Educom Review

Wiring the Schools:

Is This All Going to Work?

By Kenneth G. Robinson

Is this all going to work? Congress in 1996 passed legislation saying all schools ought to be connected to the Internet, a theme which figured in the President's reelection campaign later that year. Nobody was quite sure what more needed to be done - virtually all public schools at the time had computers, and many had some sort of Internet access (courtesy of NetDay and similar "grass roots" initiatives). Probably more significantly, nobody in Washington had any good idea what would be done with all this technological paraphernalia.

But the politics certainly were good. People were unhappy about public education. All across the country, soccer moms - those critical, pivotal voters living in the 28 counties Congressional Quarterly has identified as key - were reading Family Circle, Reader's Digest, even local newspaper articles about how computers and the Internet were a necessary component of "quality education." Politicians relish topics that seem "high-tech," suggest great prescience, and demonstrate how much the politician may care.

In that classic work on bureaucracy, Yes, Minister - one of the few books to grow out of a TV sitcom, rather than the other way 'round - the mythical Minister of Administrative Affairs, later the Rt. Hon. James Hacker, instructs his speech writer to include in all his remarks the line, "And, the silicon chip is changing all of our lives." Hence, whether Hacker's opening an urban petting zoo, dedicating a hospital, or announcing an environmentally sensitive "Save the Badgers" program, in goes the line - to universal approbation.

"Wiring the schools" may well be the current equivalent of this cynical policy. Certainly it's also proven to be one of America's more popular exports. Last summer, French President Jacques Chirac declared on national television that maintaining la Gloire and French cultural hegemonism rested on both wiring schools and fostering more use of computers (reductions in France's punitive value-added taxes were proposed as a stimulus). England's Office of Telecommunications - sort of their Federal Communications Commission (FCC) - has been unveiling British "wire-the-school" programs for years (British Telecom just announced the latest round of connection discounts, incidentally). Japan's wiring also, of course. It's sort of a modern-day analog to the old Cold War arm's race, with every country worried they'll somehow fall behind.

In the United States, Congress only set the broad, high policy, of course, and left working out all the niggling details to the FCC. The U.S. Department of Education, the classic bureaucracy on the make, immediately announced that they'd help the FCC. All across the government, agency budgeters, ever alert to new initiatives popular with politicians and having "sustaining value," promptly came up with their own programs. Testimony before the House Telecommunications, Trade & Consumer Protection Subcommittee this past spring indicated there were some 13 distinct federal programs aggregating about $9 billion envisioned in the fiscal year 1997 federal budget, all for the purpose of wiring schools, distributing computers, subsidizing the Internet, and so forth.

Last summer, the FCC came up with some of the money. Rules were adopted, in effect, to surcharge all telecommunications services and distribute some $2.25 billion annually in support of wiring schools (public libraries, too). Percentage-wise, this is a rounding error relative to America's $195 billion a year "telecommunications economy" - even smaller if one folds in all the computer, software and online services stuff. Socialize that $2.25 billion across the U.S. telephone "access lines" universe, however, and it works out to around $1.25 per line per month. Consistent with the Dirksen Rule, in short, a dollar here, a dollar there, and pretty soon you start talking about real money.

For American educators, this program creates both the proverbial challenges and opportunities. One of the challenges, for instance, turns on the issue of visibility. There actually are people in education who have at least a vague idea - sometimes, quite a bit more - about how one educates using telecommunications and computers. A lot of them may actually subscribe to this magazine.

Like most Washington programs, however, this one is being designed by lawyers and politicians (they tend to be coterminous sets). One reason is that lawyers (including myself) automatically assume they know all about everything, or can quickly pick things up. Another reason is that everyone assumes they're an expert when it comes to education. Is there a parent in the country who doesn't understand these things at least as well as their child's teacher?

If parents - or lawyers, or politicians - were asked for their latest ideas on how to improve neurosurgery, one probably wouldn't be deluged with suggestions. There is something about teaching - like music, writing books and making movies - however, which brings out the imagined expertise in all of us.

