In this essay, I'm going to try to tangle with learning, or as it's more civilly called, "education".

This was brought to mind by the continuing debate in political circles generated by the overall downturn of the abilities of the "graduates" of the United States educational system. Recently there's been an effort to totally undermine the public school system by the federal government.

I have to say up front that I'm not an educator, nor do I subscribe to a particular theory of how people learn. Therefore, these are my own ideas that are being put forth here, and only I am responsible for them. "The buck stops here", to coin a phrase.

There are three kinds of learning. I'll take them up one at a time. Those three types of learning are:

- Rote learning, by which we usually mean those things that we need that have to be learned by rote, or memorized, or at least the concepts buried in memory to be recalled when needed. These are sometimes called the "3 R's" abilities necessary to exist within any society. The allow us to read and write and calculate and communicate.
- Moral/Religious/Ethical (MRE) learning, where the interpersonal interplay of individuals is dealt with next. This may take place in the home and/or church/synagogue/mosque/temple. This relates to how the individual conducts him/herself within their own culture according to the morals and ethics taught by his/her spiritual bent.
- Existential learning. This is the "school of hard knocks". It's usually the result of trying to apply either MRE or Rote learning to everyday life and finding out that it's either reinforced or repudiated, usually with a cost on both ends of the spectrum. But even by itself, when gained from peer interaction, it's a powerful factor in the overall education of the individual for an entire lifetime.

When people say education, they usually mean just the Rote variety. The usually forget the other two kinds, because they don't fit into the neat categories of "learnin" that we associate with education. But we have to look at the whole picture if we're going to be able to see how a person is "educated". OK, the question first arises, what is the purpose of what is narrowly defined as "education"?

In a narrow sense, it's defined as gaining the skills to make a living, once the "institution" (quotes added for emphasis) turns you out into the 'real world' to survive on your own. There is also a more overriding reason for education that most people never think of, or get told about.

That second reason for education is the goal for the longevity of the state and its own preservation. Education's prime directive for the social structure (not the individual) is to produce a citizen that is **supportive of the society and will defend it** from either external or internal influences to keep it whole.

From society's viewpoint, and that of politicians and social scientists, the preservation of the state is paramount to the survival of the individual. Every war where we lose soldiers is a statement to that fact.

The educational system has to be geared to that end if the society is to survive for long. It has to produce people on an ongoing basis to support the government and the society as it moves forward, backward or sideways in its evolution.

Now, education in this realm of thinking has to be done in stategoverned and approved schools, so that revisionist history can be evoked to support and prop up the social structure. A classic example of that is the recent attempt at the exclusion of Black, Asian, Hispanic, and Native American history studies. Why? Because we would have to admit that we played our own brand of genocide and suppression on those groups and we'd have to bite the bullet on a national shame. Our history in regards to all of these groups is somewhere between atrocious and criminal. But I digress ...

The education of the child is an investment in the future, but society wants that investment to protect the society. It has nothing to do with truth, scientific method or factual representation. It has everything to do with cumulative culture, non-reason, and revisionist history.

I quoted the exclusion of factual history for all the groups that aren't white Anglo-Saxons. There are others even in our present day. Witness the effort to reinstate creationism into the curriculum on an equal footing with evolution. Witness the effort to downplay events like Waco, Ruby Ridge, and other such things by the government, and to discourage questioning their value or need. This all has to do with maintaining the society's status quo and producing a citizen that will support it regardless of what it wants to do or what policies it wants to implement..

This was brought home to the U.S. government during the Vietnam War. Here, the news media brought the war (killing, blood and all) right into our dining rooms at dinner. It was impossible to not see what the mayhem and violence were all about, and it produced an entire generation that didn't agree with the idea that we needed to be there. The American military has taken pains ever since to totally control journalism in any conflict that we're involved in, so as to not generate that resistance to it back home. The Vietnam war in our homes every night was a learning experience that no government wants to encounter again.

Why am I discoursing here? Because I want to bring home the fact that the only populace that is controllable to any large degree by its government is one that doesn't think for itself. And the only way that can be accomplished is for the established authority to control what people learn, and channel it into areas that won't diminish their view of what the society should be. It has to involve the suppression of critical thinking to damp down the fires of dissent.

Almost everyone will agree that the American educational system is in a shambles. The graduates of it are rating far below their peers in other developing nations. And among the developed world, we're rapidly losing our technical and innovative edge, because we're not producing young adults that can think and do.

