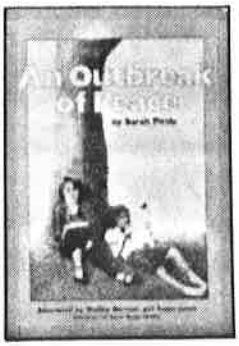
HOLISTIC EDUCATION REVIEW

VOL. 1 NO. 1 SPRING 1988 $2.50

Education for the Whole Person

. . . and a healthy planet.

Educational Resources from New Society Publishers



AN OUTBREAK OF PEACE by Sarah Pirtle.
Nominated for "Best Books for Young Adults List," American Library Association. "Really demonstrates how it is possible to work for peace with one's own family, friends, and acquaintances."—*The Los Angeles Times.*
384 pages. Illustrated. Paper $9.95 Cloth $29.95

SEEDS OF PEACE compiled and edited by Jeanne Larson and Madge Micheels-Cyrus.
Indexed and well-organized collection of more than 1700 quotations on war, peace, and the quest for justice. "Educates and inspires. It is an important addition to any library collection."—*Kliatt Young Adult Paperback Book Guide.*
276 pages. Illustrated. Paper $12.95 Cloth $34.95

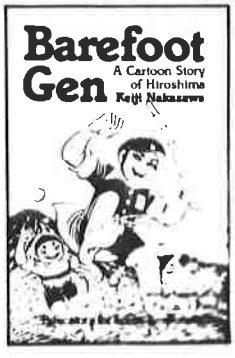
THE POWER OF THE PEOPLE: ACTIVE NONVIOLENCE IN THE UNITED STATES edited by Robert Cooney and Helen Michalowski.
Pictorial encyclopedia of the struggles for peace and justice through nonviolent action. Nominated for "Best Books for Young Adults List," American Library Association. "This book should be in every library in America and studied by every student."—*Kliatt Young Adult Paperback Book Guide.*
272 pages. Large format. Illustrated with more than 400 photographs. Paper $16.95 Cloth $39.95

A MANUAL ON NONVIOLENCE AND CHILDREN compiled and edited by Stephanie Judson; foreword by Paula J. Paul, Educators for Social Responsibility.
Includes "For the Fun of It! Selected Cooperative Games for Children and Adults." A practical guide for teachers and parents. Recommended by *School Library Journal* and *The Horn Book.*
160 pages. Large format. Illustrated. $10.95 Cloth $24.95

THE FRIENDLY CLASSROOM FOR A SMALL PLANET: A HANDBOOK ON CREATIVE APPROACHES TO LIVING AND PROBLEM SOLVING FOR CHILDREN by the Children's Creative Response to Conflict Program.
Skills, tools, exercises, games, resource lists, and more! A proven educational response to growing concerns about violence and interpersonal hostilities.
120 pages. Large format. Illustrated. Paper $9.95 Cloth $29.95

WATERMELONS NOT WAR! A SUPPORT BOOK FOR PARENTING IN THE NUCLEAR AGE by the Nuclear Education Project; afterword by Dr. Helen Caldicott.
"A wise and compassionate work, it's the best available resource for parents and others trying to raise children well-informed enough to face the fears we all share."—*New Age Journal.*
176 pages. Large format. Illustrated. Paper $9.95 Cloth $24.95

BAREFOOT GEN: A CARTOON STORY OF HIROSHIMA by Keiji Nakazawa.
The powerful, tragic story of the bombing or Hiroshima, seen through the eyes of the artist as a young boy. Focuses on the ethical dilemmas faced by a peace-loving family in a militarized culture. "*Barefoot Gen* merits careful reading, especially in schools..... It is is a graphic 'lest we forget' depiction of nuclear devastation and a troubling index of certain kinds of urban ruin even before the bombs fall."—*The Los Angeles Times.*
Volume 1—300 pages. Paper $9.95 Cloth $29.95
Volume 2—290 pages. Paper $8.95 Cloth $29.95



Order from **New Society Publishers,** *Box H, 4527 Springfield Avenue, Philadelphia, PA 19143. For shipping and handling, please add $1.50 for first book, 50¢ for each additional. Write for complete catalogue.*

For MasterCard/Visa orders, call toll free: 1-800-333-9093.

books promoting fundamental social change through nonviolent action

HOLISTIC EDUCATION REVIEW

SPRING 1988 VOL. I NO. 1

Holistic Education Review aims to stimulate discussion and application of all person-centered educational ideas and methods. Articles explore how education can encourage the fullest possible development of human potentials and planetary consciousness. We believe that human fulfillment, global cooperation and ecological responsibility should be the primary goals of education, and we will inquire into the historical, social, and philosophical issues that have prevented them from so becoming.

FEATURES

Introduction to Holistic Education Review, ***by the editors*** ..... page 2
Guidelines for Contributors / Information on Reprints ..... page 4
Two Hundred Years of Holistic Education, ***by Ron Miller*** ..... page 5
Holistic Education for a New Age, ***by Philip S. Gang, Ph.D.*** ..... page 13
The Search for a New Educational Paradigm: The Implications of New Assumptions About Thinking and Learning, ***by Edward T. Clark, Jr., Ph.D.*** ..... page 18
Peace Education for Young Children—A Beginning, ***by Donna Leveridge*** ..... page 31
Humanistic Education: Exploring the Edge, ***by Jerome S. Allender and Donna Sclarow Allender*** ..... page 34
Educating as an Art: The Waldorf Approach, ***by Roberto Trostli*** ..... page 44
Sudbury Valley School: Where Ideals and Reality Cross Paths, ***by Daniel Greenberg*** ..... page 53
Why Homeschool?, ***by Mark and Helen Hegener*** ..... page 57
Letters to the Review ..... page 60
Holistic Education Reading List ..... page 62
Book Review, ***by Mary E. Sweeney, Ph.D.*** ..... page 63
Classified Ads ..... page 63
Resources in Holistic Education ..... page 64
Guide to Holistic Teacher Education ..... inside back cover
Educational Conferences, Spring & Summer, 1988 ..... back cover

Holistic Education Review, P.O. Box 1476, Greenfield, MA 01302
Publisher: Ron Miller, Ph.D. Cand.
Co-editors: Mary E. Sweeney, Ph.D., and Ron Miller
Contributing Consultant: Fred Stawitz

The editors wish to thank all those who have supported the emergence of this new publication by contributing articles, photos, advertisements, mailing lists, and ideas. Thanks to Annie Hunt Heiman, of Orange Peel Educational Clinic, Greeley, CO, for promotional photos; and to Lahri Bond, Heartswork Studios, Keene, NH, for the logo design. Marketing consultants: ARS Strategic Mail Services, Amherst, MA, and Mind Over Media, Northampton, MA. Production by Sharp Offset Printing Inc., Rutland, VT.

Member, Educational Press Association of America

EDPRESS

Cover photo by Donna Leveridge, Bandon, OR

Holistic Education: A Radical Perspective

by Ron Miller, Co-editor

Why do we introduce a new publication into the already crowded field of educational journalism? Because it is time to give voice to ideas which have been neglected and misunderstood throughout the history of American education—ideas which are profoundly humane and refreshingly radical.

As demonstrated by the variety of articles in this issue, holistic education is not a neatly packaged curriculum, method, or set of guidelines which we (or anyone else) can market for mass consumption. The holistic point of view is a philosophy, an attitude, which calls into question many basic, and often implicitly accepted, educational and social values. As several of our authors indicate, the holistic approach is a new **paradigm**—a new way of understanding our experience.

Holistic education, above all else, is an expression of profound respect for the deeper, largely unrealized powers of our human nature. Holistic educators see each child as a precious gift, as an embryo of untapped spiritual potential. This attitude is similar to the Quaker belief that there is "that of God in every one"—or at least an unfathomed depth of personality, contained in the soul of every person.

Holistic education is radical because modern culture has banished the sacred from our lives. Most of us have lost the intuitive knowledge, shared by traditional cultures around the world, that our existence as human beings is embedded in the grand unfolding of the universe. Quite simply, the determination of what is "normal" in modern culture is an impoverished conception of the human being. We can be so much more than just productive workers, happy consumers and obedient citizens; yet for two centuries, the dominant goals of education in our culture have been economic advancement and national glory. (Try to find any other meaning of education in the recent flood of reports by the commissions and foundations.)

The holistic philosophy is a challenge to educators, policy makers, scholars and parents—to all of us who care about the meaning of life and the quality of life in our time—to reconsider the course of our cultural evolution. It asks us to take a hard look at how we define our humanness, our untapped potentials, and our relationship as individuals to the community, nation, and planet.

I invite the readers and contributors

A Structural Approach for a New Age Paradigm

by Mary Ellen Sweeney, Co-editor

Trouble is brewing in conventional schooling practices. High school dropout rates of fifty percent are reported in some urban areas. The 1980's educational literature has been dominated by criticisms of an organizational structure that has not changed fundamentally since the centralization and consolidation of its services in the late 1880's.

The 1980's reform studies call for two types of measures to fix and repair what is wrong with conventional schools. A first type involves *clinical* reforms which recommend that certain components of the existing structure be repaired. For example, solutions as simple as a longer school day and year, more homework, more requirements, and higher expectations will remedy the ills of the "one best system." The authors of these studies advocate more and tighter control of the existing system.

