed to place our provisions into broadband bills they were writing. Senator McCain acted first. (See sidebar: “Disability Language in Senator McCain’s Bill.”) The disability groups celebrated this development, issuing press releases heralding the appearance in a formally introduced piece of legislation of language requiring broadband products and services to be accessible to and useable by Americans with disabilities.

Because 2002 was an election year, the Congressional calendar was shortened to the extent that lawmaking did not occur, even with a House-passed bill. However, the fact that Senator McCain — in 2002 the ranking member and in 2003 the chairman of the Senate Commerce committee and a major player in Washington due to his strong showing in the 2000 presidential primaries — had put forth a bill containing disability requirements sent a strong message to the FCC.

Accordingly, advocates focused their energies upon the FCC for the balance of 2002 and in the first months of 2003. First, the House committee counsels for the majority (Republican) and minority (Democratic) were asked to communicate to the FCC their support for the McCain disability language. Second, the Broadband paper was widely circulated among opinion leaders in Washington. Those leaders were asked to tell the FCC that they, too, support the McCain language. In-person meetings were arranged with Commissioners Abernathy and Copps at the FCC.

As this is written, the “word” from
the FCC is that both commissioners and staff are now aware of the need for disability access. They have documentation in hand demonstrating that disability access is needed. They have told advocates that they are working on ways to provide that access.

References


Disability Language in Senator McCain’s Bill
The Consumer Broadband Deregulation Act (S 2863), August 1, 2002

Section 3 of the bill creates a new Title VII, which contains a Sec. 704, Access by Persons with Disabilities, which reads:

Section 704. ACCESS BY PERSONS WITH DISABILITIES

(a) Manufacturers.--A manufacturer of equipment used for consumer broadband services shall ensure that equipment is designed, developed, and fabricated to be accessible to and usable by persons with disabilities, unless the manufacturer demonstrates that taking such steps would result in an undue burden.

(b) Consumer Broadband Service Providers.--A provider of consumer broadband services shall ensure that its services are accessible to and usable by persons with disabilities, unless the provider demonstrates that taking such steps would result in an undue burden.

(c) Compatibility.--Whenever the requirements of subsections (a) and (b) constitute an undue burden, a manufacturer or provider shall ensure that the equipment or service is compatible with existing peripheral devices or specialized customer premises equipment commonly used by persons with disabilities to achieve access, unless the manufacturer or provider demonstrates that taking such steps would result in an undue burden.

(d) Regulations.--Within 18 months after the date of enactment of the Consumer Broadband Deregulation Act, the Commission shall prescribe such regulations as are necessary to implement this section. The regulations shall ensure consistency across multiple service platforms with respect to access by persons with disabilities. The regulations also shall provide that neither broadband services, broadband access services, nor the equipment used for such services may impair or impede the accessibility of information content when accessibility has been incorporated in that content for transmission through broadband services, access services, or equipment.

(e) Definitions.--In this section--

1. Disability.--The term ‘disability’ has the meaning given to it by section 3(2)(A) of the Americans with Disabilities Act of 1990 (42 U.S.C. 12102(2)(A)).

2. Undue Burden.--The term ‘undue burden’ means significant difficulty or expense. In determining whether the requirements of this paragraph would result in an undue burden, the factors to be considered include--

(A) the nature and cost of the steps required for the manufacturer or provider;

(B) the impact on the operation of the manufacturer or provider;

(C) the financial resources of the manufacturer or provider; and

(D) the type of operations of the manufacturer or provider.

Frank Bowe has advised the U.S. Senate, U.S. House of Representatives, and Executive Branch agencies on federal disability policy for more than 27 years. In 1992 he received the Distinguished Service Award of the President of the United States for lifetime achievement in this field.

As the first executive director of the American Coalition of Citizens with Disabilities (ACCD) in the mid-1970s to early 1980s, Dr. Bowe was instrumental in achieving historic civil rights gains for people with disabilities. His civil rights work was widely reported in *U.S. News & World Report* and *The Washington Post*, among other publications.

Professor Bowe earned a B.A. summa cum laude from Western Maryland College (later renamed McDaniel College), an M.A. from Gallaudet Graduate School and a Ph.D. from New York University. All three of Professor Bowe’s alma maters have recognized his professional achievements. He received the Distinguished Alumni Achievement Award from New York University, the Trustee Alumni Award and the Distinguished Alumni Award from McDaniel College, and an honorary doctor of laws (LL.D.) from Gallaudet College (now University).

At Hofstra, Professor Bowe teaches courses on the Individuals with Disabilities Education Act (IDEA), physical and sensory disabilities, technology and disability, and inclusion. In 1996 he received the University’s Distinguished Teaching Award.

Professor Bowe has authored more than 30 books and has an extensive list of publications that focus on social policy on age and disability, demographics, and public interest advocacy. His recent journal writing focuses on information age technologies and their role in empowering Americans with special needs.

Professor Bowe’s professional accomplishments have been featured in *Who’s Who in the World, Who’s Who in America*, and *Who’s Who in American Education*, among other directories. In 1991 he received the Americans with Disabilities Act (ADA) Award for his role in enactment of that landmark legislation. In 1994 he was inducted into the National Hall of Fame for People with Disabilities.

In addition to having received numerous prestigious awards throughout his career, Professor Bowe is currently a Mary E. Switzer Distinguished Fellow, conducting policy research in rehabilitation.

[6]