Why is this? Since the fifties, almost everyone will agree that the entire society has changed radically. The nuclear family is now a thing of the past, and with it has gone a large portion of not only social learning, but the motivation for education as well. The schools have gone downhill for two basic reasons. One is because we were complacent as a society because we were a world-dominant power, and didn't pay attention, until we started getting our butt whipped in the global marketplace.

The second reason, as I see it, is far more insidious and far reaching. Starting in the nineteen-fifties, the curriculum was shifted for a while to science and engineering. When we filled the need for scientists and engineers for the space race and the Cold War, we started coasting. One of the things that happened simultaneously with that was the evolution of mass media. It to a large extent is responsible for the breakup of the family, by destroying the time that the family had together to talk and do the MRE learning ... not to mention homework and putting the "why I have to learn this" into the equation.

One side effect of learning the scientific method is that it teaches you to ask "Why"? In the ensuing years, with that family dissolution, religion started taking a back seat to everything else. Church attendance started plummeting once the "me" generation got into high gear. I have to believe that it was in teaching scientific method of inquiry, kids started applying it to the religion. Their families had preserved it for millenia, and rejected critical thinking when it involved faith.

The backlash to that loss of faith from the older generation, especially with evangelicals and fundamentalists of all ilk, was to try to force religious teaching back into the schools. It's a battle that is still in full swing in legislatures across the country at all levels. But, we've changed in our demographic makeup since the fifties, and instilling a Christian religious bias to the educational system may not wash in many areas any more.

Again, I digress, but I think it's necessary to think about the "why" of education, as much as we focus on the "how" of it.

OK, we've established the "why" and its ramifications. Let's look at the how. It's also controversial. Religious schools, while teaching science, also infuse it with the religious teaching that they affiliate with, so as to instill the faith at a time so it won't be questioned. To them it's the only way they can keep their faith intact and growing. It also is at the heart of the school voucher dispute in the political realm.

What we teach our kids is also important. I mentioned up front about the non-teaching of factual history, of which we are as guilty as any old-world culture. We, as all societies do, play the revisionist history game. It's difficult (if not impossible) to get us to admit our collective faults, and far easier to blame somebody else for whatever nasty deed we have committed collectively in our past.

As an example, you never hear a discussion in public high schools about whether Roosevelt knew about the bombing of Pearl Harbor prior to the attack, and was using that event to force the isolationist block in Congress to back the British and get us into the Second World War. It's a fascinating subject, but you won't find it in any high school social studies program (if the program even exists).

Another banned subject would be "Was Custer in the right when he got annihilated at Little Big Horn ?" or ."Were we right as a society to incarcerate the Navajo people for years, and why did we do it?" We just don't talk about it. Another: "What was the role of the Chinese of the opening of the American West? Were they exploited and how were they treated, once the railroads didn't need them any more?" Not a topic covered in many history texts.

History at all is fast becoming a victim to budget problems, and geography is a lost art. English as a language is less and less taught at the higher levels, and communications skills are being lost as a result. English grammar is almost non-existent. Why?

The why is because we as a society are fast becoming multicultural. The existing white power structure still doesn't want to admit minorities into the fold, even though you won't find anyone that will openly admit it. If you don't think that's true, look at the boards of directors of the Fortune 500 companies. Barely 5% are minority, and very few women. All the rest are white men. This is an indicator of how it's working.

Do the schools pay a penalty in this equation? Yewbetcha. Let's take a likely scenario again that nobody will admit to.

If we consciously dumb down the schools, we eliminate the probability of minority students getting the education they need so as to challenge the monopoly of whites within the power structure downstream. There is no other explanation for the condition of the public school system, especially in minority ghettos. The power structure's kids live in either the affluent suburbs, or they go to private schools. The exception to this is many times the Catholic parochial school, where the administration answers to a higher authority. At least they make the kids learn, but it still is governed by the curriculum established by the state/federal governments as to what's taught and what texts are approved.

There's a big hoorah about local control of schools. The argument to that which I see, is that if I were a Kansas graduate where evolution and creationism are taught as equal theories, I would have a significant problem with heredity and natural selection as being biological fact. It's somewhat difficult to correlate that with what I learned back in Kansas, and if I were to want to work in genetic science, I'd be coughing and sputtering all the way through with foundational conflicts.

OK. Enough of the "educational" system as it is. I've slow-roasted the current school system for producing kids that can't read and can't think. Now, the family and church come into view.

Learning is a lifelong process. It begins before birth, if you believe some researchers. When is really irrelevant. It's the fact that it does, that's important.