A second type of reform study recognizes the political and economic forces that have driven the re-examination of conventional schooling practices. These reformers advocate a new *structure* to replace the dysfunctional conventional one so predominant in today's public school districts. Structural reformists call for the empowerment of students and teachers in schools, through such in-place strategies as all-school governance systems, free choice, individualized learning, and a sense of community. These schools build a sense of community where students and teachers want to go daily—not drag themselves with leaden legs because of mandatory attendance laws. Many of the innovative schools are already in place, such as the Sudbury Valley School in Massachusetts (see p. 53) and Mountain Open High School in Evergreen, Colorado.

Higher level thinking skills and problem solving techniques are heightened in this type of school, which develops the potential in each student through individualization and self-directed learning. Students and teachers *choose* to attend and teach at these schools, and their small size helps to foster a sense of community. In some cases, the school becomes the primary support system for students and staff.

The world is the classroom for students in holistic settings. Students exit these schools with a more open awareness of the world. The *process* of schooling has been experienced firsthand by them. Teachers exist as *facilitators* to aid in the development of the special gifts and talents of each unique student. A shared process of learning among parents, students, and teachers is a process which builds *trust* between student and teacher. *Responsibility* is shared but *consequences* are experienced by the student making choices. Students can never learn all they need to know but learn *how to learn*; life-long learning is emphasized.

A Radical Perspective (cont.)

to this journal to raise fundamental questions about modern American culture and its definition of education. I hope that together, we will take on some big issues:

Let us challenge the Sputnik mentality which prevails among educational leaders and politicians—the view that the main purpose of education is to enhance national prestige, technological superiority, and commercial success in some international competition. Besides diminishing the meaning of education, this view denies the growing awareness that humankind is a global family, and that we must now learn to live and work together. The age of chauvinist nationalism is over—or else life on this planet soon will be.

Let us question the meaning of "basic" skills, which now include, along with the three R's, so-called "computer literacy." This emphasis on raw intellect, to the exclusion of emotional, aesthetic, and spiritual growth, neglects the depth of our human existence. Certainly reading and arithmetic are necessary in today's world, and the computer is a valuable tool. But are these the most vital skills needed to sustain a humane society? In human terms, any list of basic skills must start with such things as self-knowledge and self-esteem, moral sensitivity and personal integrity; in comparison, computer literacy and even reading can hardly be considered "basic."

Let us defend the dignity of the child. It is a good sign that the public is concerned about missing children and child abuse, but few people question the daily use of physical violence inflicted on children by adults four or five times their size, which goes by the name of "punishment." Few question the regimented structure of the average classroom, where children are forced to sit still and quiet, marshalled from one activity to the next by command of the adult authority. Few cry out against the use of drugs to suppress "hyperactivity" and "attention deficiency" among children who resist the deadening routines of the classroom.

Let us offer a new perspective on problems such as "learning disabilities" as well as drug abuse and suicide. What if these are not so much personal moral failures (as they are commonly seen) as the desperate response of young people to a culture they experience as shallow and deadening? There have been other cultures where young people learn by participating in community life, instead of passively following directions, and we do not hear much about "learning disabilities" in those societies. These are also cultures that take adolescence seriously and offer young people rites of passage such as the vision quest; and again, for those societies, drugs and suicide do not seem to be such serious concerns. We must ask whose interests it serves to blame the victims when a culture does not serve the needs of human development.

Let us address the unsettling social problems of the declining industrial age: the weakening of the family, the erosion of moral values, the growth of cynicism and violence. The holistic approach is a middle path between religious fundamentalism and secular humanism—it is a response to social change that is both spiritual and reasonable.

Let us recognize that the holistic approach is essentially an ecological approach. Respect for the depths of the human being necessarily involves respect for Nature and for the Earth: it is a reverence for all life. Holistic education challenges the materialistic, mechanistic, intellectualistic world view of the industrial age, for as long as we treat the Earth as a resource to be exploited and controlled, so we will treat our children.

And let us examine the popular myth that public education guarantees social and economic equality in America. Even many holistic educators optimistically believe that their ideas will be applied equally to all young people. But in recent years, revisionist scholars have shown how schooling has actually perpetuated an unequal class structure, funnelling middle class youth into lucrative careers and working class youth into lives of drudgery. If the holistic approach is not to become yet another advantage which wealthier citizens have over those in poor, rural, and minority communities, then holistic educators must address the sources of inequality in American society.

This is a radical agenda. It challenges deeply entrenched prejudices and ideologies. But it is our belief that humankind is at a critical historical point: if we continue our materialistic, nationalistic crusade to dominate the Earth and control our children, with the technology that is now available, we will probably destroy life on this planet. We need instead to reawaken a reverence for life, and for its mysterious emergence in the soul of every child.

A Structural Approach (cont.)

Self-discipline on the student's part replaces external discipline as the student flowers into herself. *Nonconventional evaluation techniques* are utilized as the learner first evaluates herself and then seeks the input of significant others or group members. The process or *quality* of learning is valued rather than quantity or end products, such as letter grades or GPAs.

Holistic Education Review proudly presents itself as a voice to advocate the specialness of each child. With your help, holistic educational approaches which develop the emotional, intellectual, physical, aesthetic, and spiritual spheres of children will be promoted in this journal. Clinical reform measures which promote band-aid or emergency measures to patch the "one best system" are dysfunctional attempts in a world that desperately needs new widespread educational models or paradigms—new and different ways of viewing the world.

We are leaving the industrial age for a new age, in which learners must view the world with an ecological approach that recognizes the interconnectedness of activities and the intricate balance of nature. It is old-world thinking to believe that we will melt together as one people; but, we must develop a new social order that calls upon the specialness of each distinct and diverse individual as being a worthwhile part of the whole. We need to set our children free to allow them to create, through an expanded and knowledgeable reality, solutions to the problems of old-world values, such as materialism, social stratification, racial inequities, and other conflicts that threaten to destroy the very planet we inhabit. Please join us in our dialogue to advocate radical, widespread, and structural educational change and promote self-actualization of the highest moral level for the children we proclaim to love.

HOLISTIC EDUCATION REVIEW welcomes contributions from readers.

This first issue is an overview of holistic education, an introduction to some of the perspectives and approaches that are creating the future of education.

Now we are looking for articles on more specific educational issues (from a holistic perspective), as well as practical applications for the classroom and home. We invite readers to submit writings, from a few paragraphs up to twenty-five pages.

Some of the topics we would like to cover in future issues include:

- Recent research on intelligence, the brain, and learning styles.
- Spirituality and humanism.
- School governance & discipline: freedom, democracy, & responsibility.
- The teacher as professional.
- Empowering parents.
- Holistic approaches to evaluation of students, teachers, schools.
- Social, cultural, and political forces affecting education.

Holistic Education Review is concerned with the fullest possible development of human potentials—intellectual, emotional, social, physical, artistic, and spiritual. Articles should examine how education, and society in general, can encourage this development. Our main interest is in elementary and high school education, although material on college or professional instruction, or adult education, may be considered if it is exceptionally compelling.

We want articles that are supported by evidence (pertinent examples or research) and clear thinking, but not strictly scholarly work. Scholarly authors should summarize, translate, or interpret academic literature for the benefit of practicing educators and others who may not have an opportunity to consult the literature directly. Bibliographies are helpful. Please indicate references with numbered footnotes and a bibliographic list at the conclusion of the article; see the articles in this issue for examples.

We encourage authors to write with passion rather than dry, academic objectivity. First person is entirely acceptable, and radical viewpoints are welcome, as long as they are supported by evidence and good writing.

Articles should be typed, double-spaced; please send two copies. The Review does not pay for contributions, but offers professional exposure and a reprint service.

Please contact us for more details.

Photos

We are always looking for good quality photos showing young people exploring and learning. Black and white glossies are preferred. We will return all photos and negatives. Please obtain and send us the written permission of subjects or their parents. We encourage photographers to submit photos of children from minority groups.

Resource listings

We want to provide comprehensive guides to conferences, teacher training programs, publications, and educational networks and organizations. We encourage you to send in news in any of these areas.

Letters to the Review

We want your reports from the frontlines. What is happening in your classrooms, school, community? Tell us how **Holistic Education Review** can address your problems, concerns, and visions.

Advertising

Display and classified ads are available. Please contact us for rates and details.

Holistic Education Review is published in March, June, September, and December.
Regular subscription rate: $12.50 per year, $22 for two years.

REPRINTS are available

Reprints of individual articles may be ordered from Holistic Education Review. The cost depends on the number of pages per article and the number of copies ordered, according to the table below.

Number of reprints ordered	Number of pages in article				
	1-4	5-8	9-12	13-16	17-20
50	$ 70	$ 93	$106	$117	$130
100	79	100	116	133	150
250	87	110	132	148	171
500	104	133	158	176	202
1000	144	161	186	214	233
Addl. 50s	3	5	6	7	8

HOLISTIC EDUCATION REVIEW P.O. BOX 1476 GREENFIELD, MA 01302

Two Hundred Years of Holistic Education

by Ron Miller

"Holistic education" may sound to many people like a pedagogical fad left over from the 1960's. Yet actually, under a variety of names, this approach has a long and rich history. The word "holistic," it is true, has only come into popular use in the last twenty years, but the educational approach—and underlying world view—which it describes have been evolving in Western thought for at least two centuries.

