## U.S. EDUCATIONAL PERFORMANCE: A FAILING GRADE

## INTERVIEW WITH CHESTER E. FINN, JR.

Public Perspective: In your book, We Must Take Charge, you level devastating criticism of the data available to us on the outcomes or outputs of the American educational system—the levels of knowledge and performance that students attain in and through it. You write, summarizing your concerns:

"The reader is by now aware of my frustration at the wretched state of our consumer information system. Most of the data we need, we cannot get. Much of what we get, we cannot trust. Of that which we can trust, far too much is obsolete, unintelligible to laymen, or unsuited to crucial analyses and comparisons." [We Must Take Charge: Our Schools and Our Future (New York: The Free Press, 1991), p. 263.]

I'd like to focus on this assessment from several different angles. First, how did we get to this state of such dismally inadequate information?

**Chester Finn:** The simplest answer is that we have never had in education anything like what business calls an "independent audit." The people who produce our information about educational performance are, by and large, the same people who are running the system whose performance is being assessed. It is simply not in their interest to give clear, objective outcomes information; and, at least as we are currently structured, nobody else is in a position to do so. The upshot is that the information people get about outcomeswith a handful of happy exceptions—is the information that providers want them to have. And that information tends either to contain false good news—the so called "Lake Wobegon effect"—or to be so dense and confusing as to be unintelligible to ordinary mortals. Nor is it readily available for the level of analysis one needs. For example, we can now get pretty good national data about educational outcomes—but almost no decisions about education are made nationally. At the levels where the rubber hits the road in terms of policy (state, local, specific schools, specific classrooms, specific children) it's very hard to get the necessary information.

**PP:** So, "conspiracy" or words like that may be unnecessarily strong, but in point of fact a coalition of interests in the field of education blocks the gathering of the information we need?

CF: We have nothing like the stockholders' claim on an independent audit to check on performance of the company and the accuracy of the treasurer's data.

**PP:** Let's look at some of the data that we do have. What do they identify as our big deficiencies in the area of education?

CF: All the really serious problems involve outcomes or results. The US looks pretty good when it comes to educational inputs—expenditures, services provided, etc. Part of the "conspiracy" I was alluding to earlier is an effort to get people to dwell on those inputs instead of outputs. For example, "We need to spend more on teachers' salaries."

When we turn to outcomes or results, plainly the two biggest problem areas are student achievement (e.g., measurable cognitive learning by young Americans in the K-12 system) and drop-outs or noncompletions of formal education. That is, a lot of people don't even complete school, but among those who do, a great many have not learned very much.

**PP:** The international comparison data collected in the International Assessment of Educational Progress (IAEP) program says that mathematics is an area where our students' attainments are lagging badly.

CF: Note that most of the international comparisons one can get hold of are for math and science. That's what is internationally comparable both as to curriculum and as to language.

There are a few exceptions, notably the National Geographic-sponsored surveys of geographic knowledge, and the recent International Association for the Evaluation of Educational Achievement (known as IEA) study of reading literacy. The latter comparison is one of the very few in which we look pretty good. But a researcher I know who was fairly close to the construction of that test tells me that what it tested were rather rudimentary reading skills. That we look good compared to other countries on such a test is consistent with the findings of our domestic assessment data. At a rudimentary level—think of it as basic literacy— American kids are now doing reasonably well. Our serious fall-off occurs when the focus moves from the rudimentary to the complex.

Also recall that American primary schools are almost completely obsessed with reading skills. They tend to downplay math, science, social studies, languages, and so on. Much more than most countries in the world, our young kids only learn to read in the early grades of school. They don't learn enough about other things. This is a further possible explanation for why the reading literacy study shows us looking relatively good.

Now let me come back to math performance. All of the studies that I have seen of math and science internationally show the US looking somewhere between mediocre and dreadful, and the more ambitious the level of the test the worse we look. This is to say again that younger students on the easier tests look comparatively better than older students being checked for advanced knowledge. Math and science both get a lot more attention in the schools of many other countries than they do here. Naturally, then, these are subjects in which we tend to do poorly.

PP: The math test data, which show US students trailing their counterparts in many Asian and European countries, get a lot of attention. Should they? That is, do some Americans put too much emphasis on comparative math scores, seeing math attainment as an almost magical tool in the postindustrial era?

