

Linkages Between Work and Education? The perspective of a futurist

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You're in luck today. Since there are four other people up here on the podium with me, champing at the bit to tell you what they think the future of jobs and schooling might be, or should be, or even will be, I will give you the short version of my talk.

The future of the link between jobs and schooling is this: there will be none because there will be no jobs and no schools.

Thank you.

Oh. OK. maybe that was too short. Let me try an only slightly longer version.

In the next few minutes, I intend to lay out several of the major trends and emerging issues which I think are important for you to consider in trying to reflect on the future of the relationship between jobs and schooling. Then I will suggest, in snapshot form, how those trends might combine into seven alternative futures for jobs and schools.

But first, let me make it plain what I believe to have been the historical relationship between jobs and schools.

Until the industrial era, one hundred fifty or so years ago, there was no relation whatsoever between the work most people did and the few schools which existed. Few people went to school at all, and most schools focused on training for only a few occupations--mainly those for the clergy or for the scribes to nobility and power.

With the industrial era, jobs were invented and so was schooling, pre-eminently, publicly-funded schooling. And there is not the slightest doubt why the publicly-funded (that is to say, taxpayer-supported) school system came into existence. The only purpose of the publicly-funded school system was to turn out good and obedient workers fit to fill the many new jobs of the emerging industrial state. The relationship between school and jobs therefore was one-to-one.

Moreover, schools were to model and later mimic the factory, so that the raw material of rough-hewn incoming ignorant children emerged from their school processing fully willing and able to fit into the round pegs of industrial jobs. Schools were--and to a considerable extent still are--little factories, obsessed with standardization, conformity, control, hierarchy, predictability, linearity, timely and orderly sequencing, and uniform, interchangeable products. Most industrial jobs needed people who possessed those characteristics, and no others.

Oh, of course, a select few, who made the grade one way or the another, went on to high school, and fewer then to college where some slight hint of independence and creativity could be permitted quite safely, all real deviance or spontaneity having been thoroughly wrung out of them by the primary schooling process.

Now I don't believe there is anything new or controversial about what I just said. You all know it very well, and were no doubt bored to tears by my recitation of it. If you were NOT bored, it probably is a tribute to the taste for boredom you have acquired over your long years of work and schooling.

Yet the once-tight connection between jobs and schooling has been rapidly unraveling. In a sense, in the US, it all began after the second world war when the GI bill permitted so many people to go to school and get jobs that they would never have been permitted to obtain before. Then the baby boomers did there thing first on schooling, and then on work, as they are now doing it on middle age, and will soon on retirement and funeral homes--now THERE is a growth industry! Do you teach Embalming 101? I ask because my grandfather WAS an undertaker and the holder of the first License in Embalming issued in the State of Florida. He clearly saw, in the early 20th Century, that death would be a big business in Florida, and he got in on the ground floor of it, so to speak. It's about to be big business almost everywhere in the US again.

But the major reason I can so confidently predict that there will be no significant relationship between jobs and schooling in the future is due to the accumulating effects of the Reaganomic 80s which, in the name of traditional and often family values, destroyed every worthwhile traditional and family value in sight and left it up to us, and many succeeding generations, to wallow in the deepening mire.

So let me without further ado recite some of the major trends and emerging issues which I believe will frame the context for the alternative futures of jobs and schooling.

Three Trends Impacting the Future of Schooling in the US:

--TREND ONE. Basic and secondary public education, and much higher education and research, has been the duty of each state and/or local community. Of course, the federal government has made important contributions to education in the past, but the real burden falls on the states and local communities which are now virtually bankrupt. The US federal government is even more bankrupt, but the feds can keep on producing guns and paper money which the states and localities cannot. All governments can tax, of course, but that is not presently ideologically possible, and, given the level of corporate and personal debt, probably not a viable solution anyway.

The consequence? Public education is too expensive for governments to do--at least to the extent they have done it historically--and they will sooner or later get out of the schooling business almost entirely.

Now, I used to think that private economic corporations would take over the business of schooling from the state, for better or worse. While to some extent that has already happened, and may continue to happen, I think that is not a

sustainable trend. For reasons I will make clearer in a minute, most private enterprise are too poor and too shortsighted themselves to go into the general education business. They may offer to educate the elite for fat fees, or to train certain temporarily-needed workers in some specific trait or other, but the private sector will not take over education from the state, and yet the state will be forced out of the business itself.