The holistic approach starts with the realization that the human being is wholly and innately connected to the unfolding of the universe; we are part of the same process which made the stars, and we are made of the same stuff. All facets of human experience—intuitive, imaginative, aesthetic, emotional, and spiritual, as well as rational intellect—are needed to fully grasp the awesome depth of our existence. But schooling in modern societies, say holistic educators, has neglected this organic and vital connection between ourselves and Nature, and has forgotten that true learning involves not just academic discipline, but also wonder and awe, spontaneity and joy. This is a minority view, however, and holistic educators have always been found on the romantic and mystical fringes of Western industrial civilization.

Yet something has occurred since the 1960's to give the holistic approach new emphasis and new hope. A small but provocative group of thinkers, frequently called the "new age" movement, has begun to stir Western culture. Inspired by humanistic psychology and brain research, non-Western and esoteric spiritual traditions, the ecology movement, as well as the 1960's counterculture, writers like Theodore Roszak, Marilyn Ferguson, Jeremy Rifkin, Fritjof Capra, and Robert Theobald, to name a few, have opened a frontal assault on modern industrial culture.

The new age movement is not completely new. Its roots, as many of these writers readily admit, are in ancient spiritual traditions and in the romantic movement of the eighteenth and nineteenth centuries. But these writers believe (and they are joined by less romantic social observers such as Alvin Toffler and John Naisbitt) that industrial culture is entering a period of profound change, similar in scope to the Renaissance. They suggest that this impending new age may usher in the holistic world view that spiritual seekers and romantics have been calling for all along. If this is the case, then the educational ideas of the spiritual seekers and romantics—what we are calling

What is holistic education? It is not any one teaching method but a social philosophy based on reverence for life and profound respect for human potentials. It is at odds in many ways with the predominant materialism of modern industrial culture, and until now has flourished only in small, countercultural enclaves. But there are indications that holistic education is an idea whose time has come.

Ron Miller is the founder and co-editor of Holistic Education Review. He was a Montessori teacher at both preschool and elementary levels, and has worked with young people in a variety of other settings. He has an M.A. in psychology and is completing his Ph.D. dissertation on the history of educational alternatives in American culture. This article is a brief summary of that work, which he hopes to publish later this year.

holistic education—are ideas whose time is about to come.

Why are the romantics and new age thinkers so anxious to overhaul our present civilization? It is, they say, because the predominant world view of the industrial West is *materialistic*—it is a definition of reality which honors economic, technological, and intellectual dimensions of experience while discrediting the organic, mythological, and transcendent dimensions that had nurtured human civilizations for centuries. Materialism, they say, is preoccupied with the external world which can be measured and controlled, to the neglect of the inner human world which needs to be contemplated and delicately cultivated. They argue that this is a great loss, an impoverished conception of human possibilities.

Jean Jacques Rousseau
Historical Pictures Service, Chicago

These rebel educators have argued that children contain within themselves, as their human birthright, remarkable powers of imagination, creativity, and self-direction which, tragically, are repressed by the consuming goal of enculturation.

According to their critique, the materialist view sees the human being as a passive, even mechanical result of physical laws and impersonal forces. The scientific world view, which has come to dominate modern culture, denies any spiritual or transcendent purpose in human life. And Western religion, say the new age critics, has surrendered to materialism because it conceives of humankind as "fallen"—cut off from the spiritual source (which it sees as otherworldly or supernatural) and driven by "animal" desires which must be curbed.

Roots of traditional education

If, as materialism presumes, the human being is innately passive and aimless, without spontaneous curiosity or sociability, then it is only logical to believe that civilization is a difficult and precarious achievement, which can only be preserved by carefully controlling the upbringing of each new generation. Traditionally, the word "education" has meant a formal process of enculturation—a deliberate (and, if necessary, forceful) introduction to young people of the values, skills, and world view of the society in which they live. According to this conception, the culture to be introduced has priority over the immature, whimsical desires of individual children. The child is seen as an undisciplined threat to the carefully constructed social order, and adult-directed education as a necessary means of protecting it. The discipline of religious authority, "the wisdom of the ages" or scientific technique is considered necessary for ensuring social stability.

Some of the more liberal educators have argued that the student's needs and interests should not be altogether ignored. But they rarely go so far as to suggest that the child's intrinsic human qualities and the needs of development, rather than social and cultural demands, should guide the educational endeavor. It is the romantic/holistic educators who say this, and according to the materialist view of human development, "romantic" means inherently sentimental, impractical, and unrealistic. Mainstream educators, believing that civilization itself would be at risk if we took such ideas seriously, have continually dismissed them.

Yet the holistic tradition, in the form of small and short-lived dissident movements, has emerged repeatedly in American education since the early nineteenth century. These rebel educators have argued that children contain within themselves, as their human birthright, remarkable powers of imagination, creativity, and self-direction which, tragically, are repressed by the consuming goal of enculturation.

It is time to give this approach more serious attention than it has been given so far. In the spirit of "new age" criticism, I will argue that the romantic/holistic approach is not merely sentimental, but is a legitimate opposition to the predominant world view of Western (and specifically American) culture. The holistic educators have called into question not only the standard pedagogical practices of mainstream education, but also the underlying materialist culture which has sanctioned those practices in the first place. To dismiss the person-centered approach as sentimental is to endorse this world view—to protect it from any major revision, which the original insights of a new generation just might produce. Holistic education is not just about children having more freedom in the classroom; it is also about people having the power to make their culture embrace more humane values. This has been true ever since the work of Jean-Jacques Rousseau (1712-1778).

The holistic approach

Rousseau's writings were an impassioned response to the materialist world view as it emerged in the eighteenth century Enlightenment. Rousseau warned that a society based so thoroughly on scientific reason, conventional roles, and urban life would snuff out vital human qualities which need emotional expression, freedom and natural surroundings in order to thrive. In *Emile* (1762), Rousseau argued that education, rather than ruthlessly instill intellectual and social discipline, should seek a harmony between the organic needs of human development and the contractual needs of social life.

He observed that child development proceeds at its own natural pace: children do not—cannot—understand

the adult use of reason and must not be prematurely forced into it. This natural development, he argued, ought to be respected because "the first impulses of nature are always right; there is no original sin in the human heart."[1] This is the core of the holistic approach to education: human nature itself is the most trustworthy guide to educational practice. The organic needs of the developing child should be the starting point of all pedagogy, and should not be crowded out by cultural prejudices.

According to Rousseau, the harsh imposition of social and intellectual discipline is undesirable because it violates the divine order of nature;

> what God will have a man do, He does not leave to the words of another man, He speaks Himself; His words are written in the secret heart.[2]

Human development is not aimless and chaotic, because this "secret heart"—one's inner, unbroken connection to the universal source—gives the individual spontaneous powers of creativity and self-renewal. Even in the face of Enlightenment scientism and skepticism, Rousseau upheld this spiritual point of view, and it has been a key element of the romantic/holistic approach ever since. As we will see, in the twentieth century, educators would find a non-religious language to express a similar belief in this inherent human power of inner guidance.

The first educator of note to apply Rousseau's ideas to pedagogical practice was the Swiss humanitarian J. H. Pestalozzi (1746-1827). In an "address to the House"—his boarding school for pauper children at Yverdon—he declared that

> God's nature which is in you is held sacred in this House. We do not hem it in; we try to develop it. Nor do we impose on you our own natures. It is far from our intention to make of you men such as we are. It is equally far from our intention to make of you such men as are the majority of men in our time. Under our guidance you should become men such as your natures—the divine and sacred in your nature—require you to be.[3]

For Pestalozzi, the transmission of cultural practices and intellectual skills was secondary to the development of this divine nature inherent in each person. Education meant providing a loving, family-like environment which had as its first priority the children's emotional security. Intellectual and vocational skills, while important for allowing the young person to find his place in society, must be taught according to the student's level of understanding, starting from concrete, sensory experience as Rousseau had argued, and not (as was standard practice in his time) drilled through rote memorization and corporal punishment.

Johann Heinrich Pestalozzi *Historical Pictures Service, Chicago*

Pestalozzi's ideas were most faithfully represented in the United States by his associate Joseph Neef (1770-1854), who came to America in 1806. He ran schools in Pennsylvania and Kentucky, and in the 1820's taught at the socialist commune at New Harmony, Indiana. In 1808 he published a summary of the Pestalozzian approach, *Sketch of a Plan and Method of Education*, in which he claimed that education

> is nothing else than the gradual unfolding of the faculties and powers which Providence chuses [sic] to bestow on the noblest work of this sublunary creation, man.[4]

In relation to these unfolding human faculties, Neef argued, the arts and sciences—indeed, book learning in general—were "accessory things." Rather than pouring knowledge into students, education should consist of giving them command of their own "senses and understandings." Neef did not consider himself, as a teacher, to be an authority figure, but the "friend and guide" of his students. Accounts of his schools recall the open, informal relationships between himself and his students, as well as the many field trips they enjoyed. These were radical innovations—so radical that neither the ideas nor the practices introduced by Neef stimulated any subsequent educational reform.

