

EDUCATION PLAN FOR THE 21ST CENTURY

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As society faces a proliferation of crises requiring imaginative solutions, the nation's education becomes a matter of life or death. Nothing short of a revolution of educational excellence will give our children the intelligence essential to generate imaginative, powerful solutions to problems so great, that our children's children will still be solving them. Within the next quarter century education must be massively redefined. But what form should it take?

Population pressures and environmental change will expose global limits. Young adults of the 21st century will have to identify not just with local and national, but with the fate of all humanity because the impact of world events will be more immediate and more intertwined. Workable solutions regarding energy, food, water, pollution, politics, and population problems will come not from individuals but from teams of concerned, intelligent, creative citizens working locally, regionally, and internationally.

Schools must produce high-caliber citizens who are self-assured, self-organizing, and self-expressive; who know where to find and how to use and communicate information effectively; who are flexible and adaptive thinkers; and who know how to plan and carry out their best ideas. Schools must teach people to work with others in positive, highly creative ways.

As I see it, the curriculum of the future should proceed along three fundamental paths:

- 1) Training the learner to learn -- psychophysical education: teaching the eyes, ears, emotions, bodies and brains of every student for optimal performance and wellness;
- 2) Teaching information and complex thinking via multi-media computer and communication technologies for harvesting and expressing global information; and
- 3) Teaching teamwork - students working together for self-expression and for solving real-world problems in local communities.

The following is a three-stage model for achieving this purpose.

STAGE ONE — THE NEW PHYSICAL EDUCATION — TRAINING THE INSTRUMENT

In the schools in the 21st Century more attention will focus on the human instrument itself. Professional educators will treat each student as a unique instrument of learning, not a vessel to be filled. Each child has a unique neurology and learning style to be individually developed through appropriate training. By integrating knowledge from brain research, medicine

and psychology, students will become individuated learners of the highest caliber. Schools will become brain and health enhancing rather than degrading.

Starting from pre-k through about 3rd grade students will have an individualized program tailored to develop high-performance learning and mental capability along with optimal emotional and physical health. They would learn how to learn. Each school would include a health center, a mini hospital, to insure and facilitate optimal health for every child. Students would know what it means to be healthy and why and how to take personal responsibility for themselves (a huge future savings for society).

Educators would use sophisticated training and technology to train the nervous system to perform at its highest potential. Generic learning skills such as: memory, attention, balance, eye-hand and gross body coordination, complex figure-ground organization, vision and auditory development, focus, flow, spatial intelligence, decision-making, affective self-regulation, thinking and planning skills would be trained directly rather than leaving them to chance. Most learning disability problems would be eliminated through this early psychophysical intervention. Children would emerge self-assured, self-organizing, and self-expressive. The curriculum would elevate mental capacity way beyond present standards and expectations.

Training methods would be imported from such fields as: audiology, speech therapy, optometry, occupational therapy, osteopathy, sports medicine, exercise physiology, special education, martial and eastern arts, body therapies, psychotherapies, art, dance, drama, music, biofeedback, nutrition, medicine are the basis for this applied physical/mental education. This would stimulate new research in the brain and behavioral sciences. (Neuroscience has had little impact on education.)

Training would include:

- PSYCHOPHYSICAL TRAINING: for developing mental/physical coordination and multisensory fluency;
- PERCEPTUAL TRAINING: for improving the senses themselves -- vision, hearing, kinesthetic awareness, balance;
- PSYCHOSOCIAL TRAINING: for eliminating the anxieties imbedded in the individual by prior experience. These ambient fears depress nervous function and are the source of conceptual errors and assumptions that prevent optimal learning.

STAGE TWO — ACQUISITION OF KNOWLEDGE VIA MULTIMEDIA TEACHING COMPUTERS

Use of the computer would begin at the most appropriate developmental stage for each child. Computer aided learning would continue throughout the student's career. Students would learn to identify, seek, store, organize, understand, and communicate information at levels we can hardly imagine. The burden of teaching information would be on the computer programmers and not on the teachers freeing time for their real responsibility -- teaching children. Teachers would be there to overview, support, supervise and discourse with individuals or small groups.

Computers are adaptive. They can deliver information in the style and at the speed each child requires for their highest quality learning. This includes reading, spelling, writing, computer literacy, language, history, mathematics, science, and almost any field of knowledge. One-on-one computers can teach better than one teacher for thirty students. Bright students can excel in their areas of talent. No more losing interest because the class is going too slow or traumatic class ridicule for slow or unprepared students or for those that wish to excel.

Students would really know their subjects because computers give students immediate feedback on what was learned and what was not. Facts, concepts or students would not "fall through the cracks." Learning would be efficient and rapid for the majority of students. They would gain superior skills and knowledge. Those not capable of learning in this manner would be easily identified and would receive specialized teaching.

STAGE THREE —: LEARNING TO WORK IN TEAMS FOR PROBLEM SOLVING, SELF-EXPRESSION, AND COMMUNICATION BY WORKING ON COMMUNITY BASED PROJECTS

Students with high-level learning skills (stage one), with superior knowledge and easy access to world-wide sources of information (stage two), would learn to cooperate with others to find and solve problems in the real world (stage three). They would work together on meaningful, community integrated and artistic projects that promote morally responsible personal and social values. Schools would become an economic resource rather than a financial burden for the community. Practical intelligence would grow through real world experience.

Teaching would focus on creative interaction and teamwork. There would be no age segregation. Children from grades four through twelve would be teamed together in the same classroom. The students would work in an apprentice relationship with the teachers and older students who can bring out their best contribution. Everyone would learn to teach, communicate and express their best ideas. Teachers working in teams would be selected by their ability to

model positive working relationships and by their ability to help students work together on creative projects.

MEANING IS THE GLUE THAT HOLDS LEARNING TOGETHER. Goals would include:

- Group process - arbitration, negotiation, compromise, motivation, teamwork, creativity and effectiveness.
- Using information - what is it, how to find, induce and deduce, see patterns and differences, organize, store, and retrieve it, how to access community information, develop a data base.
- Artistic expression - music, dance, theater, visual arts, community art.
- Myth-craft - individual and collective visions: current, ancient, future
- Literature - writing, living, knowing, relating.
- Journalism - reporting, organizing and communicating observations and thoughts.
- Communication - media use, production, direction, editing, use of computer link up between classes, schools, cities, and with leading scientists for counseling etc.
- Personal science- stress management, maximizing consciousness, and biofeedback.
- Community science - studies in group, social, community, large data community problems
- Learning science - optimal learning, pushing back limits.
- Health - optimal, preventive, birth, disease, illness, death.
- Psychological arts - studies of internal process, self esteem, creativity, cycles.
- How to teach, how to train others and one's self.
- Creativity - making your dreams work in the world, attaining creativity states, good ideas.
- Entrepreneurship - sell product to the community, research and development, manufacture, distribution, accounting, planning, producing, marketing, managing, trouble shooting.
- Personal business.
- Government - services, restrictions, law, politics, change.
- Current events - future trends, future world vision.
- Peace - war.
- Manual arts - home, auto, electrical equipment maintenance, repair.
- Technology - future impact of new technology.

COMMUNITY INVOLVEMENT

Volunteers should contribute energy and knowledge. This would reduce the cost of education and increase its quality. The use of retired persons would be of great benefit to everyone. Executives, advertising specialists, film makers, repair persons, could share their wisdom and knowledge, offer internships and independent studies. Others could be taught to work in psychophysical training or to organize computer libraries.