The Moral, Religious, and Ethical learning starts early, also. Kids

are mimics. They learn by example. And they learn at a very early age. They experiment. Anybody that has had kids will tell you that at age two, anything they can pick up goes in for a taste test. It's felt, thrown, played with, moved and anything else that can happen to it at the hands of a materially sadistic child. It's all part of learning. Things can be sharp and hurt, taste bad, or not be pleasant to play with. They learn to avoid these things.

They also learn to avoid doing things that displease their parents, or things that the parents feel will hurt the child. A harsh voice and a spanking are things to stay away from, and it doesn't take long for the kid to catch on. Whether they stay caught is another question, once they get to be teenagers.

Inherent in this learning process from a very early age is the moral component of right and wrong. "Don't hit your sister!" Of course, this is done in the context sometimes where the parents are watching football, WWF wrestlers in action, or Starship Troopers. Seems a little bit of a mixed message what with the gore and violence. In fact, I seem to recall the case of a youngster killing his little sister, using a wrestling move that he saw on WWE wrestling on TV.

Once they get language skills of a rudimentary nature, "Why?" becomes one of the first and most used words of the new vocabulary. "Don't hit your sister!" "Why?" "Because it's not nice." "I saw Chynna hitting Triple H on WWE TV." "That's different." "Why?" At this point, sometimes the kid gets smacked, or at the very least, the apoplectic parent says, "Because I said so."

If this continues long enough, the "why's" stop, which is sad. If we stop asking why, it carries over into the traditional educational system. They quit asking "why" on all levels.

Curiosity in the human animal is an innate thing. It wants to know how things work, and why they work the way they do. It's at the basis of all scientific advances. If it isn't "why", it's "how" or "who" or any of the other questioning words we use.

Remember the bumper sticker from the sixties? "Question authority." Uh-huh. The kids at Kent State during the Vietnam War tried that with disastrous results.

But we run into another social roadblock to the "why" when we include religion into the mix.

I remember when I was about to get confirmed into the Episcopal church, that I started trying to get "why" answers from the minister as to things that didn't make sense. I never got confirmed, by the way, because I refused to give up the "why" and substitute faith for it.

We can accept faith in religion because we don't want to die off, or because we have to believe in something to explain questions like "What's beyond the edge of the universe?" or "What was before the big bang?" We have to have an explanation, or we go nuts. That explanation can be a simple "God did it", which stops any followup questions in their tracks.

Almost all religions have what they define as ethical and moral rules of conduct. They usually agree on basics such as murder, adultery, and stealing. After that, they diverge, sometimes radically. Jews observe kosher, and Moslems don't eat pork, as examples. But in their true form, these were absolutes in other times as not only moral and ethical values, but as social law with significant penalty. Sometimes it was in the realm of marriage, where (again an example) a Moslem man merely has to say "I divorce you" three times, and it's done. If you're a Catholic, there ain't no way or words to make it happen at all. How do you come up with a unified society with these kinds of diversity?

Good question...

So we have the family values thingie going, and we have the religion thingie going so as to mold our mangy little minds into some form of social animal. Much of the question from this point forward becomes "what kind of social animal do we want to create?"

Here we start diverging like the Hydra on a bad hair day.

If you're a Serb, you remember old battles against the Ottoman Empire, and learn to hate Moslems with a passion. That hatred is reinforced by the Orthodox church, who try to preserve the national/ethnic/religious heritage so as to keep the culture and the status quo intact.

If you're an Orthodox Jew, you adhere to strict dietary and dress codes. It makes you different than the rest of the society and preserves your ethnic and cultural heritage intact, not to mention your religion. As an observant Jew, you always think (for good reason in many places) that the society is out to get you, and that they have long memories. The nation of Israel was founded on such paranoia, and still possesses it for good reason; being surrounded by states that are, to say the least, hostile to your existence.

If you're a traditional Muslim, you pray to Mecca five times a day, and celebrate Ramadan. You also, if you're an Albanian or Kosovar, remember that the Serbs are out to get 'ya, and never forget it.

These are but a very few of many, many examples of this kind of MRE thinking.

This is all part of the MRE learning process. Many times the moral and ethical part of this (as we've seen) is entangled with the religion as well. This can be good or bad, depending on how literally you enforce your moral codes.

If you're Jewish, chances are you don't stone sinners in the public street any more. Moslem states use Islamic law taken from the Koran to punish violators for stealing, adultery and murder. In its original form, it's public and violent, but serves the purpose for that society. Most have abandoned much of that violence.

