

## Paths of Learning, Issue #19, Winter 2004

The following interview is a continuation of the dialogue published in the article “Vice President for Educational Heresy: An Interview with Veteran, Maverick Educator Don Glines” on pages 16-21 of the Winter 2004 issue of *Paths of Learning*.

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### Inspirational Thinkers and Practitioners

**Paths:** What thinkers or practitioners inspired you to become involved in educational reform and renewal, and why and how did they affect you?

**Don:** Most of us involved with the change process could list dozens of people who influenced our views—dating to previous centuries. Limiting the number to the early era of my learning, Dr. J. Lloyd Trump was my most instrumental mentor, for he taught me that change was possible, and his books (*Images of the Future*, *No Bells Ring*, and *A School for Everyone*) outlined how it could be accomplished.

T. H. Huxley, from the late 1800s at the University of London, taught me that knowledge was not segmented but interrelated, and thus that separate departments and courses were obsolete. John Dewey presented the focus on the child and active learning. Bertrand Russell proved that “schooling” was not essential; his brilliant education evolved without schools. Ivan Illich reinforced the de-schooling concept. Robert Anderson proved in the *Nongraded Elementary School* the fallacy of the current age-level based system. Bill Alexander of Florida envisioned a learning environment for the middle-aged youth. William VanTil and Gordon Vars provided curriculum insights. The *Eight-Year Study*\* provided all the necessary research to change the system. Ronald Barnes, Robert Theobald, Buckminster Fuller, and Willis Harman envisioned the future—including the design for the Minnesota Experimental City, a community of 250,000 people with no schools. They taught me that IMAGINEERING—Imagining, Inventing, Implementing—was required for the future.

Sixteenth Century Don Quixote taught the value of fighting the windmills, and though the Windmills are still ahead, there is yet hope. Perceptive Willie Wonka taught me that we **can** make realities out of dreams, and dreams out of realities; we can be the dreamers of the educational dreams for the youth and adults of the nation.

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\* On p. X of *Paths of Learning* (Winter 2004), I explain in some detail what this study was all about.

## Who Needs Algebra?

**Paths:** You have said that no one needs to learn Algebra. Why do you believe that? Are there other required subjects you think not all of us need to learn?

**Don:** Most students should never take algebra, even the best college-prep students, for it is irrelevant for them, and certainly not needed in most life pursuits. In any case, no one needs a separate course in Algebra. Innovative educators tossed it out in the 60s. Algebra is just one of those political hangovers like Latin. For decades people felt that Latin was essential for college and life success; therefore it was promoted or required until the Latin teachers retired. Algebra is also obsolete. Math should not be taught as math, but as part of a larger systems approach. For engineer-type students, concepts from the old algebra, geometry, trig, calculus that may be needed by them should be taught at the appropriate moment, not one year at a time as separate courses just to ensure that students are ready for the next class. No one else needs engineering topics.

Math is only being required/pushed now for political reasons. In the past, college prep students took algebra; non-college-bound took business or general math. When the push came to give minorities equal opportunity, what could be better than to say, if all students take algebra, they have equal opportunity to enter college? If we must teach algebra, we should do so with the knowledge that gifted math students can learn it in six weeks but that many college prep sociology majors need 50 weeks. Yet for uniformity, we insist on 36-week classes for everyone, even though only 3 of the 30 students fit that pattern. The others need more or less time.

Who needs to know integers? Who needs to figure out  $x - y^2 - (6) + 3 = Z$ ? Engineers don't need more algebra; they need courses in Common Sense. Look at the on/off ramp freeway snarls they created in major cities. People have forgotten the Guilford Studies (professor at USC) on IQs, in which he indicated there were probably 120 individual IQs—not just one composite—for each person. He had documented over 50 of them as early as the 1960s. In math alone, there were at least 5 IQs. A student could have a "120" score in Numerical Computation, but could have only a "90" in Abstract Reasoning or Spatial Relations—thus creating havoc with algebra and geometry requirements. Physically it is the same. The 15-year longitudinal study in Medford Oregon by the U of Oregon proved the physical differences. One student on the first kick of a football could be seen as a potential NFL candidate. Another student who could barely kick the ball could take remedial, remedial, remedial kicking for two years, and he would never be a kicker.

It is lucky schools do not teach the complicated skills of walking and talking (some in 2 or 3 languages) as they do reading, for if they did, look at all the

remedial talking classes we would have to schedule. Algebra falls in the same category. No amount of remedial algebra will overcome the Guilford findings.

Beyond algebra, there are no classes that need to be required. The only crucial items are related to health and safety (don't put your finger in the fire, or drink poison). Reading is not even essential (the blind person who cannot use braille can be the most intelligent through talking books). Group-paced separate departments, courses, classes are wrong—teaching can and must be personalized and individualized. But if classes are required, home economics is the most important—not cooking/sewing, but child growth and development, interpersonal relations, parenting.

**The *Eight Year Study* proved conclusively that it makes no difference at all what classes are taken in high school with respect to one's success in college, success in life, success at work.\*** In fact, the students from the schools deviating the most from traditional requirements had the best success. The gooney birds came out better than those who followed the traditional structure.