What the professional educators need to do, in short, is establish - perhaps reestablish - their status in Washington and the public's eye. If that's not done, well, they'll end up being saddled by a "Rube Goldberg's twin brother"-style mishmash cooked up by Washington bureaucrats and lawyer-politicians.

A second challenge facing educators, and those knowledgeable about telecommunications and computer applications, is related: That's the challenge of resisting the centralization of decision-making in Washington.

All of us should have learned three fundamental lessons over the past 10 years. First, central planning usually doesn't work. Ask the Comecon bureaucracy that once endeavored to mismanage the Soviet bloc economy. Central planning imposes enormous direct costs. It's inimical to flexibility and adaptability. And, it thus makes it very hard, if not impossible, to capitalize on new circumstances and a changing environment.

Second, trusting individuals usually does work. Given freedom and discretion, it's amazing what people can accomplish - even out there in what Washington calls "fly-over America." It's also amazing the workable solutions to complicated challenges that people and markets can produce.

Third, if Government has to intervene to safeguard clearly defined public policy goals, you'll probably do best by moving the issue to that level of Government which is closest to the challenge. They'll probably come up with the best - or, the "least worst" - solution. And, they'll probably also be most careful - because they're most directly accountable.

It will obviously be very difficult to resist the centripetal forces inherent in any large, money-blessed, Congressionally devised program. If schools or libraries are tapping into that $2.25 billion, the argument will go, how can we be sure the money's being spent right? First will come rules, followed by efforts to police compliance with the rules, and before you know it, it'll be a mess. Potentially.

To the extent that educators out there in the provinces demonstrate expertise, they'll obviously have a better chance when it comes to retaining some significant control. The educators will have to fend off their own local administrative cadre, of course. You know how they can be. Again, however, demonstrating to Washington decision-makers (preferably the elected ones) that there actually are people in the United States who know about, and have studied, these things - well, that has to be good.

Finally, the American educational community has to be prepared to challenge Family Circle frontally, and to dispute the popular notion that computers, the Internet, and what Zorba the Greek prophetically called the "full catastrophe" somehow is education's silver bullet. There aren't many complicated problems that admit to simple solutions, and that's certainly true of American education. The problem with the national penchant for "Star Wars"-style quick fixes, however, is that old bit about making choices foreclosing possible alternatives.

Computers and the Internet are wonderful things. According to one back-of-the-envelope cost forecast, however, wiring every classroom and simply keeping the LANs and machines working implicates outlays on the order of what public schools currently spend on textbooks annually. Anyone who's watched a Fortune 100 company's computer operations is immediately reminded of the old line about yachts - a hole in the water into which you pour money.

There has to be somebody prepared to apply a credible "reality test" to these technological ventures. Since the Washington lawyers and politicians aren't likely to do that, it'll just have to be done by folks out there in education who know what they're doing. Sorry about that.

Computers, the Internet, and U.S. education, in conclusion, might be the optimal recipe for forward progress. Professional educators knowledgeable about how to exploit telecommunications and computer technologies, however, ought to be prepared to do their duty. They need, first, to reestablish their decisional primacy - to show that they know what they're doing. Second, they need to emphasize that centralizing probably won't work. Finally, they also need to be candid, and to make it clear to parents and politicians that there's no single, universal panacea. And, if the educators gum or swallow the bullet? Well, this great leap forward has real potential - consistent with what they say about computers generally - to be really fouled up.

Kenneth G. Robinson is a Washington communications lawyer who worked 24 years for the federal government. 72154.232@compuserve.com

Educom Review

Ken Robinson:

Crying FIRE! in a Theater Full of Arsonists

By Educom Review Staff

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A veteran of federal government service from 1969 until 1993, Kenneth G.
Robinson Jr. recently celebrated the 500th issue of Telecommunications
Policy Review (TPR), the provocative weekly newsletter single-handedly
written and published by the Washington communications attorney.
Covering everything from gardening to upkeep on Harley Davidsons, to
driving behavior on the streets of Washington, to baseball
prognostications (oh yes, and telecommunications policy!), Robinson's
iconoclastic views on politics, industry, and just about everything else
have earned him the loyal readership of Washington insiders. As one
subscriber puts it, Robinson specializes in "crying Fire! in a theater
full of arsonists."