Social order is almost always taken from religious ethic of one form or another. It's interesting to note that in America, we are now becoming so diverse that we're having trouble finding common ground for even the most basic ethical and moral values - because we have significant minority populations that don't agree with them. Those minority lines don't cut across clear boundaries, either. It can be cultural, ethnic, or religious in nature, and sometimes conflicts the individual involved in all three at once, when they are working at cross-purposes.

Take the abortion issue, for example. Depending on your own personal religious persuasion, or lack thereof, you come up with your own position on the issue, and there isn't a major amount of slack in it. Plus we have some of the fanatical fringe that think that God has given them a mandate to kill abortion doctors, which complicates the issue significantly.

This is a problem that predates our own Constitution and indeed, generated the Freedom of Religion amendment in the Bill of Rights. There was such a diverse religious population, that they couldn't agree on many moral issues. The English Puritans in New England didn't see eye to eye with the New York Dutch Protestants. The Catholics in Maryland didn't approve much of any of their northern neighbors, and so on. The one thing that they had in common was their basic Christian roots, however shallow, and the fact that almost all had been persecuted minorities in Europe.

We have these differences now, amplified about 300 million times. Each of us has at least some basic moral values that keep us in check, unless we're a pathological killer or rapist or somesuch. If there's no moral fibre, then at least the law and the consequences for violating the agreed community practices (which is what the law is) keep us in line. Part of the learning process is finding out what the limits of acceptable behavior are, and what those consequences consist of. It's also why we give juveniles some slack until they supposedly get the experience to be able to reason out why they should conform to the law.

OK, so we've seen how the MRE side of education is important in a social sense. Unfortunately, the family part of the equation has fallen apart, and the religious part of it has also lost steam. That leaves the "school of hard knocks" part of learning.

Existential learning, or "the school of hard knocks", is the practical side to all of the things learned via the other two types.

This is where someone actually applies morals, ethics, theoretical education, and parental teaching out in the real world. Unfortunately, because the other two are pretty much lacking in substance these days, this third option is probably the one that matters most, and shouldn't.

School/education/rote learning is almost all theory. There are exceptions, where work/study programs allow some application to real world stuff, but they are pretty much limited to engineering and science majors. The rest are left to struggle with applying the stuff they've learned (or didn't) in order to survive in the jungle of modern day America.

Rote learning can only do so much. Sure, there are certain things that have to be learned that way, like basic reading and writing, and numbers and basic math. But the minute you get out of the basics, there's no application of them that deals with the real world.

For instance, it isn't until you get into high school trig that you actually get to measure the height of something, and then it's only once, quite fast. There's no real application. In the engineering work that I do now, I truly wish fervently that I'd learned all my algebra, trig and calculus. It would make my life a hell of a lot easier if I had. But I didn't, because I never saw the connection between what I was learning and some application "out there in the real world."

It wasn't until much time had passed that I learned to appreciate the tie-in between English Lit and European History. The association of geography to maps and cartography, and the extension to navigation across the oceans didn't occur until much later either. The association between the science of spherical trig, and the actual determination of your position on the earth using star sights just didn't occur at the time.

The same could be said for any number of occupations where any kind of technology or science or book learning is a requirement. If the tie-in between art, music, technology and social sciences isn't made, then there's no way to see the implications of what we're doing to ourselves. The relationship between architecture and history, or between science and military history, or between the development of religion and how it relates to politics and war, is so necessary as to be essential. We're not doing it, and losing a lot of ground.

For the moral and ethical side of things, it's much the same story. We're taught in church or mosque or synagogue that it's wrong to steal or murder or latch onto someone else's property (human or otherwise). If the practical side of it isn't taught along with the theory, it isn't going to stick.

Just reciting the ten commandments or the law from the Koran without some actual examples won't have much effect. Even though much of our criminal and civil law is grounded in these basics, the connection won't get made at the necessary level so the person analyzes their action in the light of morality and ethics.

In today's business climate, with the emphasis on the bottom line and producing dividends for their investors, much of the ethical standards have been lost, and probably for that reason. Stealing from competitors is ok, and trying to wipe them out by any means possible is the norm, regardless of any ethics that might be applied. Somewhere along the line, the learning was either never applied, or the connection didn't occur. In fact, most businesspeople probably consider themselves moral and religious, regardless of the fact that they closed a factory and put 5000 people out in the street without incomes. Personally, I don't see how they can face themselves in the mirror, but that's another story. Where's the morality that they supposedly learned through their religious affiliation? And if they still profess to have it, where's the disconnect?