--TREND TWO. One of the additional functions of publicly-funded schooling was to serve as the melting pot of the many immigrants to America--to be the bubbling caldron in which newly-arrived cultures stewed and blended together until they were cooked into a single American nation with a common American culture: E pluribus unum and all that.

No more. The population of America is becoming increasingly diverse in almost every way. It is not likely that a single educational curriculum or educational style, nor even some set of curricula and styles, will satisfy a majority of American citizens now, and especially in the future. Also, as more and more citizens have come to experience the banality of the formal educational process, the mystique of the scholarly life has been revealed to be little more than a facade behind which hide some rather addlebrained Wizards of Oz and their administrators.

The consequence? Schools, as molders of citizens and a common culture, and as a place where moderately learned people are paid to teach dumb ones and otherwise pursue truth, will cease to exist.

--TREND THREE. During the early industrial era, the knowledge which a good worker needed was accessible only from people and documents which were housed in central locations. It was necessary for learners to go to the information. The information was then imparted partially, sequentially, and with many checks for quality-control. Since it was important that a grade, certificate, and degree mean some thing, and that the same grade, certificate, and degree mean the same thing everywhere, vast bureaucracies were necessary to determine curricular and testing policies, and to monitor their enforcement. It was also important that learners model and experience the kind of conformity and control in their schooling that they would later experience in their jobs.

For better or worse, modern communication technologies make it absolutely unnecessary, and indeed, in large measure, completely counterproductive, for learners to go to a central place to access information. Information now can and does flow into peoples' homes, cars, eyes, and ears from any and everywhere in the world. While some of this flowing, and overflowing, is individually processed, much can be and also is shared and compared among spatially- (and often temporally-) dispersed learners bound together in electronic virtual communities. If time permits, and you have interest in this, I can describe later how electronic communication technologies have totally--and I mean totally--revolutionized the way I teach. I am certain new and improving technologies will change it even more, and more rapidly.

Of course it probably is the case that there should always be a time and place where humans meet physically to learn together, but I urge you not make too much of that possibility.

The consequence of this trend? While learning will abound, schools, as places, as buildings, will disappear.

Those three trends will have to do for explaining the looming demise of schooling, for now. Let me next focus on trends and emerging issues impacting the future of jobs.

Four Trends Impacting the Future of Jobs.

Once upon another time, he who did not work, neither could he eat. More importantly, if people didn't work, goods could not be produced and services could not be performed. No more.

Robots, Expert Systems, and Artificial Intelligence are doing more and more of the things which once upon a time required human mental, as well as manual, labor. The consequence is that we now no longer keep people in jobs because we need their labor, but because we need their purchasing power. So schools now produce people who are consumers rather than laborers. Probably 20% of the current labor force could do 100% of the truly-needed human labor. The rest of the labor force is featherbedding. Employment is just a socially-acceptable way to keep people off the streets and out of trouble

And the consequence?

--TREND ONE. In 1992, roughly 18 million Americans were jobless, resulting in a jobless rate of more than 14%. This is double the official rate of 7% unemployed because of changes in the way unemployment has been reckoned since the early 1980s. Because unemployment was so embarrassingly high, the Reaganometricians changed the way the official rate was figured so that it presently does not count unemployed people who have stopped looking for work, or persons working part-time who want full-time work. But the job situation would look even bleaker if we measured people who lost secure, high paying jobs and now find themselves permanently in temporary, low paying jobs, or involuntarily in early retirement. It also is extremely difficult to know how many people are members of the underground economy, which includes not only people involved in criminal activity, but also growing numbers of people who have given up on the commodified economy and polity, and have created a voluntary barter economy and more participative polity of their own which is officially unacknowledged.

Moreover, the official rate also now counts people in the military as being employed, even though many people joined the military in the 80s because it was the only way you could be all you could be. Indeed, the virtual nonexistence of any kind of peace dividend following the collapse of communism is not because other threats to American security require our bloated belligerents, but because, during the 1980s especially, the US used military service as a surrogate for a welfare policy on the one hand, and weapons and materiel production as a surrogate for an industrial policy on the other. It is important to remember that America's number one export item for more than a decade has been guns and other weapons, and that the US share of the entire world arms market is more than 70% at the present time. Our vaunted "market economy" would collapse if the military-industrial command

economy underlying and supporting it were to vanish. That is one of our most challenging dilemmas.