Transcendentalism

In the 1830's, however, a group of young social critics, the Transcendentalists, found Pestalozzi's ideas to their liking. These thinkers were largely inspired by the Unitarian leader William Ellery Channing (1780-1842), who taught that, because human nature is an expression of the divine creative source,

> there is an infinity of resource in the human soul . . . We can never say that our nature is exhausted. It breaks out suddenly into new and most unexpected forms.
> We were made to grow. Our faculties are germs, and given for an expansion to which nothing authorizes us to set bounds.[5]

Channing argued that the human mind is "self-active," and that therefore education should not be an attempt to mold other persons' thoughts. Rather, he claimed that

> to educate a man is to unfold his faculties, to give him the free and full use of his powers, and especially of his best powers.[6]

The Transcendentalists forged Channing's religious humanism, along with a strong dose of European romanticism, into a passionate critique of the materialist world view. As Emerson expressed it, they held that "the relations of the soul to the divine spirit are so pure, that it is profane to seek to interpose helps."[7] They warned that all institutions of a materialist society—government, commerce, churches, schools—were prone to obscure the connection between person and Nature, which would only diminish personal integrity and wholeness.

William Ellery Channing
Courtesy of Unitarian-Universalist Association

Many of these writers had first hand experience with teaching, and they introduced radical methods. Henry D. Thoreau conducted several schools between 1835 and 1841, in which he used a largely child-centered approach. (He once resigned from a town school rather than obey the directive to use corporal punishment.) When he wrote on education, he used the common romantic argument that the student should be free to experience the world directly rather than be confined to reading and memorization. Another Transcendentalist educator, George Ripley, was the founder of the Brook Farm community, and the school—which was the most successful endeavor at Brook Farm—reflected Ripley's interest in the religious humanism of both Pestalozzi and Channing.

The most radical Transcendentalist educator was A. Bronson Alcott (1799-1888), who wrote that education

> should not be regarded as a process instituted on the human being, to fit him for a specific employment, by the installation of a given amount of knowledge into his intellect; but *as the complete development of human nature* . . .[8]

For Alcott, "complete development" meant primarily spiritual awakening. Deeply influenced (even more so than Pestalozzi and Channing) by romantic and idealist philosophy, Alcott believed that the purpose of human life is the cultivation of its inherent divine nature. Education is an essential part of this task, for it can put the young person on the path of self-knowledge and moral integrity. Unfortunately, Alcott's idealism became overly zealous, and when his book *Conversations With Children on the Gospels* suggested to parents as well as the general public that his ideas threatened traditional educational goals (such as career success) and religious authority, Alcott was denounced in the Boston press and forced to close his school. He opened another, but when he admitted a black girl and ignored white parents' demands to expel her, they withdrew their children. By 1839 Alcott was left with a handful of students, three of them his own daughters—including six-year-old Louisa May.

Transcendentalism itself faded as a radical movement by the mid-1840's. For the next half century, the nation became preoccupied with territorial expansion, slavery, civil war, and the "gilded age" of industrialism. It was not a time for romanticism—except within the carefully confined "women's sphere" of the home. Not until the waning years of the nineteenth century did another holistic educator argue the case

A. Bronson Alcott
Courtesy of Louisa May Alcott Memorial Association

for a person-centered approach. Francis W. Parker (1837-1902) had earned a reputation as an educational liberal while superintendent of the Quincy, Massachusetts schools in the 1870's. But it was twenty years before his more radical ideas gained a widespread hearing.

Toward progressive education

In *Talks on Pedagogics* (1894) Parker was harshly critical of authoritarian educational practices—corporal punishment ("the living relic of dungeons, torture, police, standing armies, used to force human beings into unreasoning obedience and fixed beliefs"[9]) as well as the use of grades and prizes, which he considered "infinitely worse" than punishment because they encouraged false motives of selfishness and avarice. Parker blamed traditional school practices for encouraging the rampant materialism of the gilded age. He argued that traditional pedagogy was not true education, but "mind-stupefying and disgusting drudgery."

Francis W. Parker
Courtesy of Francis Parker School

> Real, genuine educative work, real search for truth and its ethical application, needs no other stimulus. Drudgery must be driven by fear or the unnatural incentive of rewards; but work that . . . best develops the whole being . . . brings its own sweet, joyous reward.[10]

Parker reasserted the romantic trust in human nature. His criticism of traditional education was based on the same conviction held by his predecessors, that the human being inherently contains "germs of the divine"—and that education "consists entirely in the *presentation of conditions for the exercise and outworking of moral power.*"[11] Such conditions allow the student self-initiative, so that he may discover "unity of action"—where thought, will, feeling and activity coalesce in the service of meaningful learning. When the "whole being" is developed, Parker suggested, moral integrity would replace materialism.

For expressing these ideas, and training a generation of teachers at the Cook County (Chicago) Normal School at that particular point in American history (the populist and social gospel movements were beginning the major re-examination of urban industrial society which would culminate in progressivism), Parker was considered the "father of progressive education." This was to become a major reform movement in American education, but we must look closely to see how much impact Parker's holistic ideas actually had on mainstream schooling. To begin with, the progressive movement which characterized American politics and thought between 1905 and the First World War was *not* a romantic movement but a rather cautious, middle class effort to make industrial society more manageable and efficient through the application of science. In education, this meant centralized school administration, more professional training for teachers and administrators, and the proliferation of school surveys, IQ tests, and college board exams—in short, a negation of holistic principles.

Even for more liberal reformers, Parker's ideas were only one among many new influences around the turn of the century—such as the German educators Froebel and Herbart, and American psychologists William James and G. Stanley Hall. Responding to their ideas, and personally associated with Parker and the pioneer social worker Jane Addams, was a University of Chicago professor named John Dewey. Because of the laboratory school he conducted there, and the important essays and books he wrote on education during these years, Dewey (1859-1952) came to be the leading figure in progressive education, eclipsing even Parker.

Dewey's contribution was enormous, and there is no doubt that he had some liberalizing influence on American schools. He defined education as the continual enrichment of experience, and severely criticized the formalistic, intellectualistic methods of traditional education. He called for the student's active participation in the learning process, and emphasized critical thinking, social participation and aesthetic sensitivity. Furthermore, he was not simply a pedagogue but an exceptionally well-rounded philosopher and social critic, who observed (particularly in the years after the First World War) that American culture was impoverished by the overdevelopment of capitalist competition and greed. American education is in some ways closer to the holistic ideal than it was before Dewey's work, and holistic educators continue to draw inspiration from his writings.

John Dewey

Still, in some important ways Dewey did not fully endorse the holistic approach. His faith, ultimately, rested on critical intelligence—that is, the application of the scientific method to human affairs. For him, the transcendent and spiritual—the "divine" within human nature—were metaphorical rather than actual. (He was, in fact, one of the founders of the twentieth century humanist movement.) Human wishes, preferences and habits arise from experience, from interaction with the environment, and not from any spontaneous, self-creating force in the child. In other words, he was more of a materialist than a romantic, and did not approve of the child-centered branch of progressive education, which he criticized for exaggerating his views on students' freedom.

Yet the child-centered progressives, who were most active and influential in the 1920's, were, in my judgment, the most genuinely holistic members of the progressive movement.[12] They were among the first educators to draw inspiration from the new ideas of psychoanalysis, giving romanticism a new, nonreligious language to describe the mysterious inner unfolding of the human personality. Margaret Naumburg, founder of the Walden School, invoked Freud, Jung, and gestalt psychology to argue that human development requires *individuation* in order to be complete. She claimed that the traditional educational goals of imparting intellectual and vocational skills led to "lopsided development."

> The real job of education ought to be to develop what is still buried or less evolved in our natures. . . . About 90 per cent of what we really are is pushed out of sight by the time we're seven years old! The standards of education and society force back below the surface the most living and essential parts of our natures.[13]

Naumburg argued that there are intuitive and emotional ways of knowing which are not measured by intelligence tests. Indeed, one of the distinguishing features of the romantic progressive schools was their emphasis on self-expression through the arts. The goal was not simply to acquire creative skills, but to give expression to the "essential urge" for growth within every child. Naumburg and her colleagues believed, like Pestalozzi and Parker, that when this urge is protected by emotional security, meaningful learning occurs spontaneously. In a nurturing environment, wrote another progressive educator, the child does not need adult authority to instill learning, for he

> is driven constantly by that little fire burning inside him, to do, to see, to learn. You will not find a child anywhere who will sit still and idle unless he is sick—or in a traditional classroom.[14]

The affiliation of these educators with the romantic tradition is evident in an article on Emerson which appeared in

"The real job of education ought to be to develop what is still buried or less evolved in our natures. . . . About 90 per cent of what we really are is pushed out of sight by the time we're seven years old!"

Progressive Education magazine in 1930. The author exclaimed

> We are tired of facts, persons in the mass, things, propaganda, social and economic classifications, standardization. . . . We are talking about the person as an end in himself, his individuality, not of an economic factor in society.[15]

But from the 1930's through the 1950's, this romantic/holistic vision was obscured by waves of criticism from within as well as without the progressive movement. The Depression galvanized the "social reconstructionists," led by Dewey and George Counts; the rise of totalitarianism in Europe turned progressive educators into cheerleaders for the "American way of life"; and the smug materialism of the 1950's brought "life adjustment" into the progressive curriculum. Parker's ideas were left behind.

