Technology- NIST

GOP, Democrats Squabble Over Technology Lab, Which Some Economists Have Labeled Irrelevant

By Bob Davis
Staff Reporter of The Wall Street Journal

GAITHERSBURG, Md.—The National Institute of Standards and Technology is a most unlikely ideological battleground. The government lab was founded during the McKinley administration to make precision measurements used to calibrate scales and gauges. NIST's director says it should be renamed "Nerds 'R' Us."

But Democrats and Republicans use NIST to showcase their opposing views on technological development. Clintonites want to remake NIST into an industrial policy hotbed that would offer grants and advice to deserving companies and jumpstart a lagging economy. Republicans try to slash the lab's budget, arguing that the economy could swoon if the government stumbled picking technological "winners and losers."

Now the battle is getting bloodier. The House voted this month to kill NIST's $200-million advanced technology program, which makes grants to companies trying to develop such commercial technologies as electronics or biotechnology. House Budget Committee Chairman John Kasich, an Ohio Republican, derided the program as "corporate welfare." But the program's death is far from certain. The administration vows President Clinton will veto the bill unless the money is restored, and the Senate has approved full funding. A final budget showdown is at least a month away.

Missing the Point

A number of leading economists, though, say that both sides have missed the point during the NIST debate. Rather than spark or short-circuit economic growth, NIST has become largely irrelevant. For an information-age economy, they say, producing highly skilled researchers is far more important than doling out NIST research grants.

"The real way to subsidize knowledge is to subsidize people," says Stanford University economist Paul Romer, one of the nation's leading theorists of economic growth. "If the Republicans or the Democrats were students in my class, I'd give them both D's."

In early 1994, the Clinton administration proposed to nearly triple NIST's annual budget to $1.4 billion within three years. The advanced-technology program, which made grants to companies trying to commercialize innovative technology, was scheduled for the biggest boost increase, a nearly fourfold increase to $750 million. The budget efforts reflected the thinking of Vice President Al Gore, who had argued for commercial technology funding during his Senate career.

"We can promote technology as a catalyst for economic growth by directly supporting the development, commercialization and deployment of new technology," Mr. Gore and Mr. Clinton said in a report shortly after they took office in 1993.

'Darling Project'

NIST changed in a Gore-inspired direction. During GOP administrations, William Engelhoff, a veteran NIST materials scientist, says he never talked to businesses. Now electronics executives make appointments to inspect his room-sized machine, bristling with pumps and wires, in which he analyzes new materials that may help boost the amount of information stored on hard-disk drives. "Suddenly I became the darling project," he says.

Other NISTers had similar experiences. One director finally had enough money to build a computer room to run industry experiments on remotely controlled machinery and shared software.

But the change was incomplete. When Republicans took over Congress in 1995, they were able to halt the increases NIST received. Although they couldn't kill programs as they had hoped, NIST's budget this year is less than half the amount Mr. Clinton once sought.

The advanced technology program, in particular, has yo-yoed over the past six years. Program backers produce research showing that government grants help companies. One recent NIST study, for instance, contends that if only three advanced-technology projects pan out, they would produce economic benefits that exceed the cost of 50 advanced-technology grants. The three projects would improve automobile-part manufacturing, produce new prosthetic materials and extract bone-marrow cells.

The technology program "practices a sort of economic jujitsu, applying small, highly leveraged investments against the potential for major economic gains," said NIST's director Raymond Kammer at a conference last spring.

But critics counter with studies arguing that NIST-backed companies could have—and should have—gotten financial backing from private investors, not the government. Citing success stories is a "PR game, not a real attempt to measure the scientific value of a program," says Mr. Romer, the Stanford economist.

Broad U.S. economic expansion is powerful evidence that NIST's ability to affect the economy—for good or ill—is minimal. NIST backers can't claim that technology grants are powering the new economy—there are too few grants and they haven't yet produced marketable products. And NIST detractors can't claim government funding is elbowing out private investors—venture capital and industrial R&D budgets are soaring. The program has become largely irrelevant economically.

Claude Barfield, an economist at the conservative American Enterprise Institute, has long railed against government investment in commercial technology because it can distort markets. But he no longer bothers to attack NIST. "There hasn't been any economic harm," he says, partly because NIST is such a tiny part of the $8 trillion U.S. economy.

NIST programs were designed to address problems that seemed to loom large in the early 1990s when the U.S. was stuck in recession. Japanese manufacturers were thriving by turning out better and cheaper versions of products that were invented in the U.S., such as video cassette recorders, computer memory chips and television sets. Mr. Gore and other Democrats argued that the government must help industry figure out how to turn laboratory innovations into marketable products even more quickly than the Japanese.

"What was evolving in Gore's mind was how can we capture the best of what those guys are doing over there in Japan and apply it to our world," says John Gibbons, a former White House science adviser who has long worked with Mr. Gore and congressional Democrats.

But without prodding from the government, those problems faded as companies raced to turn research into products they could sell. Economic success became exemplified by Silicon Valley-style entrepreneurship and information technology, not Japanese-style government direction and manufactured goods. The Internet, not the video recorder, became the global model of success.

