will be “no more great solutions from Washington.” It is going to come down to “your personal behavior today, tomorrow, next week, and next month.” His agenda for educators to make the transition to the information age calls for us to:
1. Learn from the future.
2. Build a vision of what we want to do.
3. Learn to be comfortable with chaos.
4. Take this once-in-a-lifetime opportunity and run with it.

The critical questions we must ask are: What capacity does the school system have to adapt to the volcanic eruption of new technologies, new industries? To make creative leaps from where it is now to where it will be in the future? To solve complex, nested problems? And finally, what capacity does the school system have to make the needed capital investments? Gillespie (1983) writes that although computer hardware is becoming less expensive, “the uses and number of users are expanding, and the cost of support (labor) is increasing. If every student and faculty member needs 5 to 10 hours access, the costs will be easy to estimate.”

These, then, are the challenges. As you prepare to meet them, you might keep these thoughts in mind:
“Revolutions Never Retreat” (Business Week).
“Dogs and Computers Can Smell Fear” (Gillespie).

**References**


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### Buy 'Em While They’re Hot!

Computers have a lot of potential for education, but for now....

**Kerry M. Joels**

Come in, Mr. Snively.
“Nice of you to see me, Mr. Blankenship. How are things here at Jefferson Junior High?”

“Better now that you’re here! The parents and school board have been all over me to get computers into the classroom. By the way, you’re looking different somehow.”

“It’s probably the gold chains and leisure suit. When I shifted from Prosaic Publishers to Lemon Computers, I spent some time in a training session in Silicon Valley, where everything is laid back and high tech to the max. But let me tell you about the Lemon IV.”

“Right. What can it do?”

“As you already know, the world runs on computers. Everyone needs to be computer literate.”

“Well, that’s what they say, but I don’t know; I can certainly drive my car even though I don’t know much about its insides or how to tune it up. What I want to know is, what can a Lemon IV do for our curriculum?”

“Well for sure it’s going to help your teachers teach. Computers are probably the greatest teaching machines ever devised. You have games, drills, games, programming, uh... games...”

“Programming? Why do the kids have to know how to program? I thought that’s what your software people did for us. Are there a lot of those kinds of jobs out there—a lot of programming jobs? You know, I tried to program a Lemon computer once. All it kept saying was ‘Syntax error, syntax error, syntax error.’ “What in blazes is a syntax error?”

“Oh. Ha ha. That just means it didn’t like what you typed in.”

“But I was only copying a program from your How to Program in Five Easy Steps Manual.”

“Were you using Version 2? You probably were. Version 2 hasn’t been debugged, so you’ve got to expect things like that to happen. You should’ve been using Version 3. Version 3 has been debugged.”

“Debugged?”

“Right. Look at this list here, Mr. Blankenship. Why, there are over ten thousand programs available on the Lemon IV. This is just a sample.”

“Zorgon, ZZzappppo0, Kill the Kyreneans?”

“No, no. Look here, under Education.”

“Math Drill, Spelling Drill, Power Supply Design, Hexadecimal Conversions.’ How will this help my seventh-graders?”

“Our math drill goes all the way up to fractions. It’s really good—there’s this little clown who dribbles the numbers like basketballs. If the kid gets the prob-
Cars, Computers, and Curriculum

The computer may be today's darling, but its value for tomorrow has yet to be tested.

CHARLES SUHOR

In 1900 an enthusiastic futurist might have made some predictions about society and education as follows:

By 1950 the automobile will influence every aspect of our lives. Those who have no knowledge of the automobile will be at a serious disadvantage in their personal, social, and vocational lives. Every household will have one (or even two!) cars. Vast industries of auto production, sales, and maintenance will grow. The automobile will enable individuals to live at ever greater distances from their places of employment, as "commuters" simply jump into their cars each morning, drive at speeds up to 40 miles an hour, and return by the same routes on an expanded network of macadamized roads.

Moreover, new vistas of recreation will be open to families. Advanced technology and mass production will make cars affordable to the average American family. We can look forward to driver-friendly devices (no-crank ignitions, automatic chokes and transmissions) that will breakdown resistance to car use in our society.

But pity the poor midcentury citizen who lacks fundamental knowledge of the automobile. Such a person will be stymied by the overheating of a radiator, the deflation of a tire, or the simplest unplugging of a wire in the car's complex electronic circuitry. People who are knowledgeable about the basic workings of the automobile will have incalculable advantages over "auto-illiterates." The car-wise individual will arrive on time, make more professional contacts, and engage in sparkling conversation about radiators and batteries. The non-driver and non-car owner will be ill-suited to successful 20th century living.

The implications of the automobile for education are mindboggling. And yet it is clear that our schools are not