European influences

Meanwhile, other holistic influences came to the United States from abroad. A small group of working class radicals and artists in Greenwich Village and elsewhere were inspired by the "modern school" of the Spanish anarchist Francisco Ferrer (1859-1909), who wrote

> we want men who will continue unceasingly to develop; men who are capable of constantly destroying and renewing their surroundings and renewing themselves. . . . Society fears such men; you cannot expect it to set up a system of education which will produce them.[16]

Society fears such men, indeed: Ferrer was executed in 1909. His death aroused worldwide outrage and brought attention to his ideas; from 1911 into the 1950's (most vigorously before the First World War), the "modern school" movement offered an even more romantic alternative to American culture than the progressive schools. The anarchists believed that

> If the natural instincts of the child, uncorrupted by the conventional discipline, were given free play, we would have a race of men and women that could build a new, beautiful life on this earth.[17]

The anarchists sought to liberate these "natural instincts" from the dictates of economic, political, and religious elites. Ferrer and most of his followers rejected religion totally, and so, like the progressives, postulated a self-creative human spirit without reference to divine powers.

Maria Montessori
Courtesy of American Montessori Society

Social stratification and oppression occur, according to the anarchists, because some children are groomed for elite status by intensive intellectual training, while the masses are given only the rudiments. The anarchists called for an "integral education" which would teach all classes respect for manual as well as intellectual work. They saw their schools as free communities where teachers and students learned to treat each other as individual persons rather than according to prescribed status—and believed that this lesson could be applied to society at large. The study by Paul Avrich is a poignant account of a dedicated group of idealists who honestly "imagined themselves at the dawn of an epoch-making revolution."[18]

At the same time Ferrer was engaged in his work, a woman in another Mediterranean nation was devising an educational approach which too would be welcomed in the U.S. as an alternative to mainstream schools. Maria Montessori (1870-1952) was not a radical social critic; she was a physician whose interest in education arose from her work with so-called mentally defective children. The "prepared environment" which grew from her research was far more orderly than the classrooms of extreme child-centered educators—in fact Montessori criticized Rousseau as too permissive.[19] Nevertheless, Montessori's conception of human development was holistic. Despite her scientific training, she held that a purposeful, divinely inspired life force, *horme,* guided the unfolding intelligence of each child. Behind a person's surface behavior,

> there must be an individual spiritual embryo that is developing according to a definite plan. . . . The most urgent task facing educators is to come to know this unknown child and to free it from all entanglements.[20]

Montessori was convinced that given the proper environment, children are, indeed, driven to learn. As they grow, they undergo "sensitive periods" where they are irresistibly attracted to particular physical and social phenomena in their environment, including speaking, writing, and reading. The prepared environment is structured to provide the proper stimulation at the right time—but the teacher must carefully observe the unfolding intelligence and serve, not force it. She must leave the student free to explore what the inner spirit seeks to grasp.

> He who interrupts the children in their occupations in order to make them learn some predetermined thing; he who makes them cease the study of arithmetic to pass on to that of geography and the like, thinking it is important to direct their culture, confuses the means with the end and destroys the man for a vanity.[21]

According to Montessori, education is not instruction but "a natural process which develops spontaneously in the human being."[22]

Still another European holistic thinker, Rudolf Steiner (1861-1925), created an educational system which has found a home in America—the

Rudolf Steiner
Courtesy of Rudolf Steiner College

Waldorf schools. The root of Steiner's philosophy was that

> there slumber in every human being faculties by means of which he can acquire for himself a knowledge of higher worlds. Mystics, Gnostics, theosophists—all speak of a world of soul and spirit which for them is just as real as the world we see with our physical eyes and touch with our physical hands.[23]

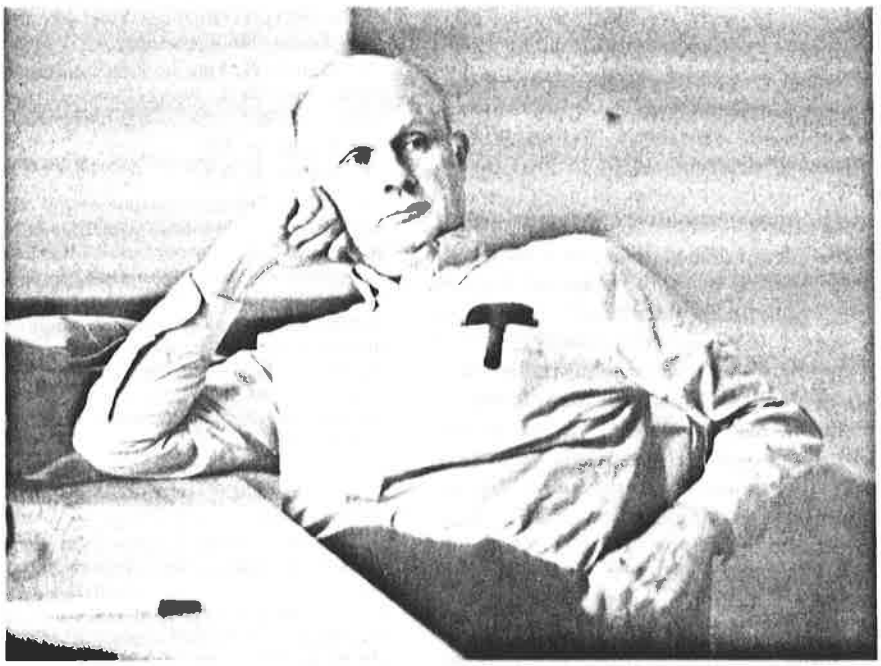
Steiner argued that the Western mind, bound by a materialist world view, was unable (more accurately, *unwilling*) to penetrate to the spiritual core of reality. Human development is the gradual unfolding of this spiritual essence, said Steiner, and education should assist, rather than hinder it.

> One should not ask, "What does a person need to know and to be able to do for the existing social order?" but rather "What gifts does a person possess and how may these be developed in him?"[24]

The Waldorf approach draws extensively upon myths and legends, creative arts and the movement discipline of "eurythmy" to stimulate the imagination and self-awakening of children. Like the Montessori classroom, the environment is not totally child-centered because the teacher is guided by a specific ideal of human development. Still, again like Montessori and the holistic tradition in general, Steiner called for reverence toward the child, for sincere awe at "the creative power within the human soul."

The 1960's and beyond

The most recent outburst of romantic passion in American education was the radical criticism and free school movement of the late 1960's. In *Summerhill* (1960), A. S. Neill had argued on psychoanalytic grounds that social problems and personal unhappiness were caused by repression of natural organic energies. He offered the model of a school where children, given almost unlimited opportunity to test their natural impulses, *did* demonstrate a strong desire to learn and to participate constructively in society. Paul Goodman was another important influence on the romantic movement of the 1960's. A gestalt therapist and social critic, he contended that mass society robs individuals of self-determination and authentic meaning. Schools, he said, "less and less represent *any* human values, but simply adjustment to a mechanical system."[25]



John Holt

Courtesy of Helen Hegener, Home Education Press

By the end of the decade, a number of educators took up this rebellion against the purposes and the practices of American school systems. Leading the charge were John Holt, Jonathan Kozol, Herbert Kohl, George Dennison, James Herndon, Ivan Illich, and Charles Postman & Neil Weingartner. Several themes recur consistently in their writings, and link them to the ongoing holistic tradition.

Education, they argued, should have as its primary goal the growth and happiness of individual children, rather than the forcible imposition of cultural practices. Teachers and students should be free to relate to each other as whole and unique persons; there must be room in schools for emotional as well as intellectual dimensions of experience. Decisions should be made democratically, by the people most affected (i.e. teachers, students and parents) rather than by distant, often anonymous administrators. Education should deal with choices and problems drawn from real life, rather than isolate students in an abstract, morally sanitized curriculum based on "right answers." Extrinsic motivation—fear of punishment and failure as well as competition to excell—is inimical to true learning. Ultimately, these writers based their ideas on a romantic faith in the inherent rationality, curiosity, and sociability of human nature. Holt wrote that

> people, and above all children, may not only have much greater learning powers than we suspect, but also greater self-curing powers. Our task is to learn more about these powers, and how we may create conditions in which they may have a chance to work. This is one of the things that children may be able to teach us, if we are not always busy teaching them.[26]

Starting in the late 1960's, educators calling their approaches "humanistic," "integrative," "affective" or "confluent" carried on the holistic tradition. Some of the more influential writers of this period were George Leonard, Carl Rogers, George I. Brown, Paul Nash, Beverly Galyean, Jack Canfield, Gerald Weinstein, and Sid Simon. Humanistic psychology and the human potential movement stimulated interest in their ideas, and new discoveries in brain functioning and learning processes have added a further impetus. By the mid-1980's, the holistic movement was building a strong scientific case for its philosophical approach.

In the face of the vast technological and cultural transformations that are in store for humankind in the twenty-first century, it is increasingly clear that the holistic approach, far better than the industrial-age model of education, addresses the needs of human development and adaptation to change.