I am confident that the massive white collar layoffs of 1993 will push the true jobless rate up still higher in the US, even while governmental and corporate economists crow about an economic recovery in 1994. All major US corporations have been downsizing at a rate of about 10% per year for more than seven years now. Downsizing, as you know, means firing workers, many of whom have worked a lifetime in the corporation that fired them, and who expected to work for many years more, and then to retire on a good and secure pension. But there are no more permanent jobs anywhere, or at least there won't be once tenure is abolished in academia, as it probably will be before then end of this century. And there are no secure pensions anywhere.

Additionally, the economic well-being of even people still employed has declined over the past 20 years. By January 1993, the average real wages for production workers had fallen to 80% of their level in 1973.

In 1979, 25% of the workforce--of those actually working in paid employment--were at or below the poverty line. Now, one-third of the workforce is in poverty. This is the largest percentage of the US working population in poverty since 1964--when Pres. Johnson declared the War on Poverty, which in fact did lift millions of Americans out of poverty and into a promising lower middle class lifestyle, a hope ended by Reaganomics in the 1980s. I also dare any of you to live a happy, meaningful life on the income defined as poverty, though this apparently is the goal of many new proposals and policies--such as those signed into law last month in the once-progressive State of Wisconsin--which cut off welfare benefits after two years and require persons to work. Great idea! But where will the jobs come from? I mean real jobs--socially and personally important jobs, secure jobs, well-paid jobs.

It is almost certain that most families headed by someone born after 1945 will not achieve the same comparative levels of income achieved by preceding generations. For all intents and purposes, the American Dream of upward mobility, of children always having it better than their parents if they just went to school and did as they were told, has ended.

Of course, not everyone is poor, underemployed, or unemployed. Since the late 70s, and accelerating enormously during the 80s, the number and percent of the rich has also grown in the US. That is one of the reasons we don't see or worry about the poor very much: there are so many more obviously rich people--or at least double income/double shift working rich persons--than there used to be, and many of us in this room might be among them. The number of hours worked per week for some white collar workers has significantly increased over the last decade and a half. So while most people are working less (or not at all), and earning significantly less (or nothing at all), some people are working more and earning seemingly more.

I say "seemingly" because many of the rich people are also over their ears in consumer debt as well. The main thing that a good job provides is not a living wage, but easy access to credit cards which enable you to live now, and hope that someone else--perhaps your children?--pays later.

On top of the rich are the super rich--that one percent of the families in America who earn a not-so-mere 14% of the total income, yet who own 40% of the total net worth and over 50% of the net financial assets. That's the top one percent, I said. And the bottom 60% of families essentially own nothing and have no financial assets. One half of that top one percent also received 55% of the total increase in household wealth in the heydays of Reaganomics, between 1983 and 1989. During that period, the richest one half of one percent saw their average wealth grow at \$10 million per year. At the same time, the lower-middle and poorest families collectively lost \$256 billion.

I have been talking about America the Beautiful. I'm sorry I can't give you similar figures for the price of paradise, but I can assure you things are generally NOT better here. Every time the Sunday newspapers put the smiling faces and salaries of the top CEOs in Hawaii on the front page of the Money section, I feel I ought to make a citizen's arrest of the publisher for promoting obscenity in a family newspaper. Each of the three highest-paid executives in Hawaii received well over one million dollars in direct compensation last year (which was an increase of almost ten percent from the year before), but we are supposed to feel sorry for them because the median pay of the chief executive officers of the nation's 800 biggest corporations was \$1.2 million dollars which was down 15% from the year before. See how anti-business Hawaii is? Our top-earning three CEOs only earn at the median of all the other CEOs in the US. No wonder they complain so loudly.

Nonetheless, more than one million dollars a year in direct compensation (and who knows how much else in indirect compensation and thus in net worth) seems like an obscene amount of money for any individual to make. It certainly is much, much more than chief executives make in Japan and Europe, and astronomically more than the average wage of American workers. For example, last year, the top executives in Japan earn 17 times more than the average Japanese worker, which sounds pretty obscene to me, but the top executives of the major US corporations average 53 times more than the typical American worker. Many US CEO's earn 130-140 times more.

Is that something to be proud of, or ashamed of, I ask you? And is it OK to publish that information in the financial pages of our daily newspapers? Maybe it is since only the rich and super rich read newspapers--or at least that section--anyway, and it is their lust and greed that is being pandered to. But I have to wonder.

Now, don't think for a minute that the situation I just described is unique to the US. While it is true that the gap between the richest and poorest, and the percentage of the families below the poverty line (and many other indicators of negative well being) are greater in the US than any other advanced industrial nation, the rest of the industrialized world is clearly trailing along after us, heading in the same appalling downward direction. Thirty-five million people, or almost 10% of the workforce, are formally listed as unemployed in the 24 industrialized nations which make up the OECD. In Europe, the jobless crisis is grave with unemployment near 12% officially. The plight of the erstwhile Third World is too gruesome to discuss in mixed company after such a fine lunch.

