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On Education and the Future: A Conversation with Harold Shane

Harold Shane, author of three books and numerous articles on education and the future, was one of the first curriculum authorities to be recognized as a futurist. When he was ASCD president, in 1974, the annual conference theme was "Creating Curricula for Human Futures" and the keynote speaker was Alvin Toffler, author of *Future Shock*. In this interview with ASCD Executive Editor Ron Brandt, Shane predicts a new renaissance in schooling.

RON BRANDT

Q: Since the early 1970s you've talked with hundreds of leading physical and social scientists around the world. How did these dialogues come about?

Shane: It was largely a benign accident. One evening about ten years ago, I was having dinner with the Commissioner of Education, who asked if I would do a review of some work the U.S. Office of Education was funding at the futures centers at Syracuse and Stanford. I suggested that I might get a broader base by doing 50 or 60 interviews across the country. My report, called *The Educational Significance of the Future*,[1] came out about six months later. One result of the USOE inquiry was that I got involved in a study the NEA was sponsoring for the Bicentennial, called *Curriculum Change Toward the 21st Century*.[2] It was a re-examination of the "Seven Cardinal Principles" made by 50 distinguished Americans to determine if they were still valid after 60 years. Then came the most recent study, which was sponsored by Phi Delta Kappa and funded by the Lilly Endowment.

Q: And that was *Educating for a New Millennium*.[3]

Shane: Yes. It was concerned with what content is essential if we're going to survive and live as decent people. It was based on 132 interviews with physicists, chemists, biologists, anthropologists, economists, and other comparable scientists from all over the world. I wanted to find out what they felt students need to know in their areas of expertise.

Q: Was there much commonality among the views of these scientists?

Shane: They had an amazing tendency to draw on one another's disciplines. Physicists, for example, were very concerned with social trends. Sociologists and anthropologists talked about what they thought was threatening or interesting in the natural sciences. The interdisciplinary tone was very conspicuous, and the scholars agreed as to the nature of the world's problems; they proposed very diverse solutions, however.

Q: Such as?

Shane: Some of the scholars have faith in what is commonly known as "technofix" (technological solutions); others—the transformationalists—feel there need to be changes in human behavior. A third group believes we need to re-

structure and rehabilitate our industrial resources so that the "smokestack" industries—automobile and steel manufacturing—can regain a strong competitive position. Many participants recognized that we also need an infusion of high technology to provide the support system required to make this reindustrialization possible. That's a spectrum of their comments, which I have greatly trivialized by summarizing them so briefly.

Q: From having talked with these scientists, what conclusions did you reach?

Shane: The main concern of the people I've interviewed is whether or not human beings can cope fast enough to deal with the changes and problems that threaten them. John Platt, a biophysicist at Boston University, observed that humans have confronted more changes in the last 40 years than in the previous 600. It reminds me of the old H. G. Wells comment to the effect that we've always relied on a time-lag of a century between perceiving what ought to be done and making an attempt to do it. But now we've got to learn to act rapidly and prudently.

Q: You've been a futurist for some time. How did you decide that educators should pay more attention to the future?

Shane: Back in the early 1960s I was talking with a friend at the Rand Corporation in Santa Monica, and I asked him how it is possible to study things that haven't happened. He said there were a variety of techniques that could be used—the Delphi technique, cross-impact analysis, scenarios, and the like. It occurred to me that perhaps the devastating lag between changing society and changing schools could be reduced if we learned about and applied some of the techniques that were being explored by futurists.

One of the interesting things I discovered was that Rand's long-range forecasts, which were done in the late 50s, had begun to come true by the 60s. These included heart transplants, moon landings, orbiting space ships, and creation of life forms in the laboratory.

Q: Still, many people continue to see futurism as a kind of frivolous activity. Do futurists really know any more about the future than anyone else?

Shane: I have been amazed at the accuracy of some of the prognostications from reliable scholars. For example, Wilbur Cohen, one of the architects of social security, said in 1971 or 72 that social security would go broke by 1980 unless there were massive changes in its funding. That was right on the nose. The energy crunch that peaked during the OPEC embargo was clearly foreseen by most of the futurists I talked to. The ecological problems, the dangers of nuclear warfare, the proliferation of arms, the population explosion—which is disastrous and even more ominous now than it was then—were all predicted.