Robinson's tenure in government spanned the terms of five presidents,
beginning in 1969 with a stint as legal counsel in the Antitrust
Division of the Justice Department. From there Robinson moved on to the
White House Office of Telecommunications Policy and later served as
senior policy adviser to Assistant Secretaries of Commerce for
Telecommunications and Information Henry Geller, Bernard J. Wunder Jr.,
David J. Markey, and Alfred C. Sikes. He moved with Sikes over to the
Federal Communications Commission in 1989, where he served as Chairman
Sikes's senior legal adviser. Since 1993 he has been describing himself
as "just another Washington communications lawyer."

Educom Review: So as a federal worker, how did you end up publishing a
newsletter like TPR?

Robinson: Well, if your name's not on it and you don't traffic in
government information and it's not done on their nickel, it's OK. It's
called the First Amendment, though I did retire it for the three-plus
years I was at the FCC, when I was supposedly in a quasi-judicial--

crypto might be the better word--position and there were enough other
things for people to complain about. But then I started it up again.
Now, it's not entirely done on my nickel--there's a subscription charge-
-but I doubt Cox Enterprises feels threatened.

ER: Telecommunications Policy Review seems to deal with everything in
the world, including not only education and communications but also
politics, media, gardening, and weekly movie reviews, right?

Robinson: Actually, I deal with less now than I did. But I do deal with
those. No effort is too hopeless, I guess, but that it cannot be pursued
relentlessly.

ER: You don't see much hope?

Robinson: Well, I don't know. I was on the Temporary Commission on
Alternative Financing for Public Telecommunications back in the early
1980s when I was at the National Telecommunications and Information
Administration, and I guess I managed to convince myself something might
be done. Then, Barbara O'Connor at California State University--she was
also the chair of California's Commission on Educational Technology--
started telling me all the problems: how improvements were possible in
education using communications, but it was like "sucking peanut butter
through a straw." So, I probably changed my mind. Now, however, I'm back
where I was, more or less. That is, I'm not sure technology--
communications technology--is the silver bullet here--maybe bullet is a
bad analogy given what happens in schools now--but I don't know what
else can be done.

ER: Your newsletter recently said we needed to encourage more and better
educational programming. Say something about that.

Robinson: I was prompted by what Bill McCarter at Chicago's WTTW and
"Pete" (that's Ms. Lauren P.) Belvin in FCC Commissioner James Quello's
office have told me. What I argued was that we need to encourage local
"strategic alliances" and get local commercial stations to work with
public stations to start producing better shows instead of beating the
commercials over the head relentlessly, hoping something will happen.
This way, for instance, you'd end up with one source of very good
children's stuff in a city, instead of 11 or so. I think you also need
to focus on getting better shows into the home, not just into the
classroom, because, as I said, children and young people are watching TV
every day as much as they go to class.

ER: Why public TV? As a Republican appointee, aren't you worried about
insidious liberalism and all that?

Robinson: You're right, I was a Republican appointee, but I also worked
in the Carter Administration. One good thing about being a reactionary
Democrat is, you can deal with all these guys. And, yes, I do worry

about some of what you've jokingly called insidious liberalism. You've got to be careful about that, though those who think public broadcasting stations are liberal probably doesn't know what they're talking about.

No, the reasons you want to work with the publics are these: First, you've got an enormous amount of money already invested. David Brugger, the head of America's public television stations in Washington, pulled the numbers for me, and it's around $22 billion since the 1960s. That's a staggering investment in a field like television that's not all that capital-intensive. So, you've got the infrastructure out there. Second, you've got all these people. Now, I don't know anything about making TV shows, and virtually nothing about teaching, though I guess I know more about that, since I have two sisters who do it for a living. But these guys and ladies, whatever it is they do, do a good job of packaging information.

And that's good. What you want to do, I think, if you're a teacher, is instill the desire to learn. You don't just want to fill their little heads with rote learning stuff. This isn't a juku, you know, even assuming that'd work. And I think public TV does a pretty good job of interesting children, of making them more curious. Go back, too, to what I said: every time somebody tells me that talking heads on TV aren't a substitute, I agree, but ask them about the alternatives.