But I believe I must bring it up, as it were.

Richard Barnet has recently written that "across the planet, the shrinking of opportunities to work for decent pay is a crisis yet to be faced." Globally, almost 50 million new job seekers enter the already overcrowded labor market each year, 40 million of them in Asia, Africa and South America. Within the next two decades, in the Third World, more than 3/4 of a billion men and women will reach legal working age, and join the 3/4 of a billion already unemployed or underemployed, thus totaling 1 & 1/2 billion unemployed people in the Third World alone.

Finally, while all races and genders everywhere are represented in these bleak statistics, it is very important to note that the feminization of poverty is another deepening trend. Statistically speaking, to say "living in poverty" is to describe a single-parent household headed by a woman, most likely a woman of color; if a white woman, divorced.

I don't know how many trends were included in those paragraphs. Let's just say it was one long slide towards a two-tiered society of the few (but still comparatively numerous) employed rich and super rich and the very many unemployed or underemployed poor. In other words, expect no more jobs for most people.

--TREND TWO. A few days ago, with a thundering series of deep-throated booms and a cloud of all-too-lingering dust, in downtown Honolulu, a building built not so long ago to last (apparently) forever, was demolished so that yet another phallus to empty wealth and greed can rise to rape the darkening skies around it.

While the demolition of the old, and the erection of a new and vastly taller, building was still under some kind of discussion, I sent a letter to my good friend, Walter The Banker, who just happens to be one of the top CEOs in Hawaii, begging him not to contribute to utterly unnecessary urban congestion by so greatly increasing the office space downtown.

My banker politely replied saying that he was as concerned about the ecology as I was.

I am glad, but that was not my point. My point is that it is now, and increasingly in the future will be, entirely unnecessary to "go" to work. As even former President Bush said, when he announced a new federal transportation policy in 1990, (quote) "sometimes the best policy means not moving people, but moving their work,...a trend known as telecommuting. ... Think of it as commuting to work at the speed of light." Precisely so!

Surely it is more socially, ecologically, economically, esthetically, technologically, and humanly reasonable to bend our efforts towards creating more opportunities for teleworking and telecommuting than continuing to force people to travel at the same time to and from central work places!

The consequence of this second trend? Just as most learning in the future will be self-directed, self-motivated, and done at a distance, so also will most work.

-- TREND THREE. Given the enormity of our looming environmental problems--from steadily rising sea levels to rapidly and permanently altered climate and weather patterns, and everything in between, one major focus of human activity in the future will be on dealing with all of the human and ecological disasters caused by global environmental change. These include coping with massive numbers of bitterly angry immigrants who must head for higher ground as their homes disappear under the rising seas; dealing with a myriad new and renewed public health problems caused by salt and brackish water contamination, ozone depletion, and the inability of plants and animals to adapt naturally to drastically changed weather conditions; and containing the outrage and shame of our children and grandchildren as they realize that we are the cause of all of their misfortunes and privations: that it was our educational, economic, and environmental policies and practices, in the 19th and 20th centuries, which destroyed their chance for a decent future.

So while there may not be many jobs in the 19th century sense of monetized and commodified occupations, there will be plenty of things for humans to do--hold back the seas and care for millions of emmiserated, suffering, angry people. Those are the jobs of the future.

Can our schools prepare people for them? Not as presently focused. We still are trying to train people for nonexistent and environmentally-destructive jobs. And our current political and economic masters won't allow us to do otherwise. Our schools arguably COULD change their focus, curriculum, and style of teaching, but as I have repeatedly said, they were created to turn out industrial workers and mangers, not tender nurturers of mother earth and all her many endangered children.

--THE FOURTH AND FINAL TREND here is the globalization of all these processes of economics, the environment, education, and culture. Nothing I have said is a strictly local problem, although all of them are problems of localities everywhere in the world. The old slogan of the futurists used to be "think globally and act locally." That is still a good slogan--better than thinking locally and acting locally, which is plainly impossible now and for the foreseeable future, however desirable we might think it would be. No, the only viable slogan for the future I can see along these lines is "think globally and act globally." Whether we are talking about Hawaii, or one of the islands of Hawaii, or of any other remote atoll or mountain village anywhere in the world, the problems and possibilities we all face anywhere are more strongly conditioned by global economic, environmental, cultural, and technological forces than by purely local ones.