The holistic approach claims that the new generation, unemcumbered by

limited world views, may have something to teach the older generation about untapped human possibilities. By contrast, according to the new age critics, the materialist world view is essentially repressive. Deprived of a holistic understanding of human life and growth, modern societies are breeding personal disintegration, anomie, and despair. There is an urgency in many of the new age writings, a warning that if materialism continues to dominate modern consciousness, then personal alienation will inevitably reach the point of global self-destruction.

I am not suggesting that we accept the new age critique simply because it is so emotionally charged. But its passion is a warning that some vital human quality is lacking in the industrial-materialist world view. The new age writings may not be the last word, but they are an earnest invitation to examine our cultural prejudices and the educational system which reinforces them. Holistic education is not another new batch of methods, not another chapter in the endless cycle of reform/back-to-basics/reform which has characterized American education for 150 years. Holistic education offers a new image of human nature and human possibilities, and a new way to define the relationship of individuals to society and to the world. To avoid these issues—to assume that the educational establishment will be able to continue its traditional practices into the next century—is itself sentimental and unrealistic, and in this period of cultural malaise, amounts to moral default.

Notes

1. Jean-Jacques Rousseau, *Emile* (London: J. M. Dent, 1911), p. 56.
2. Rousseau, p. 173.
3. Quoted in Kate Silber, *Pestalozzi: The Man and His Work* (London: Routledge & Kegan Paul, 1965), p. 213.
4. Joseph Neef, *Sketch of a Plan and Method of Education* (1808) (New York: Arno/New York Times, 1969), p. 6.
5. Quoted in W. H. Channing, *Life of William Ellery Channing* (Boston: American Unitarian Association, 1880), p. 520. Quoted in Y. Arieli, *Individualism and Nationalism in American Ideology* (Cambridge: Harvard U. Press, 1964), p. 272.
6. Quoted in W. H. Channing, p. 488.
7. W. H. Gilman, ed. *Selected Writings of Ralph Waldo Emerson* (New York: Signet, 1965), p. 268. (From the essay "Self-Reliance")
8. Quoted in Dorothy McCuskey, *Bronson Alcott, Teacher* (1940) (New York: Arno/New York Times, 1969), p. 163.
9. Francis W. Parker, *Talks on Pedagogics* (1894) (New York: Arno/New York Times, 1969), p. 370.
10. Parker, p. 371.
11. Parker, p. 348.
12. My interpretation departs from the influential one of Lawrence Cremin, who sees all the branches of progressive education as "progressivism applied to education." I think that the First World War marked a decisive turning point for progressive educators—that their orientation was more countercultural during the 1920's than before. Dewey was very much at home in the prewar progressive education movement, and less so afterwards.
13. Margaret Naumburg, *The Child and the World* (New York: Harcourt, Brace, & Co., 1928), p. 311.
14. Caroline Pratt, *I Learn From Children* (New York: Simon and Schuster, 1948), p. 10.
15. J. Milnor Dorey, "Emerson, a Prophet in Education," *Progressive Education* VII, 7, (1930), p. 335.
16. Francisco Ferrer, *The Origin and Ideals of the Modern School*, trans. J. McCabe (New York: G. P. Putnam's, 1913), p. 71.
17. Quoted in Paul Avrich, *The Modern School Movement* (Princeton: Princeton U. Press, 1980), p. 248.
18. Avrich, p. 129.
19. Maria Montessori, *The Discovery of the Child* (1948), trans. A. Johnstone (Madras, India: Kalakshetra, 1966), p. 9.
20. Montessori, *The Secret of Childhood* (1966), trans. M. J. Costelloe (New York: Ballantine, 1972), pp. 109-10.
21. Montessori, *Spontaneous Activity in Education* (1917) trans. F. Simmonds, (New York: Schocken, 1965), p. 180.
22. Montessori, *The Absorbent Mind* (1949) trans. C. A. Claremont, (Madras, India: Kalakshetra, 1973), p. 6.
23. Rudolf Steiner, *Knowledge of the Higher Worlds and Its Attainment*, trans. G. Metaxa (Hudson, NY: Anthroposophic Press, 1947), p. 1.
24. Quoted in Mary C. Richards, *Toward Wholeness: Rudolf Steiner Education in America* (Middletown, CT: Wesleyan U. Press, 1980), p. 31.
25. Paul Goodman, *Compulsory Miseducation and The Community of Scholars* (New York: Vintage. 1964), p. 21.
26. John Holt, *Freedom and Beyond* (New York: Dell, 1972) pp. 77-8.

It is important to recognize that this is *not* an "abdication" of adult authority, as traditionalist critics claim. Almost every holistic educator, from Rousseau to Holt, has observed that adult guidance is a vital part of the education process—that adults hold a "natural authority" by virtue of our experience and reason. Holistic educators ask, however, whether we adults should use this authority to enforce our own limited conceptions of the world, or to encourage children to develop their own powers of perception, judgment, and self-direction.

Holistic Education for a New Age

by Philip S. Gang, Ph.D.

The present day rising self-consciousness and our ability to see the historical turning point at which we stand, means that we can move deliberately; and we can consciously influence our direction.

At The Crossroads

We hear a lot today about "paradigms." A paradigm shift is a "profound change in the thoughts, perceptions, and values that form a particular vision of reality."[1] The first major paradigm shift occurred when human beings moved from the nomadic existence of the hunter-gatherer towards a settled life in an agrarian society. A second paradigm shift occurred as the industrial revolution became the dominant force shaping society as it spread across the world, displacing the agricultural age. Today we are on the brink of a third paradigm shift—one that searches for a type of truly unified world view. The vision itself is fascinating:

> . . . finally, an overall paradigm theory that would unite science, philosophy-psychology, and religion-mysticism; finally a truly "unified field theory"; finally, a comprehensive overview. Some very skilled, very sober, very gifted scholars, from all sorts of different fields, are today talking exactly that. It is truly extraordinary.[2]

As the twentieth century moves towards its concluding years, prognosticators from around the world and from many different walks of life are speaking about the dawn of a new age. There are associations and journals dedicated to life in this new age and the number of books written about the period is growing rapidly. Fritjof Capra, Alvin Toffler, Marilyn Ferguson, John Naisbitt, Buckminster Fuller, Robert Muller, Jose Arguellas, George Leonard, Gary Zukav and Joseph Pearce are just a few writers who are telling us about the changes that are in process.

In general these "twenty-first century thinkers" explain that in the next twenty-five years there will be sweeping changes in all of our frames of reference. These will be triggered by the gradual shift from the mechanical-industrial age to the information-solar age. It will mark the transition away from a non-renewable energy base toward renewable sources of energy, from a period of super-specialization toward a time of holistic disciplines, and from a dichotomy between man and nature towards a unifying grasp of reality.

As the momentum pushes us towards this new era, modern science is exploding with new findings that shake the very foundation of our perception of ourselves and the world in

There is an increasing awareness that our modern, mechanical-industrial civilization is beginning to evolve into an age of information and renewable energy. This "new age" brings with it a holistic paradigm—that is, a world view which is unified and ecological. And this new paradigm will demand what Maria Montessori called "cosmic" education.

After receiving an undergraduate degree in engineering and spending ten years in business and industry, Phil Gang turned to the field of education. He received teacher training from the Association Montessori Internationale at both the primary and elementary levels, and his Ph.D. in Educational Philosophy from the Union Graduate School.

Dr. Gang has taught in Montessori learning environments for thirteen years and was instrumental in the development of Montessori secondary education in the U.S. He is the founder-coordinator of the "Peace and Education Network," and also a writer and lecturer who has spoken in the Soviet Union, Italy, Israel, Sweden, Canada, and throughout the U.S. and Puerto Rico.

In July, Dr. Gang will become the founding director of the Institute for Educational Studies, a center for new age education ideas including the development and implementation of innovative models for teacher training. He is currently the director of the Northwoods Montessori Center in Atlanta, Georgia.

which we live. The "new" science has developed the capability of confirming the pervasive unity which embodies the universe—as foretold by our religious and mystical ancestors. Relativity theory and quantum physics provide us with a new window to view the universe, revealing a multiplicity of interrelationships and interdependencies. Matter and energy become interchangeable, as particles and waves of energy are sometimes indistinguishable. The new science tells us, at one and the same time, that we know more about existence than we have ever known and that existence remains, and may always remain, a mystery.

We are about to economically harness the energy of the sun and are working on tapping into electromagnetic energy and gravitation. In other areas of scientific endeavor, Richard Leakey, through his paleontological work in East Africa, has said that the whole history of humankind shall be known to us by the turn of the century—and less than 100 years ago we knew practically nothing about our ancestry. Biogenetic engineering is treading a cautious path that has the potential for saving us from disease, while at the same time it tampers with moral and ethical issues that threaten the nature of life. The sciences that support military innovation are struggling with the proliferation of lethal weaponry as we try to see our way out of the age of nuclear confrontation and into the age of peaceful coexistence.

What does all this mean to us?

We are entering a new epoch. According to the Mayan calendars which were created 1,200 years ago, the cycle we are entering is no mere transitory time-frame. It marks the end of 5,000, 26,000, and 104,000 year cycles.[3] We are truly embarking upon a period in which economic, cultural, political and spiritual realities will undergo a major metamorphosis.