CF: I think people legitimately see math and science as two of the important keys to a modern high tech economy. Of course, there are multiple functions of education—gaining communication skills, historical knowledge, etc.—beyond math and science. But in terms of the economic competitiveness issues that drive an awful lot of the conclusions people draw from international comparisons, I think it is legitimate to put extra weight on math and science.

Let me repeat, though, that math and science have been the only areas where we have much international comparative data. If we also had good data on student attainment in history, literature, language proficiency, and other subjects that would give a more rounded view of performance across the curriculum, maybe less attention would be paid to the math and science part alone.

**PP:** Let me play devil's advocate. The US looks terrible on math; but we look middle-of-the-pack on the science tests, and as you have said, we look pretty good on reading attainment. Somehow this doesn't seem so terribly negative. And, on the math side, interestingly enough,

where we have a longer timeline of test scores than anywhere else, we looked as bad in the 1960s as we do now. I vividly remember the post-Sputnik agonizing over US math performance. It doesn't seem to be a new condition. Am I reaching for something too optimistic in these findings?

CF: The reason these data are endlessly disputed is precisely because of reasoning such as you've just stated. Of course, the data also lend themselves to the opposite reasoning, which would say we are doing dreadfully in math and have been for 30 years, and during the entire span our economy has been sputtering. It would

Our serious problems are not at the top of the high end. Our problem is that neither the kind of society we want to inhabit, with its quest for equality, nor the kind of economy we need, can function with only a well-educated elite. We need to have a very much larger fraction of the population extremely well educated. That's our big challenge.

say that our reading literacy is okay, but only at a rudimentary level. When we look at more demanding measures, we find that only a minuscule fraction of Americans can do complex things that involve reading. Rudimentary literacy for the majority of the population might have been okay in times past, but it's not adequate for the kind of society we want these days. As for science, National Goal #4 says we ought to be leading the world in this area. Being in the middle of the pack is obviously better than being at the bottom, but it's not very good.

PP: Let's consider one additional, different type of data. Presumably the payoff of an educational system involves two different dimensions—how well ordinary citizens are equipped, and how much high creativity, which is essential to the society, is encouraged. On the latter, we have charted the citizenship of Nobel Prize

winners decade by decade from 1901 to the present (p. 11). If you look at chemistry, 1970 to date is the United States' best period, the one where we've gotten the highest proportion of winners. For physiology or medicine, 1970 to date is also easily our best span. In physics, 1950-1970 was a little bit better, but in the last two decades the US record of prize winning has also been especially strong. Overall, 1980-1993 has seen the US capture a bigger share of these prizes than any prior decade. How should we interpret this record?

CF: At the high end we do pretty well. The one or two percent who reach what the National Assessment of Educational Progress (NAEP) program calls the "advanced level" at 12th grade, the six or seven percent of high school seniors who take an Advanced Placement (AP) exam-for such students the American comparative position looks good. There is this small fraction of the population—in the single digits-who at the end of high school can be said to have obtained a pretty good education by world standards. Most of them go on to college, where they take real subjects and get "A"s. Our serious problems are not at the top of the high end. Our problem is that neither the kind of society we want to inhabit, with its quest for equality, nor the kind of economy we need, can function with only a well-educated elite. We need to have a very much larger fraction of the population extremely well educated.

**PP:** May we turn back to your general criticism of available information on student attainments and performance. A main reason for the deficiency, you argue, is the absence of systematic *national* testing of students. Would you summarize for our readers what you think we need to put in place by way of national tests?

That's our big challenge.

**CF:** I should underscore at the outset that, since I wrote *We Must Take Charge*, there's been a change of administrations. It's now very clear to me that what I think *should* happen is not going to happen anytime soon, and I am fairly depressed on the topic.

What we need is a system that will produce clear, comparable achievement data at six different levels of analysis: The individual child, so we will know how Johnny is doing; the classroom, to know how Mr. Jones' kids are doing; the school, to see how the Wilson Middle School is doing; the district, to place the Trenton public schools comparatively; the state, so that Ohio can have some sense of how it's doing; and the entire nation, in comparison to other nations. Those data need to be comparable across levels, comparable over time, and they need to be comparable to something that I will rashly call standards—how well students should really be doing, rather than just a snapshot of how they are doing with no evaluative judgments attached.