There are, no doubt, other trends even more important than the ones I have mentioned here, and some--maybe most--of you may think my trends are not happening, or not important, at all. We'll find that out--in the future.

Seven Alternative Futures of Schooling and Jobs.

So let me conclude by just putting these trends VERY quickly together into just the briefest of snapshots of seven alternative futures:

1. One very likely future is that the trends I mentioned (if valid trends they be) will continue unabated and thus much abetted. I certainly don't see

anything consciously and substantially changing them now. Americans are still into denial that the world has changed, and they have by and large failed to acknowledge it and try to catch up with what is really going on. We still believe we won the Cold War whereas it is my judgment that no one won it, and that everyone lost a great deal by fixating on it for four decades.

So, if trends continue, America will soon even more clearly than now be a two-tiered society with schooling and meaningful jobs for the rich who live in walled and armed garrisons, much as those already found in the suburbs of Los Angeles, Phoenix, Chicago, Detroit, and New York. The vastly more numerous poor--largely unschooled but often jailed; largely unemployed though sometimes underemployed--will live in slums and squatter settlements, attacking and killing each other, and especially any isolated rich persons who might carelessly wander too near their turf. An informative picture of this future can be glimpsed in the urban areas of Peru, Colombia, and Brazil. Don't think it can't happen here--and here in Hawaii for that matter. It can, if we don't take just, equitable, and humane action to alleviate the causes and heal the wounds.

2. One way to do so would be freely to admit that the time when jobs were necessary and important in the production of goods and services is over, and to invent new educational and economic systems based on that understanding. This means at least a guaranteed minimum standard of living for everyone independent of their work, but I think the time is ripe to institute the policy that Buckminster Fuller envisioned, of a bare maximum. There clearly is no shortage of anything in the world today. Rather the economic system purposely creates shortages by defining "effective demand" in such a way that most needy and deserving people are not able to access the goods and services that lie so abundantly about them.

Schooling in this second future would thus not be about training for jobs but education for life, self-actualization, and peaceful social interaction.

3. A third alternative future, a variation of the second scenario, would stress the importance of people caring for poor old mother earth and all her injured human and other forms of life. Thus education would help people acquire the skills and attitudes essential for that, and our "jobs", our "occupations"--the socially-important things we do--would be caring for others, not acquiring goods and services for ourselves. Goods and services would be acquired without reference to our labor and our social worth and work. Our wealth would have no relation to our occupations.

4. But perhaps I am totally wrong about the trends, except for the fact that government will go out of the schooling business. Maybe corporations will take education over. In such a fourth alternative future, very much wished for by many of you, I suspect, the relation between schooling and jobs would again become one-to-one with corporations determining the content of most courses and the skills of most teachers.

5. Or perhaps I am wrong, and the liberal welfare state is coming back again. Several days ago, the Star-Bulletin's financial pages featured an article with the headline, "Galbraith's liberal view back in vogue. The economist's ideas are sparking renewed interest." It has been my contention since before Bush was

elected President--and it is something I preach endlessly to Ben Cayetano--that the public is ready for a return to--or, better, an advance to--liberalism in the sense of an advance to a recognition of the importance of community, cooperation, compassion, sharing, and caring, which is what I take liberalism of the American sort to be. Maybe it will happen. While Clinton does not seem to be able to articulate a clear vision of a dynamic caring and sharing society, maybe his more able vice president, Albert Gore, will do so when it is his turn at the helm. In the meantime, when Cayetano wins the governorship here in Hawaii (yeah, right Dator), Hawaii will be the first state to lead the way forward to liberalism, and forward to a time when commerce is for the good of all people and not for the enrichment and empowerment of the few; a time when publicly-funded education will assume its rightful place as the key and crowning achievement of a progressive, caring, and future-oriented community, in which honest labor is honored as a sacred communal duty, but not made the sole purpose of life nor determinant of whether one lives in poverty or excessive wealth.

A sixth and seventh alternative variant of this future would see either a Green or a sovereign Hawaii, with Green Party and/or Hawaiian values replacing those of secular liberalism as determining the link between learning and work.

If any of these last three futures were to come to pass, I would be happy indeed to have been wrong in my concerns about the trends driving the future.

It is very much up to each of you in business and education to determine what future you want. I challenge you do to it. Don't let things continue to drift towards violence.

I care deeply about Hawaii and its future, so I propose to come back here in ten years to find out what you did or did not do about forging an effective and humane link between education and work.

Go ahead, make my future!