This problem leads to learning all this stuff on the fly once you get out earning a living and being a live, productive, happy citizen of the society. (Excuse me while I get sick at what I wrote.) In some instances, the person takes to the books and learns the subject later, after having found that what they're interested in doing is unobtainable without it. This was my case.

Many times it takes off the other way, though. The person gets discouraged because all the jobs that are interesting require stuff that they didn't bother to learn in school. Then they have to take a menial job that skills aren't required for. It used to be that an auto mechanic was a nuts and bolts job that you could learn through the apprentice program. Now, it's got all kinds of electronics and sensors feeding an onboard computer, and some electronics training is necessary to even get a job doing vehicle maintenance.

Likewise, to even be a secretary now requires that you know some spreadsheet and word processing skills to get in the door.

Those that can't hack it in the job market are the ones that we have to worry about. They're the ones that will see that it's easier for them to steal cars, or mug people in order to get enough money to survive. They also have the drug trade to complement their income. They learn from their peers (others that can't hold or get a real job) that it's easy income to peddle crack or any one of the other designer drugs.

That peer pressure (particularly in the economically-challenged minority communities) also looks at anyone that betters themselves in the normal societal structure, either economically or politically, as a traitor. The traditional term is "Uncle Tom." As such, they subject them to ridicule and harassment, and anyone that shows inclinations towards a better life is many times put down mercilessly.

Because they probably didn't get the religious/ethical/moral training at home, they also don't have that base to see that within our culture it's wrong to steal or do drugs that screw up our next generations of kids. That's just not there. ALL their learning has occurred on the street, hangin' with their buds and homies.

Then, they get busted, and go to prison, where they really get educated ... how not to get caught, how to do a break-in more efficiently, or how to kill someone more effectively. This now reinforces the learning that they got on the streets. When they go back, they'll be an even more efficient predator. Prison is usually considered by perps to be a cost of doing business, rather than punishment. Consider that they get three meals a day, don't have to worry about housing, and their friends are there. Who could ask for more?

So the practical side of learning can take more twists than we can imagine. It comes from everywhere. If that's true, where are we going wrong with it?

It's obvious that disconnecting the theory and practice of almost everything doesn't do much good except bore the living hell out of the kids, because they don't have enough experience to connect the dots for themselves. It leads to kids like me who get many of the concepts the first time, but then tune out and miss a lot ... usually flunking out of the class because they aren't paying attention.

In my particular case, I was pretty sharp in high school physics,

but I just didn't pay attention in class, and the teacher was a total theory person. I'd get to daydreaming and lose a couple of things, and wind up getting a low grade and almost flunking out for the quarter. The dichotomy of it was that I came in second in the school in the statewide physics exam that was given each spring. Go figure. Some of the theory must have stuck, but it sure didn't show in class or my high-school GPA..

Imagine what must go on in the head of someone who is REALLY bored ... they're the ones I really worry about. The only solution for that is going into the military, but there's a problem there, now, in that it's become so technologically oriented, that they've raised the standards for admission. That leaves the street, major crime, and the drug trade as the only viable alternatives for kids that don't or won't or can't make it through the educational process.

Couple that with the problems of broken homes, parents with two jobs, and no goals in life, and you have the seeds of a Columbine massacre, a future drug lord, or a three time loser in the pen for life. Not much of a prognosis, is it?

There are solutions, but not of a very palatable kind.

First and foremost, you have to realize that ANY change in the "educational" system in America is fought to a standstill by any number of political interests, from the teachers unions on one end of the spectrum, the politicians who fund the system on another, the school administrators on yet a third, and the curriculum zealots on yet a fourth front. All of these have a real and almost fanatical resistance to change or an equally fanatical requirement for change. There's not much middle ground.

The teachers unions will be objecting to any change that affects tenure, pay structures, or any negative impact on the number of its members ... and this includes periodic testing of teachers for competence.

The politicians will reflect what the majority of their constituents have to say, whether it be a vocal minority or silent majority. They will be driven by other factors than quality of product from the school system.

The school administrators have their own bureaucracy and philosophy that an entire industry has grown up around. This includes "educators" who have a vested interest in keeping the status quo because it's their ideas that are at stake, however flawed. Educational theorists fit this mold also.

The curriculum people are bound by their own ideas of what the children of the country should learn, and also are influenced quite a bit by religious and moral concerns in many cases. Curriculum folks include not only groups like the PTA and NEA (which fits two of our four categories) but local school boards and any religious group that feels that the inclusion or exclusion of certain subjects is a God-given mandate (check out evolution and sex education for starters in this category).

With all these competing interests, the progress of any change will be slow, if it happens at all. But change it must.