How we prepare ourselves for the dawning of this new age is the subject that needs to be addressed. For if we are to make the necessary transitions, education will have to play a major role in the transformation of society.

Holistic education acknowledges these changes and embodies them with a new integration of ideas and applications.

The principles of holistic education

> The last 400 years of scientific and intellectual progress contain a gigantic paradox. Every great advance, every profound insight in the sciences and other intellectual disciplines, has torn down the barriers of distinction between those disciplines; and yet the institutional result of each of these achievements has been the further fragmentation and specialization of the academy.
>
> Frederick Turner
> "Design for a New Academy"[4]

> Our aim is not merely to make the child understand, and still less to force him to memorize, but so to touch his imagination as to enthuse him to his inmost core. We do not want complacent pupils, but eager ones; we seek to sew life in the child rather than theories, to help him in his growth, mental and emotional as well as physical, and for that we must offer grand and lofty ideas to the human mind, which we find ever ready to receive them, demanding more and more.
>
> Maria Montessori
> "To Educate the Human Potential"[5]

The universe is a single energetic unfolding of matter, mind, intelligence and life. None of the great figures of history were aware of this . . . It is a new revelation.

> We must elevate ourselves as cosmic beings in deep communion with the universe and eternity. We must reestablish the unity of our planet and of our beings with the universe and divinity. We must have our roots in the earth and our hearts in heaven. We must see ourselves as cells of a universe which is becoming increasingly conscious of itself and us.
>
> Robert Muller
> "New Genesis"[6]

At the core, at the very center of my experience is the knowledge and understanding that a pervasive unity exists, not only on earth, but in the totality of the universe. How many times I have repeated this idea and still, as I look around the room in which I am writing and see this table, the paneling, a glass lamp, books, paper, pencils, word processor, carpet and me, it is hard to conceive that all of this is inextricably linked from some amorphous beginning twenty billion years ago. And even if it is, what does that mean to me?

As I contemplate an answer to this question I recall the ideas of Martin Buber in *I and Thou*.[7] Buber explores the nature of "I-Thou" and "I-It" experiences. The world of I-Thou is one of encounter, relationship and cooperation guided by spirituality. The world of the I-It is objective and indifferent and is guided by cause and effect.

My experience of this room becomes an I-Thou interchange as I develop relationship with the "it" articles I see and touch. It is majestic and uplifting.

We want schools that will enable students to encounter, to build relationship and to cooperate with the world. They can only accomplish this with a redirection of energy from a mechanistic to a holistic approach; that is, from one that emphasizes facts and objectivity (I-it) to one that explores interdependency and unity (I-Thou). The purposes of holistic education are to:

- Give young people a VISION OF THE UNIVERSE in which all animate and inanimate beings are interconnected and unified.
- Help students synthesize learning and discover the INTERRELATEDNESS OF ALL DISCIPLINES.
- Prepare students for life in the new age by emphasizing a GLOBAL PERSPECTIVE and common human interests.
- Enable the young to develop a sense of harmony and SPIRITUALITY—which are needed to construct world peace.

A vision of the universe

Some 20 billion years ago there was a great silent fire that marked the beginning of time. This was a fire that filled the universe—that was the universe! All of the particles of the universe were in that fire, churning in extreme heat and pressure. All that we see, all that exists was in that fire at the beginning.

We can see the dawn of the universe because the light from its edge just reaches us now after traveling for 20 billion years. Everything in the universe came from a common origin—and everything was in the fireball. The material of your body and the material of my body are intrinsically linked because they emerged from a single energetic event. Our ancestry stretches back to the stars.

The universe is a single energetic unfolding of matter, mind, intelligence and life. None of the great figures of history were aware of this—not Plato, Aristotle, the Hebrew Prophets, Confucius, Thomas Aquinas, Galileo, Leonardo Da Vinci, or Newton. It is a new revelation. We are the first generation to live with an empirical view of the origin of the universe.

We are just starting out in this journey. We have inhabited the earth for only six one hundredths of one per cent of its existence. Our presence in the universe represents less than six seconds in a twenty-four hour period. And yet, in this very limited time period we have begun to comprehend the infinite!

Our power of self-reflection has given

Photo by Ron Miller

This means that whatever we do in the future will have to be based on the unity that emerged at the beginning—a new dance has begun.

After the fireball, stars and galaxies were created. Incredible as it may seem there were billions and billions of galaxies each with billions of stars. The enormous creative powers generated from that fireball seems overwhelming but it was effortless. This creativity permeated the beginning and manifested itself in the form of this earth. The earth was created from the particles in that fireball—land, water, air, mountains, and life.

Out of the earth's creativity came the oceans. And emerging from the oceans came life—spreading across the continents and covering the entire planet. The creativity advanced, calling forth flowers to bloom; and then advanced further until the vision of the flowers and all the beauty could be deeply felt and appreciated. Human beings are the latest and most recent—the youngest creation of this creative earth.

the universe form and the universe continues to reveal itself to itself through human awareness. Human beings enabled the universe to be felt—to be appreciated. If you think about our recent arrival, the human experience has yet to realize its potential for appreciating the universe in its totality.

Consider the children. Are they aware of the beauty they embody? What if there were no one to appreciate the child's splendor—no one to celebrate its magnificence? Well, the same is true in the cosmos. Humanity can reflect on the beauty of the universe. We can value it and feel its grandeur.

As human society prepares itself to enter into a new paradigm—the information-solar age—what lies ahead for us? Perhaps we will all come to see human life as part of the interconnectedness of the unfolding earth. An emergent earth community may overshadow the nation-state as human beings begin to realize the full meaning of planetary citizenship.

Pierre Tielhard de Chardin, paleontologist, philosopher and Jesuit priest many years ago declared:

> The Age of Nations is past.
> The task before us now
> if we would not perish
> is to build the earth.[8]

This is the essence and purpose of the "cosmic education" described by Maria Montessori. Montessori tells of a cosmic mission for the animate and the inanimate—to render service unconsciously and to be part of the total interdependency of all things. In 1946 in Rome she explained:

> If we educate children to see this they will ready themselves to feel gratitude toward all mankind.[9]

Young people need to know that they are the result of 20 billion years of creation and that just as the universe has creative powers, these creative powers reside in them waiting to be used.

In *To Educate the Human Potential*, Montessori explains,

> If the idea of the universe be presented to the child in the right way, it will do more for him than just arouse his interest, for it will create in him admiration and wonder, a feeling loftier than any interest and more satisfying. The child's mind will no longer wander but becomes fixed and he can work. The knowledge he then acquires is organised and systematic; his intelligence becomes whole and complete because the vision of the whole has been presented to him, and his interest spreads to all, for all are linked and have their place in the universe in which his mind is centered . . . No matter what we touch, an atom, or a cell, we cannot explain it without knowledge of the wider universe.[10]

Montessori called the plan for this kind of learning "Cosmic Education." It is an approach that seeks to connect young people with the fundamental, universal laws or models that exist in the cosmos. Through this exposure the children begin to understand the psycho-evolutionary process which governs everything. They begin to comprehend the vision of the whole and its significance for their own lives. Ultimately what Montessori suggests in her philosophical outlook is that the student would discover that humanity's cosmic task is to continue collectively the work of creation on earth, and to discover with its intelligence the endless latent possibilities of the world's crea-

tions and make them manifest in new forms. During the earlier years in school this can be accomplished through imaginative stories dramatizing the ascendancy of life on the planet and the coming of man—and demonstrating how certain universal principles have kept us on our evolutionary journey. In the secondary school this base is expanded to full philosophical dialogue concerning these principles.

Through a direct confrontation with the unity concept, learners experience intimacy with the creative energies that exist in the universe. They understand the need for cooperation and collaboration and realize the inherent interconnectedness of all the animate and inanimate.

Interrelatedness of all disciplines

There is a direct correlation between the concepts of holistic health and holistic education. In holistic health the whole is more and different than the sum of the parts, and parts have relevance and meaning only as they serve as elements of a larger whole. When a patient visits a holistic practitioner with a knee problem, the source of the difficulty may be discovered in the motion of the head and neck—as the whole body is balanced and interdependent on all its components. This same patient upon visiting an orthopedic specialist might become a candidate for knee surgery. Holistic health considers both the physical and psychological aspects of illness.

Traditional education dissects the world of knowledge into isolated and separated categories. Culture may be divided into geography, history, math and science. Science and math are further broken down to physics, biology, chemistry, algebra, trigonometry and geometry. The fragmentation of curriculum into different areas of specialization is an artificial construction resulting from "assembly line" models which were exacted from the mechanistic mind set. In the real world these subjects are not separated but form integral wholes. Holistic education seeks to help the student comprehend the interdisciplinary nature of knowledge. It views learning as a process in which the whole and the unification of ideas are paramount.

Frederick Turner, in a *Harper's Magazine* article, "Design for a New Academy," explains the consequences of this holistic approach:

> A person educated in this way would be in a position to recover that sacramental sense of unity and meaning of the world that was lost when we took the great detour into academic specialization . . . Such a person would not be overwhelmed or paralyzed by the complexity of modern life, any more than we are overwhelmed by the complexity of our own nervous, motor and sensory systems.[11]

The conventional concept of educating the whole person has been one of including in the individual's education plan as many pieces as possible. The belief was that when a range of elements—math, reading, social studies, athletics, music, etc.—were prescribed, learners would somehow automatically integrate these fragments into a meaningful whole. There is little evidence that this happens. Holistic education includes in its concerns and purposes the processes of assimilation and integration.