Q: How well are these problems reflected in the school curriculum?

Shane: I've said for years that there's a chasm to be bridged between acquainting young learners with contemporary trends and the current school curriculum. To the best of my knowledge, there is a whole spectrum of things that ought to be included in English, the sciences, and the social studies. English, for example, needs to emphasize critical listening skills because of the huge amount of auditory and visual input from radio, television, and the computer. We need instruction that can help us interpret the way the media—not manipulate, but—select the news: when, for instance, a reporter tells us what a President has said rather than giving it to us direct. It's not the same as reading a more complete account in the *New York Times* or *Washington Post*. In social studies, science, mathematics, and other fields, we're now moving into an era that is peopled by micro-kids: youngsters growing up in the era of micro-electronics. While it's very important that they have a positive attitude toward the computer and electronic devices, there are also dangers. As Garrett Hardin pointed out, an evolutionary consequence of the computer could be the degeneration of our mental powers as a result of disuse!

Q: Do you believe that some things that are currently taught should be omitted from the curriculum?

Shane: You're asking what we will have to sacrifice? Personally, I don't see a conflict here. It's a matter of enrichment and reshaping what is taught, rather than "chopping block" tactics.

Q: On the other hand, as satirized in *The Saber-Tooth Curriculum*,[4] we have a tendency to teach things we used to need rather than things we will need to know in the future. Mortimer Adler, writing for the Paedeia group,[5] suggests that the way to prepare for the future is to read and discuss great works of the past. Do you agree?

Shane: I think in the sense that our general culture needs to move into a renaissance. We are being encircled, as Marshall McCluhan said, with the "electronic-surround" to the point that to acquire a better understanding of what is occurring we need to have a better general education. A good vocational education, in a sense, is rapidly becoming a good general education and, in a sense, vice versa; general education is acquiring vocational dimensions. For example, there's no place in vocational education for dismantling and reassembling a 1974 Ford or Chevrolet. But there is a very substantial need to help individuals understand not only electronics, but what electronics is doing to our industries and our lifestyles and our educational practices—both in the school and the home.

Q: That suggests an important role for parents.

Shane: Schools must have increasingly close relationships with parents in mediating the way children use equipment in the home. Last weekend, my grandson, who's in the sixth grade, was visiting us and was reading through the Home Box Office list. When I commented that a particular film looked pretty interesting, he said, "Oh, but Grandpa, that's R-rated!" Apparently, there are parents who take some responsibility for TV and other electronic gear in their homes, but there are certainly parents who don't. One of the challenges to education and our society is what to do about this.

Q: In *The Educational Significance of the Future*, you called for certain "fundamental reforms" in the schools. What kind of reforms did you have in mind?

Shane: That particular book, at least in part, was concerned with curriculum organization and structure. The artificial segregation of persons who are not alike is a major problem that has existed in education for many years. What we need is a life-long learning continuum beginning with universal nursery education, and urge that there would be

ungraded experiences for children at age four or five who are grouped together until they attained the developmental characteristics of six-year-olds. At age five, six, or seven, and in some cases even eight, children would be grouped with others who had a comparable quality of six-year-old-ness. As Willard Olson pointed out many years ago in his concept of "organismic age," youngsters at a given time are not the same age in any way except chronologically. We need to figure out some way to reduce the ability spread—even though this means increasing the age spread somewhat in a given group.

Q: That's the kind of reform you had in mind?

Shane: Yes. Let me add that our schools have a big problem in doing what the futurists call "retrofitting"—what we used to call "retreading" in times past when teachers needed inservice or graduate study. With the massive changes in production and the new kinds of jobs opening up in the high-tech field, there already are enormous demands on education agencies for the retrofitting, retreading, and re-educating of people; learning experiences which can continue right on through life into our senior years. If our schools do not meet these needs, some other kinds of agencies will—the kind of agencies that already have taken over portions of the instructional monopoly that schools enjoyed in the 50s. One of these, of course, is television.

Q: From current trends and your study of future possibilities, what would you expect to be the condition of public schools in America in the next 10 to 15 years?