ER: What about the New American Schools and other Department of Education initiatives?

Robinson: That's fine. But soon after that was announced I went over to Education and talked to Secretary Alexander's folks--I guess that was in 1991 or so--and I asked them when the first superschool was coming online. They told me it'd be around 1996 and I told them that nobody in the room would still be there then. Plus, what do you plan to do with the intervening age cohorts? Write them off? I don't think you can, or should, do that.

So, what you've got to do is come up with some sort of reasonable quick fix. When you do that, I don't think you ought to delude yourself, or anyone else, into thinking it's the sun and the moon. I worked for Henry Geller and he always used to say that "everything is compared to what." And Al Sikes, whom I worked for even longer--seven years or so--always used to say that you don't want to make the perfect the enemy of the good.

So, when I look at the alternatives, I don't know a better way to do it faster and cheaper. Plus, of course, there's the fact you've got to get this stuff into the home. That's a point that Mary Gardiner Jones always makes, that a lot of the education challenges, and others, are what she politely calls lifestyle related.

ER: So, what would you do?

Robinson: Simple. You tell the commercials that if they give money or in-kind support to the local publics and out comes good children's or educational programming, they all are off the FCC's hook. That's contemplated in the 1991 Children's TV Act, incidentally; it's just that nobody's taken that language very seriously.

ER: Why not just get money and channel it through the national organizations?

ROBINSON: Try that on Senator Dole. Though in fairness, I don't think he's alone. A lot of people don't want PBS taking over here. So I'd stick to local strategic alliances. And as a practical matter, remember, PBS doesn't do a lot of programming anyway. It's the big production stations--the WGBHs, WTTWs, WETAs, KCETs, and KQEDs--that do. They really are the ones arranging for the shows. Plus, I don't think you necessarily want a unified school or educational programming approach. This isn't France, you know. Or Japan. Even if you wanted to force it, you wouldn't get far anyway.

ER: Do you think the Clinton Administration, or the Hundt FCC, has any interest in this area or in your ideas?

Robinson: Who knows? Some- times you hear strange things--about how the Internet's going to do all these incredible things. There was even one speech about how all the schools in the world had to be connected via satellite. I told that to my sister who's teaching in Florida and whose school's being overwhelmed with all the standard problems, plus the crack babies. I don't think she sees being able to hook up with a school in Kazakhstan as doing a lot. Sorry. I also am probably too cynical. You know, about 10 years ago, politicians convinced themselves that talking about schools and education would be good if they wanted to get the white suburban vote--sort of like talking about the environment or wilderness areas. But I don't know that they did a whole lot more than talk.

On the other hand, FCC Chairman Hundt used to be a schoolteacher, at least briefly. All things considered, although the National Information Infrastructure [NII] project may well turn out to be a positive menace, it is giving teachers and educators a place where they can talk with the technology people, and that may be good.

ER: Why do you say the NII could turn out to be a menace?

Robinson: Frankly, I trust computer industry people about as much as I do politicians. What those guys want to do is build a better "CompUSA." They've figured out that they've gotten just about everyone they can to go to computer stores, and that's still a minority of the population. So, what they want now is to build a CompUSA in your living room: CD-ROM, multimedia, and all that. That's all we need!

ER: And you think the computer industry folks are in charge?

Robinson: Do wild bears sleep in the woods? Of course they're running that particular show! And the added problem is, you have to make things easy, at least at the start. Nothing in the computer world is easy. It's sort of the root canal approach to marketing: you have to suffer a bit before there are any gains. And I know that today's children and young people are very computer literate. I also know that, if anything, computer intimidation increases with income level: inner-city parents, for instance, all work with computers all the time. If you're a secretary, you don't have a choice, unlike your suburbanite boss. On the other hand, you have to come up with something that's a bit more user-friendly.

I'll also go back to what I said earlier. It's not simply a question of inculcating knowledge--letting that 12-year-old in Brooklyn--the child in "Fresh," for instance--access the Library of Congress. It's getting the child interested in learning in the first place, and I think TV is how you do that.