To look at what change must occur, we have to take a fresh look at what we want education to do, and how it can be best accomplished.

Education of our younger generations is essential, if we are to survive as a society. That's a given. The fight is mainly over what kind of a society we want. Do we want a multi-cultural society with many different value structures and moral codes? Or do we want a singular society, in which only a Judeo-Christian ethic may be taught to the kids? Do we want the kids to be prepared to participate politically, or do we want them to be techno-nerds, with a very narrow view of society and history? Should they question what their government is doing, or be passive sheep that need to be looked over by a pastoral authority?

Each group listed above has a different view of the preceding questions.

The recent arrivals in the immigrant pool (1950 and since) will argue for the multi-cultural viewpoint with great vigor. Their attachment to ethnic and national pride is almost tunnel vision in nature. It is with great difficulty that you pry them away from it.

The singular society folks, mainly the more fundamental Christian groups, would sooner eat dirt and die than allow anything but that Judeo-Christian viewpoint to inculcate their kids with heathen verbiage and concepts.

The vast majority would like their kids to be prepared to participate politically, but since the system has dumbed down over the last forty years, their ability to say what's necessary for the kids to participate intelligently has been degraded.

The techno-nerd approach is what we've got now, and it isn't working. A narrow and biased view of history and sociology creates

engineers and scientists that have no feel for what their work is going to do in terms of affecting either the way we live or the future of the entire world. To this end, look at the row over the ethical connotations of embryo cloning and the whole argument over fetal cell research.

Questioning what the government is doing is the fodder for any revolution. No government in it's collective right mind is going to allow criticism of their policies if they can help it. It's inherent in any governmental structure to perpetuate itself. Power hates giving up power, or changing it in such a way as to weaken the individual power of the participants. They'd much rather see the pastoral approach, which is what we're giving them at this point.

All these questions and more are brought up when we deal with the educational situation.

We no longer live in a monolithic culture in America. We have competing moral structures and religions. We participate in a global economy. We have much diversity in racial, ethnic, and religious participation. There is no way that the old monolithic structures can continue to exist, unless we wish to mold all the kids into one mold, patterned after a neo-Victorian ethic for America.

That's impossible to achieve any more. So we're stuck with diversity, however unpalatable it may seem to many. I don't like change any more than the next person. I, for instance, see the necessity of such things as "English-only" in sociological terms as well as the need for a commonality of purpose for any society to survive. To me it's a given, but nowadays, unless you're blessed with an insatiable curiosity and some resources, these facts don't become very apparent to you and won't be brought up in any education you may receive.

Inherent in diversity, we first have to teach the idea of tolerance of diverse views in the schools. Kids are color-blind until their parents and peers teach them differently. That bias has to be fought in the schools, since that's the only place that can be objective. Families will by nature be biased to their own religion, ethnicity, and culture. Sometimes that bias is vigorous and negative against inclusionary education. If we are to be a nation for very much longer, we must stress the importance of dealing with that bias at the very start of schooling.

Countering it must do such things as cross-cultural appreciation at a very early age, using the positive aspects of history, music and art to show the positive sides of almost every culture. The exquisite art of the Chinese and Japanese ... the music of Western culture, and the civilizations of Africa that pre-dated European ones by millenia ... all this must be taught. It has to be put into a context of positive thought, so that the child has an appreciation of what other diverse members of their class or age group have as a heritage. Inherent in this is the staying away from the negative aspects of warfare, greed and cultural infighting that also color the historical perspective. At this stage, we have to keep it all positive.

At this level also, reading and writing at least two languages other than the child's native tongue must be taught. We live in an increasingly interconnected world, and the ability to communicate is an absolute necessity. All of this, plus basic math and science should be accomplished by age 10. All of it has to be presented without the negative connotations of history. It also has to be presented in an integrated manner, tying together the science with the history with the art and the music as a seamless whole. What music was Newton hearing in his age when he discovered the laws of gravity? What literature was prevalent at the time? What was the tie-in between the Arabic culture and the evolution of mathematics and geometry? All this has to be integrated so that there is NO boundary at this level between disciplines.

Why do we need this presented this way? Because it is the only way that we can produce citizens that will have the comprehensive basics to be good members of the society. It is also the only way to give young minds the ability to put many of the scattered pieces of culture and geography and science together into a whole that they can understand. All of our citizens must be well grounded in not only science and technology, but in the humanities ... history, geography, music, art and philosophy.