The famous Wilson Campus School at Minnesota State University Mankato, a state funded K-12 research and development center, re-affirmed these findings for **all** grade levels during the 60s and 70s. Wilson had no required classes, no separate courses, no grade levels, no report cards, no required tests, and no homework. An interdependent curriculum was featured; everything was personalized and individualized. Yet as part of a state department evaluation, Wilson had the highest test scores, best attendance rates, and fewest discipline problems of any school in Mankato—all achieved with a cross-section of Minnesota students.

We can divide the “need to know” into 5 categories. (1) There are only a few things one **must know** (safety factors); (2) many things **nice to know** (reading); (3) others that **some need to know** (building a bridge); (4) items **only a few need to know** (repair a refrigerator); and (5) very few items **only needed by specialists** (knowing how many stars are in the Milky Way).

**The traditional required curriculum for most schools and states fits no one,** yet we pretend to be concerned for the welfare of each and every student.

## Lifelong Learning

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**Paths:** As a long-time proponent of lifelong learning, you have been a strong advocate for the creation of year-round community schools. Would you please share with us your ideas concerning such schools?

**Don:** In this 21<sup>st</sup> century, learning opportunities should be present as a continuous life-long venture—12 months a year—forever. Learning should occur in the community as well as in the so-called “school building.” Facilities (such as libraries, parks, gyms, pools, computers, auditoriums, et al) should be integrated with curriculum opportunities from birth to death. With all the local community, state, and national budget deficits, how do we justify using expensive school buildings only 185 days of the year, for only six hours each day (from 9 a.m. to 3 p.m., with empty classrooms from 3 p.m. to 9 a.m.—18 hours), and only 9 months of the year—especially when intersession, adult, and enrichment programs could take place in these buildings and thereby help benefit the community twenty-four hours a day, every day? (Most corporations and businesses would go bankrupt using facilities as we use our schools.) Further, if schools in districts are overcrowded, through year-round calendars they can house 50% more students, saving millions of dollars while providing space for everyone in both school and communities. Twelve-month intersessions can be held in theaters, parks, art museums, farms, science laboratories—they do not need to be in traditional school buildings.

If the schools are not overcrowded, continuous 12-month use of them offers people the chance to vacation as desired, students can learn whenever they wish, and work throughout the year, while communities can make full use of the facilities. Whoever proved that students cannot learn in June/July/August, and therefore that schools should close during those months? Who said it was best to let traditional students fail for nine months and then try to remediate in six weeks in the summer? Who said snow-state construction workers/families should not have summer vacation in January when they cannot work because of the cold—allowing them to go to Florida—or build snow people at home with their kids? The research is clear that all students lose gains over the summer, but **especially the bottom quartile youth** who suffer serious summer learning loss in math and reading.

The Gary, Indiana schools from 1907-1937 were open 50 weeks a year, 12 hours a day, 7 days a week, at less cost and with better attendance and achievement than schools in comparable Indiana districts—a child’s center in an adult world—used by all.\* The Wilson program in the 1960s and 70s was available for

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\* See *The Great Lockout in America’s Citizenship Plants*, by William Wirt (1937). The Gary, Indiana schools constituted a child’s world (most children attended the schools from 8 a.m. to 4 p.m.) within an adult clubhouse (most adult programs ran between 4 p.m. and 8 a.m.). Both children and adults used the same facilities, books, and equipment and often took classes together—a family community.

learning 365 days a year (yes, even on Christmas) on a voluntary basis. We can prove the value of community continuous learning centers.

## **Can Education Help Us Create a Better World?**

**Paths:** In light of your Educational Futures Projects, how do you foresee education's helping us to create a better world?

**Don:** Those involved in what we now call education must comprehend that it is essential to first understand global futures. We, as citizens on the planet, must know of the global dilemmas we face—the microproblems, which if addressed only one at a time will lead to a gloomy future. We (our society—the international community) must realize that these microproblems are really one **macro**problem. Either we solve them as one, or the problems will individually become worse.

As citizens, after we study global futures and discover how we can create a better world for everyone, we need to see how this field called education fits into the scheme of the macroproblem—how we as educators can contribute to creating a preferable future. In short, what is our role?

Finally, we address what the individual district, school, teacher, student, family can do now to begin to create a new system which will address the macroproblem and help enhance a positive present and create a desired future.

Buckminster Fuller, in his last great book, *Critical Path*, stated the matter clearly: “We are at the dawning of a golden age—maybe—but only if we can change our lifestyles, priorities, values, and institutions.” If we can, then we are indeed at the dawning of a golden age. If we cannot, then the next few decades will witness more gloom—more cloudiness—than ever before. Educators/parents must eliminate the institution called schooling and instead help educate communities in the effort to change values, lifestyles, priorities—and our institutions. If we can do this, and the optimistic futurists believe we can if we make the commitment, we can help create a better world.

The pessimists say we cannot make the changes. They point to the long histories of the corporate mentality, the wars, poverty, traditional schooling, and the increasing have-have not gap worldwide. Buckminster Fuller, on the other hand, believed that we could overcome these dilemmas, but again only if we as individuals, and then society as a whole, do change values, lifestyles, priorities, and institutions. Education can contribute to the Fuller visions—not by focusing on testing and reading scores, but by focusing on three aspects of human potential: the balance of the triangle representing the spirit, the mind, and the body.