The private-sector Council on Competitiveness pushed the government in the late 1980s to adopt NIST-style commercial technology programs. But that kind of help isn't needed anymore, says John Yochelson, the council's president. Instead, the government must increase funding of laboratory-based research, the very kind of research that his group had once argued the U.S. was failing to commercialize.

Seeds of Innovation

"We're much more concerned where's the seed corn [of innovation] for 20 years from now," he says, "than on capitalizing on the research we have now."

But while NIST's economic importance has faded, six years of controversy have sharpened the lab's political skills. Laura Powell, who heads NIST's advanced-technology program, says the program's original goal of plugging a gap between laboratory research and commercialization remains valid. She now travels the country t‹ help companies apply for grants.

Ms. Powell is learning the lessons of another NIST program, the manufacturin; extension partnership, which provides ac vice for small manufacturers. When NIS set up manufacturing centers around th country, NIST's ideological opponent stopped attacking the program.

"When we translate what the benefi are for local companies, we have more a‹ vocates" in Congress, says the program director, Kevin Carr.

TECHNOLOGY —
NIST

THE WALL STREET JOURNAL
WEDNESDAY, AUGUST 25, 1999

THE WALL STREET JOURNAL
WEDNESDAY, AUGUST 25, 1999

Judge Blocks School Voucher Program In Ohio, Citing Use of Taxpayer Funds

By Amy Dockser Marcus
Staff Reporter of The Wall Street Journal

A federal judge in Cleveland blocked a program allowing students to attend private and parochial schools using taxpayer money.

U.S. District Judge Solomon Oliver Jr. issued an injunction that stops the four-year-old school-voucher program from continuing while he considers its constitutionality.

His decision came one day before the start of school for 3,801 students who attend 56 mainly parochial schools in the Cleveland area using the program, whose use is limited to low-income families in the city.

In his decision, Judge Oliver said the overwhelming majority of schools participating in the voucher program are sectarian and therefore "the Cleveland program has the primary effect of advancing religion." The judge said the potential harm his ruling could have on the students may include the loss of security and stability that might result if they are forced to leave schools where they are already enrolled. But the judge wrote such harm is "insufficient to overcome the fact that plaintiffs' likelihood of success on the merits is great."

Clint Bolick, a lawyer with the Institute of Justice in Washington who is representing the students and parents in the voucher program, said the students are going to attend school anyway. He said an appeal of the ruling has been filed, and his group is working to help raise private funds that will allow the children to attend the schools even if the injunction remains in place.

"Asking for an injunction that literally wrenches 3,800 kids out of the only good schools they've experienced really shows what these groups' priorities are," Mr. Bolick says. "It's not kids, it is the protection of the education establishment."

But Marvin E. Frankel, the lawyer for the plaintiffs—who he says include taxpayers, parents whose children are in public schools and "interested religious people who believe in the separation of church and state"—says the voucher program is unconstitutional. "They're worried about these terrible, unsafe, vermin-infested schools," Mr. Frankel says. "But they don't say a word about the 75,000 people in them, and from whom this program takes public money to support sectarian schools under a statute we're quite sure is unconstitutional."

The ruling is a setback for the voucher movement. In May, the Ohio Supreme Court struck down the voucher program because it violated state law in establishing and funding the program as part of the state budget in 1995 rather than as a separate piece of legislation. But the court in that case had said the program didn't violate the constitutional separation of church and state or Ohio's religious-liberty laws.

The Ohio state legislature had passed new legislation to enable the program to continue, and this is what the current court case challenges.

A voucher program in Florida that was recently enacted to allow children in some poorly performing schools to attend private schools this fall is also facing a legal challenge.

Last year, the U.S. Supreme Court declined to hear a challenge to a longstanding program in Milwaukee for low-income families. But advocates on both sides of the matter agree that while the nation's highest court turned down the chance to rule on voucher programs in that case, the latest rulings and the growing number of court challenges to such programs may ultimately force it to address the issue.

Newspaper Association Asks FCC to Ease Rule On Broadcast Holding

WASHINGTON (AP)—The Newspaper Association of America has asked federal regulators to suspend a rule that prohibits ownership of a broadcast station and daily newspaper in the same locale.

In a petition to the Federal Communications Commission, the association asked the agency to quit enforcing the regulation or at least implement a waiver policy until it can be repealed.

The association said newspapers face a disadvantage in the marketplace because of recent actions by the FCC relaxing other broadcast-ownership restrictions.

The FCC this month altered its rules to allow a single company to own two TV stations in the same market under certain conditions. The FCC also has relaxed rules that had prohibited ownership of radio and TV stations in the same market.

"For the government to lock out local newspaper publishers is unfair, uncompetitive and, frankly, bizarre in a world marked by hundreds of over-the-air and cable channels, broadcasting from satellites, and the ubiquitous nature of the Internet," NAA President John F. Sturm said. The newspaper-broadcast cross-ownership rule is under review by the FCC. The agency is considering whether to eliminate it entirely, change it or keep it as is. The commission also has the authority to stop enforcing the rule on its own.