At the next level, at what we now consider junior or middle school and high school, we amplify on the integrated theme that we've established in the lower grades. In every discipline that we give the young adults, we must teach them the why as well as the how and the theory. Kids are by nature curious, and if we don't satisfy that curiosity, they will either find out for themselves or get discouraged and not be curious any more. Any parent who has tried to tell their kids "no" without a good explanation is asking for trouble downstream.

At this level we can start to introduce philosophy, in its historical sense. But we also have to include the philosophy of the far East, as well as that of Africa and the middle East. It is again, only through a historical perspective that this whole framework of learning can be placed. To paraphrase ... 'they that do not heed the lessons of history are doomed to repeat them.'

The language training goes forward, as does the ability to communicate. As talents emerge, those talents and interests must be encouraged. A natural talent for science, math or music has to be nurtured. But in that nurturing, we cannot neglect the other aspects of the civilization. If we have a kid that likes history, we can't neglect the science in a broader (non-specific) sense, nor can we keep the languages or humanities at bay for a scientifically talented child. Where the interests of the child and the parents differ, every effort has to be made to convince the parents of the child's talent and wishes, so that they may develop along their natural talent lines.

We can start to teach the different disciplines separately at this level, but the curriculum must be coordinated so as to tie the scientific study back to its roots. All learning from this point on must do this coordination. For instance, concurrently, you might have the teaching of the Pythagorean theorem in geometry as well as the Egyptian culture that allowed it to be thought of in the history class. Hypatia and the Library at Alexandria would be classic examples of what happens when you lose knowledge as well.

You might have English literature concurrent with basic physics, showing what Newton was reading at the time he discovered gravity, as well as the music of the period and the art he was appreciating. What political system and economic restraints was he operating under at the time? Philosophy will reflect this integrated approach as well, dealing with the cultural and social aspects of the period when this was taking place.

The advanced classes at the current college level should continue in the same vein. By this time, the student has either opted for a vocational education, or wants to continue with higher education. In either case, they follow their own desires and abilities, and the education system will be required to maintain the integrated approach to that education, cross-pollinating all aspects of the learning process to provide the seamless whole of an educated citizen.

In the vocational side, to produce an artisan, a car technician might be required to see the environmental problems involved with auto exhaust systems, and why it was necessary to mitigate what comes out the tailpipe.

It all fits together. This integrated approach to learning is the only

way that we can continue as a society without suffering major structural problems. It just won't happen any other way.

I'm sure you noticed by now that politics and government aren't mentioned here as subjects for education. I purposely didn't mention them, since they are a logical outgrowth of history, geography, and comparative religion. Some of it will rub off as logical extensions of the social sciences. Politics and government can only be analyzed once a firm base of these other disciplines is established. Only then, perhaps at the college level can this be taught in any meaningful way. Without knowing the roots of the founders of the United States, and the conditions leading up to the establishment of the constitutional republic, you cannot appreciate the impact of how and what and why the government operates the way it does. It is only then that we can afford to teach this, and a course in government and civic responsibility should be a requirement for any citizen to vote or participate in the system of government that is in place. An equally required course is in the basic law of the society, including how the legal system works (or doesn't). But again, these can only be taught after a firm grounding in all the other requirements.

Non-curious kids are dangerous for the society. The old phrase, "idle hands are the devil's playground", is a most appropriate and true aphorism. Most internal revolutions in history have stemmed from students who find that their intellectual pursuits are being stymied by either government, religion or both. We can't afford for that to happen here.

Purists will cringe at the thought of promoting the questioning of dogma, whether it be scientific, cultural, literary or religious in nature. But what I have seen is that in questioning all the norms of society, most people see that the norms are built up over time by either commonality of idea, or commonality of need.

The questioning of a defense system leads to an investigation of why we need defense in the first place, and an acceptance of the fact that any society will eventually need to defend itself. Thus the questioning in this case leads the questioner back to the norm. If the norm isn't logical or practical, as many are not, then as more question it and find different answers, the norm will change and the society with it. But it is only with this curiosity and questioning that this positive evolution will take place. Otherwise, we are led in directions that may be antithetical to our survival, because we didn't know what else to do. The questioning of the religious authority is the one that the society also has to allow. Some religions allow and encourage this. The Jewish faith is unique in its ability to continuously challenge the concepts of the Talmud and still keep its structure intact (except for its own schisms within its structure between Orthodox and Reform.) Others insist on never challenging even the most minor literal component of the Bible.

The unquestioning faith in religion has never worked in the past and will not in the future. But the allowance of questioning any and all tenets of faith eventually leads the questioner back to the religion that best suits their needs, and the religious hierarchy has nothing to fear until or if the norm changes with a new generation of proponents. Any faith must grow and evolve to hold it's believers, or it will fade away like many have.