Shane: There will be significant and perhaps even a vast increase in flex time and much more learning going on beyond the walls. Many homes will have electronic equipment so that various kinds of distance learning will be possible. In other words, the school under certain circumstances will come to the student. Electronics equipment will make a life-long contribution to education on an increasingly flexible basis.

Q: In *The Educational Significance of the Future*, published just ten years ago, you said, "We have perhaps a dozen years . . . to make basic and educationally relevant policy decisions with regard to certain crises and problems confronting us."[6] What kind of progress has been made?

Shane: Until recently, I was fairly uneasy about the glacial rate of change in education, sluggish at best, which Goodlad pointed out so eloquently in his Study of Schooling researches. But in the last year or two I have changed my mind somewhat. Back in the 1950s when Sputnik was launched, our society was shaken by the competition implied by Russian technology. A tremendous impetus to education was reflected in funding by the Kennedy and Johnson Administrations. There was an enormously important intellectual and financial transfusion at that time: the "new math" and "new science" era!

We are again on the threshold of a very substantial renaissance in schooling becuase of the coming omnipresent information era. We are benefitted as well as "threatened" by high-tech, as Japan and other nations begin to leave us behind in production races—automobile sales being a good illustration. In view of this threat, I believe a Sputnik-like phenomenon will reoccur. Once again, albeit more slowly, U.S. schools will be more adequately funded.

Q: It seems likely that society will make some adjustment to whatever new forces there are. The question is whether it will be our schools that provide the necessary response. The public schools may not be able to adapt quickly enough.

Shane: There's always that potential danger, and history suggests that we may not. But the situation today is different. Let me put it this way: in addition to the rapid changes that are self-evident—artificial life, fly-bys of the outer planets, gene splicing, the pill—another new element has been added within our generation: people who are moving into positions of responsibility who see their milieu in a different perspective than did educational leaders of the past.

Q: You know a great deal about the future and you are acquainted with the tremendous problems faced by the world and our society. Yet you seem to be somewhat optimistic about the future.

Shane: I am—partly because the rapidity of change and the information society are giving us a spark of the enthusiasm analogous to the one that began to glow in the post-Sputnik era. Second, journals like *Educational Leadership* are taking time to speculate and think about the future. There is a growing positive concern—namely, that we have to "make tomorrow work" in school and in society. Furthermore, our young people have "bottomed out" with respect to coping with most of the problems that led to the alienated generation of the 60s and early 70s. Many of them are more thoughtful and task-oriented than they were. I'm not talking about the young returning to mindlessness or bigotry; I'm talking about a general return to thoughtfulness and a departure from the "me generation." This is partly a result of changing parental attitudes, and of growing concerns for the world's future good that are local, national, and international. It may be that the times that are being thrust upon us will, in effect, serve to lubricate our educational efforts to achieve the renaissance that the information society demands.

There's one other thing I really should say. If you're a pessimist, you're likely to just lie down and let the steam roller of the future flatten you. Therefore, I think educators have to be optimists. At his farewell appearance in Washington, D.C., Maurice Chevalier said, "Now zat I am 78 years old, zee reporters zay, 'Monsieur Chevalier, how does eet feel to be 78, eh?' " And Chevalier cocked his straw hat as he used to do and said to his audience, "I zay to zee reporters, 'Eet ees marvelous to be 78—considering zee alternative.' " As curriculum workers, we too have to be optimists or, professionally speaking, face "zee alternative" of decline.□

[1]Harold G. Shane, *The Educational Significance of the Future* (Bloomington, Ind.: Phi Delta Kappa, Inc., 1973).

[2]Harold G. Shane, *Curriculum Change Toward the 21st Century* (Washington, D.C.: National Education Association, 1977).

[3]Harold G. Shane, *Educating for a New Millennium* (Bloomington, Ind.: Phi Delta Kappa, Inc., 1981).

[4]Harold Benjamin, *The Saber-Tooth Curriculum* (New York: McGraw-Hill Book Company, 1939).

[5]Mortimer J. Adler, *The Paideia Proposal* (New York: Macmillan Publishing Co., Inc., 1982).

[6]P. 92.

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