To get anything like that kind of a measurement system, we would first need to specify some reasonably clear standards. This we are now moving toward. Then, we need a testing or assessment system that administers suitable exams to just about everyone at some point or another. Not to say every child every month, or every child every year. It might be every 4th grader and every 8th grader. Eventually, though, everybody should be part of the testing. Finally, the results have to be made available in a clear and coherent way to the various audiences who need them.

It may not be necessary for tests to be exactly the same everywhere in the country, so long as they have a common core. The entire curriculum need not be uniform everywhere in the country. Wyoming will have things it wants emphasized, as will Georgia, and so on. The tests that are relevant to Wyoming and Georgia on those parts won't be comparable to each other. Some significant fraction of the curriculum ought to be uniform enough, however, that outcomes can be compared.

**PP:** Am I right that you have two quite distinct sets of goals in mind in urging national testing? The first is one that will put the heat on malperforming school systems, and let us see how this or that part is doing, and how we as a nation compare to other countries. But the second is that you see national testing as important to the way the teaching process would go on in schools as a result.

CF: These tests would be diagnostic and corrective on the one hand, and an instrument for accountability on the other. Both elements are needed. I don't believe that testing is just a form of playing "gotcha." But I do believe that if nobody but the teacher ever sees students' results, this makes for very limited accountability for what those results are. In the latter circumstance you must ultimately depend on the teacher's conscience. While I think that many teachers have vibrant consciences, that's not enough of a foundation for a successfully performing system.

What I am proposing is not going to happen anytime soon under federal government auspices—with two limited exceptions. We will continue to have the federal NAEP program, which produces sound national and state data. And we also have federal funding underway for standards setting, which should produce reasonably coherent and ambitious educational content expectations for the major subjects. That is going to happen. But the testing, measurement, and accountability that need to go with it are not going to come anytime soon under federal auspices.

There are a couple of private ventures trying to do something. The College Board, for example, is coming up with a new system of high school performance tests for schools that want to participate. There is also the privately funded "New Standards" project, led by Lauren Resnick of the University of Pittsburgh. It has identified states and districts willing to participate, and is trying to come up with what amounts to a national assessment scheme for those jurisdictions.

**PP:** One final question. A substantial proportion of *Public Perspective*'s readers are involved in public policy work in business corporations. They are very concerned with what role business has in education reform. Where is corporate America so engaged that it's hitting the mark, and where is it missing badly?

CF: There are two broad categories of business involvement in education. One could be termed "the Lady Bountiful" approach—where business asks, how can we help the schools, what can we make

available to them so that they will be better resourced and better able to do their job, etc. The other approach is to pound on the system, using whatever forms of leverage business has to change the prevailing standards and operating procedures. Ten years ago, even five, most business involvement was of the "Lady Bountiful" variety. Now, more of business is playing a political role in changing the system. There are some worthy examples of business leaders coming forward almost as surrogates for the rank-and-file educational consumers.

The great political tension in American education today is the tug-of-war between producers—the education establishment-and consumers. The former are exquisitely well organized to secure their own interests, while consumers are dreadfully organized and ineffectual as a political force. Really only two groups are in positions to represent the consumer interest in these political tussles. One is the business community, when it has chosen to play that role. The other is a band of elected officials: governors, mayors, civic officials, et al. The business leaders' role, where they have chosen to be a forceful surrogate for consumers' interests in education-including but not limited to business's own interests—is, I think, an honorable and important one.

Unfortunately, business often wimps out. They often decide that opposing the education establishment on an issue is just too controversial, too hot to handle. There is a tendency among large segments of the business community—and I do fault them for this—to avoid the really tough issues for fear somebody will get angry with them. Or a corporation may turn management of the issue over to its vice president for community relations, who often is straight out of the ranks of professional educators and agrees with their value structure. Business is, alas, an uncertain ally in the fight for education reform.

Chester E. Finn, Jr., now on leave from Vanderbilt University, was Assistant Secretary for Research and Improvement at the US Department of Education, 1985-88