And let me also say this. One thing that bothers me about the NII exercise--aside from the fact that by the time it ever gets around to making recommendations, the train will long ago have moved on--is that it just isn't paying enough attention to existing assets. What are they thinking? That this country is rich enough that we can just write off $22 billion and move on to some brave new electronic world? That might be a nice story to tell small children, sort of like how babies are born under gooseberry bushes. But if you're a grown-up, if you want to do something positive quickly that makes a difference, you've got to play the TV card. That, I think, is how you do it.

ER: Are you saying you'd abandon the NII effort?

Robinson: I wouldn't necessarily do that, though I sure wouldn't be spinning it out as long as things have been going. I mean, how complicated are these things? I always remind people that they wrote the Magna Carta in six days, that it took only a bit over a month to write the Declaration of Independence, and that Grant wrote the surrender articles while he was talking with Lee. How in the world, with all these smart, sophisticated people, could it possibly be taking--what is it--a year at least?

One thing that's good about the NII effort is that it does get these people together. That's one of the main problems, you know. The great government departments and the issues they husband tend to be like ships passing in the dark. HHS [the Department of Health and Human Services] is going its way, Education is off on some kick, Transpor-tation is doing its smart highway things, and the FCC might as well be in Indianapolis for all the contact and regular dealing it has with the rest of the government, Congress excepted.

And as far as "you people," the educators, well, correctly or no, it's probably worse. Education tends to be a self-contained enterprise in many regards, and that's too bad. Among other things, it engenders all sorts of misapprehensions. How many people are there who seem to believe that educators are afraid of technology, for instance, because it'll destroy unionized teaching jobs? Well, I don't claim to be an expert, but I haven't met any teachers--or teaching union leaders, for that matter--who wanted to hold technology back in order to protect their jobs. What they don't like is the idea that some school board made up of successful tire merchants or insurance brokers, for instance, might fall for the Star Wars Fallacy and assume that technology is the solution to all problems, the universal panacea. But they sure would like to have technology make their actual jobs easier.

One of the problems, of course, is that teachers don't deal regularly with a lot of the technologists, much less my guys, the TV people. But you get them all together in one place regularly and tell them they have a deadline to produce something tangible--a deliverable--and you'd probably get a lot. Because these are all resourceful folks.

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Take me to the index

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Paul MacAvoy and Kenneth Robinson (1983) "Winning by losing: the AT&T settlement and its impact on
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Conference Name: Aspen Institute Roundtable on International
                         Telecommunications (2nd : 1996 : Berlin, Germany)

Title: Bits across borders : policy choices for international
                         multimedia and digital serivces : a report of the second
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                         Kenneth G. Robinson, rapporteur.

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Other Author(s):   Robinson, Kenneth G., 1945-
                      Communications and Society Program (Aspen Institute)

Conference Name: Aspen Institute Roundtable on International
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Subject:    Spectrum Allocation

(from NewsScan Daily, 20 July 2002)

WORTH THINKING ABOUT: COMPETING VALUES
     In his brilliant weekly newsletter, Telecommunications Policy
Review (print only), Kenneth G. Robinson comments on competing
values in the use of the radio spectrum:
     "What's more urgently needed? Frequencies to support the next
generation of 'smart' bombs, essential to fight wars with Arab and
Islamic nations with minimal risk to American lives? Or, frequencies
to support the U.S. air traffic control system? Versus more channels
to allow cellphone companies to offer full-motion video and audio
'streaming' on special 'third generation' (3G) cellphone handsets?
What do you think? National defense, or video phones so your
teenaged daughter can see all her friends? 'I mean, like, awesome!'
'Like I think I need a new bolt in my chin, maybe a ring for my
eye-lid, it's so cool.'
     "Once upon a time, Federal radio spectrum managers thought
there were competing public values and national demands to be
carefully weighed -- the requirements of Government users versus the
commercial sector. Over the past decade, however, CTIA [the Cellular
Telecommunications & Internet Association, a trade group] and the
cellular industry have convinced policy-makers and opinion-leaders
in Washington that there's no real choice -- that handing over the
resource in support of expanded 'bucket rates' just has to be the
best thing. They've shaped the debate almost entirely to their
ground and, for them, that's good."

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