There would be massive resistance to such a system. Each of the major groups listed at the head of this essay would work to undermine any attempt to implement it.

The teachers unions would see it as a direct affront on their members, since the teacher would have to be much better prepared than is currently done. Elementary teachers in particular would have to be the best possible, since they are tasked with teaching a broad spectrum of things in the integrated structure. Also, more would be asked of the teacher in terms of training, and knowledge ... as well as overall ability. We can't afford any duds at the elementary level. The costs are just too great.

The politicians would have a problem with the new structure since it would eventually lead to a new paradigm of questioning the political structure and becoming involved in it. This would lead invariably to a whole new way of politicking and running the government.

The school administrators would be rabidly against this, since it throws their entire hierarchy and philosophy out the window. This would be steadfast bureaucratic resistance which would be very difficult to overcome. You would see such a flurry of papers, theses, and propaganda against this new system that it would be years before the snowstorm of paper died down. After all, the most difficult minds to change are those of the entrenched hierarchy because of nonenlightened self-interest.

The most difficult minds to change, however, are those of the curriculum fanatics, who have their own agendas. These are mainly driven by religious, ethnic or cultural beliefs that they believe are essential to their own version of society. What has to be stressed with them, is that there is no threat from diversity, and that if they perceive one, it is because of ignorance, not danger. This will be the most difficult set of people to win over to the new paradigm, if indeed they are ever won over at all. They will probably continue to want their ignorance and narrow walls of their own existence, to which end they will continue to be a very vocal minority in opposition to any system similar to that which I am proposing. In the end, they'll probably stick with their own schools for their faith and opt out of any nationwide system ... to their student's detriment.

Many will say that with the family dissolution and lack of guidance from parents, that this plan will never work, because the kids will be too far beaten down for the school to pick back up. In addition, even though the school may be able to get them back on track, some parents will inevitably want to know "what is this trash you're teaching my kid?"

Can we counter this? Only with the political will and grassroots effort to implement and stick with this new paradigm. It won't be easy, but any other approach is so fatally flawed that it will cause future generations to make mistakes in judgement that will devastate the society.

The problem of latchkey kids and dropouts is also difficult to deal with, and it's expensive to provide daycare centers and places for them to go in a safe and enriched environment. But that's the only way that we're going to be able to turn the tide of an ever-less educated population with little to no broad-based humanitarian foundations. We have to get our kids to grow and want knowledge if our society is to survive.

There is a move afoot (as there has been for years) to make sure that local control of the schools is kept at that level without any interference. This has forever been found to be flawed. Even at the state level, it's difficult. Witness the equal status given to evolution and creation as valid theories in Kansas. There's no reputable educator or scientist that readily agrees with this correlation, yet it exists and there are thousands of other parochial interests of this type scattered around the country. If the educational standards are not maintained at a national level, with standardized achievement tests and standardized competency tests for teachers, then some students are going to be denied a decent education because of a local school board that defies logic and goes with religious-based or ethnic standards. Some will see in this proposed system a throwback to the European system of education prior to 1935. That's a fair comparison. But it worked and it worked well. During the Second World War, the scientists who worked on the atomic bomb were well aware of the implications that the use of the device would portend. Most of them implored President Truman not to use the bomb, because of the potential for mass destruction and loss of human life. They would not have had that capability to foresee the danger unless they possessed a broad knowledge of the humanities and history. Many of them had fled Hitler in the '30's, and were refugees themselves, witnessing the destruction of their own originating societies.

In short, we have to change the way we teach our kids. They have to understand the integral relationships between all facets of the human existence, warts and all. We can't be xenophobes for very long these days and exist in a global economy. If we do, we'll be a backwater nation, with little to offer the rest of the world.

Those interrelated pieces of the educational puzzle must challenge the student, satisfy and enhance their natural curiosity, and produce a product at the far end of the process that will have all the qualities that we as a nation currently lack ... global understanding, tolerance, and technical knowledge. This is what education is all about. This is what we have to do in order to survive long term as a society.

I realize that the chances of this radical approach to educating our kids into the twenty-third century has virtually no chance of implementation. I, like Plato, will not live to see any of this happen. But it gives me some small satisfaction to look into the future and at least see a way that could work if given the chance. It, however, also gives me large amounts of sadness to know that it probably will not be within my lifetime, for the same reasons that it got into this present miasma to begin with, namely power, control, greed and the lust for same by those that possess it.

Patti