New knowledge about specialization in right and left brain functions has implications for education as a holistic process. Most of what is done in schools is left brain activity—the rational, sequential, linear—while the metaphoric right lobe is neglected. Holistic education implicates both lobes. Balance is realized through processes in which options and models are available and learners are free to choose those which fit their individual life journeys. Imbalance is a function of externally administered curricula.

Education which is separated into segments, ignores parts of the learner's total development, does not include assimilation and integrative processes, and is insensitive to both right and left brain learning, does not meet the standards of holistic education.

The global perspective

For the first time during the last twenty years we have been able to observe our planet from the far reaches of outer space. This experience is having a transformative influence on the way we think and what we do. It is as if our planet has taken on the characteristics of a spaceship in time—one in which all are responsible for its preservation.

If young people can be taught to see the earth as a whole; to see that every nation is directly affected by what other nations do; to see that population growth is not someone else's problem but everyone's problem; to see that we must work together to solve the world's environmental dilemma; to see that we must learn how to live together and deescalate conflict before we destroy our planet; to recognize the humanitarian responsibility that we each have to our fellow human beings,

Junior high students searching for fossils *Northwoods Montessori Center, Atlanta*

then we can begin to create a generation of people who shed their ethnocentric past and become stewards of the earth and protectors of our future.

Recently retired Assistant Secretary-General of the United Nations, Robert Muller, develops the global education concept in his book, *New Genesis*:

> We must give a global vision to all the world's children, teach them about the miracle and sanctity of life, the necessity for love for our planet, for our great human family, for the heavens and for the Creator of all these marvels. We must teach them rules of good behavior towards our global home and all our human sisters and brothers, so as to ensure peace, justice and happiness for all.[12]

Such is the task of global education, for it seeks to plant the seeds of intercultural awareness. Global education must start with the very young child and carry through the secondary school. The preschool child, presented with the globe and learning the names of continents, oceans and countries begins to develop a larger concept of earth. He or she can be shown pictures and told stories of how people in other lands satisfy their needs. The elementary child builds on these experiences by studying other cultures and developing geography skills. Discussions about world affairs and how we are connected to global issues are critical during this period. At the secondary level, action becomes an integral part of the learning process and students need opportunities to participate in debates about global concerns. More importantly, they should participate in social action projects centered in global issues.

Spirituality

> Spiritual attraction is the force that can save humanity. Instead of being merely bound by material interests we need to feel this attraction to each other. These spiritual forces always exist around us, just as the cosmic rays exist in the universe. They are the Children! If our soul is far from the child, then we see only his small body, just as we see the star in the sky as a little shining point when it is really an immensity of heat and light. The art of spiritually approaching the child, from whom we are too far, is a secret that can establish human brotherhood; it is a divine art that will lead to the peace of mankind.
>
> Maria Montessori[13]

Ultimately what Montessori suggests in her philosophical outlook is that the student would discover that humanity's cosmic task is to continue collectively the work of creation on earth . . .

Spirituality is a state of connectedness to life. It is an experience of being, belonging and caring. It is sensitivity and compassion, joy and hope. Spirituality manifests as the harmony between the innermost life and the outer life, or the life of the world and the life of the universe. It is the supreme comprehension of life in time and space, the tuning of the inner person with the great mysteries and secrets around him or her. It is the belief in the goodness of life and the possibility for each human person to contribute goodness to it. It is the belief in life as part of the eternal stream of time, that each of us came from somewhere and is destined to somewhere, that without such belief there could be no prayer, no meditation, no peace, no happiness.

An education based on these ideas would accelerate humanity's path to wholeness. Such a method will evolve through new and different approaches to teacher preparation—approaches that help adults create new meaning for, and new relationship to, the process of education.

An old time visionary once said, "Give me your children and I will give you the world." Today we should say, "Give our children the correct view of the world and they will give us peace."

Notes

1. Fritjof Capra, *The Turning Point* (New York: Simon & Schuster, 1982), p. 30.
2. Ken Wilber, *Eye to Eye: The Quest for a New Paradigm* (New York: Anchor Press, 1983), p. 1.
3. Jose Arguelles, *The Mayan Factor: Path Beyond Technology* (Santa Fe: Bear and Co., 1987).
4. Frederick Turner, "Design for a New Academy," *Harper's Magazine*, 273:1636 (September, 1986), pp. 47-53.
5. Maria Montessori, *To Educate the Human Potential* (1948) (Madras, India: Kalakshetra, 1973).
6. Robert Muller, *New Genesis* (New York: Doubleday & Co., 1982).
7. Martin Buber, *I and Thou*, trans. by Walter Kaufman (New York: Charles Scribner's Sons, 1970).
8. Pierre Tielhard de Chardin, *Building the Earth* (Wilkes-Barre: Dimension Books, 1965), p. 29.
9. Maria Montessori, *Education and Peace* (1949) (Chicago: Henry Regnery Co., 1972).
10. Montessori, *To Educate the Human Potential*, p. 9.
11. Turner, p. 52.
12. Muller, p. 59.
13. Maria Montessori, "Gandhi and the Child" (1939), *India News* xxiii:45; (February 4, 1985).

The Search For a New Educational Paradigm:

The Implications of New Assumptions About Thinking and Learning

by Edward T. Clark, Jr., Ph.D.

The shift from a technological to an ecological world view requires new approaches in education. It is not enough to teach facts—people in the next century must be able to think contextually. Here are specific recommendations for administrators and teachers to move education toward the future.

In 1962 Thomas Kuhn, in his book *The Structure of Scientific Revolutions,* introduced the concept of "paradigm shift" into the literature and, thus, into our ways of thinking about ourselves and the world. Since that time, much has been written concerning the paradigm shift that is occurring in various fields of endeavor.

For Kuhn, a paradigm shift occurs as the result of a shift in the underlying assumptions upon which science is based. As he makes clear, at a certain fundamental level, the basic assumptions of a discipline shape the research and results of that research. When the evidence begins to challenge these commonly accepted assumptions, anomalies appear. These anomalies create conflicts—conflicts which can only be resolved by acknowledging a new set of assumptions. As these new assumptions gradually gain acceptance, a dramatic shift occurs both in the nature of scientific inquiry and in our understanding of the role of science in society. To use a Biblical analogy, one cannot put new wine in old wineskins because, in time, the new wine, as it ferments and expands, will burst the old wineskins.

While much has been written about the need for educational reform, not enough attention has been paid to the fact that, in education, as in virtually every other area of our lives, a major paradigm shift is occurring. Although implicit in each of the many national reports that first officially recognized the current crisis in education, few educators seem to have explicitly identified the problems as resulting from a major paradigm shift.

At a macro level the paradigm shift represents a conflict between two world views. If we think of a world view as a cultural mindset, it seems clear that *a technological world view* has guided Western thought since the beginning of the Industrial Revolution. Based on the analytical perspective of Newton and Descartes, it reduces things to their smallest component parts in order to understand them. Its strategies are fragmenting, linear and sequential. Its empirical logic discounts intuition and value-based perceptions and forces us into an "either/or" problem solving and decision making mode. This reductionist world view is explicitly taught in our schools and

This article is a synopsis of a book in progress, **Peepholes Or Picture Windows: The Search for a New Educational Paradigm.** *Dr. Ed Clark is an educational consultant in the areas of organizational renewal, staff development, and curriculum design. He is the author of* **Contextual Thinking,** *a comprehensive program for educational reform based on the ideas presented in this aritcle. Ed is former director of the Institute for Environmental Awareness and professor of Environmental Education at George Williams College, and has been active in the field of teacher education for more than twenty years.*

forms the conceptual framework for most social decisions.

A systemic *ecological world view* is now emerging. Crucial to much of science today, this systems view is a fundamental premise upon which the cutting edge of research in every major discipline is based. This new world view is global, holistic and integrative. Its primary mode of thinking is whole-brain thought, incorporating both inductive and deductive strategies, while integrating both rational and intuitive modes of knowing. Although it acknowledges that for certain purposes the concept of objectivity is useful, this perspective affirms that, at its most fundamental level, all knowledge and experience is subjective and value-laden. As a consequence, in our complex world, the best decisions are more often "both/and" rather than "either/or" choices. This emerging world view acknowledges the importance of science and technology, but holds that these must be understood and applied within the context of a global, ecological perspective.

This changing world view obviously represents a major shift in the context within which education is conducted. Since "context" is "the frame of reference that provides meaning," when the context changes, meaning changes. This contextual shift reflects, at a micro-level, a change in the basic assumptions that have shaped the purposes, goals and methodologies of education since the early part of this century. This shift has resulted from research in the nature of intelligence, thinking and learning, which has thrown a new light on the vast area of human potential. The research challenges both the way that the educational system is structured, and the way that teaching and learning are perceived to take place. The purpose of this article is to examine both the conventional wisdom and the emerging assumptions and explore their implications for the four major arenas that are central to education: students, teachers, administrators and the curriculum.

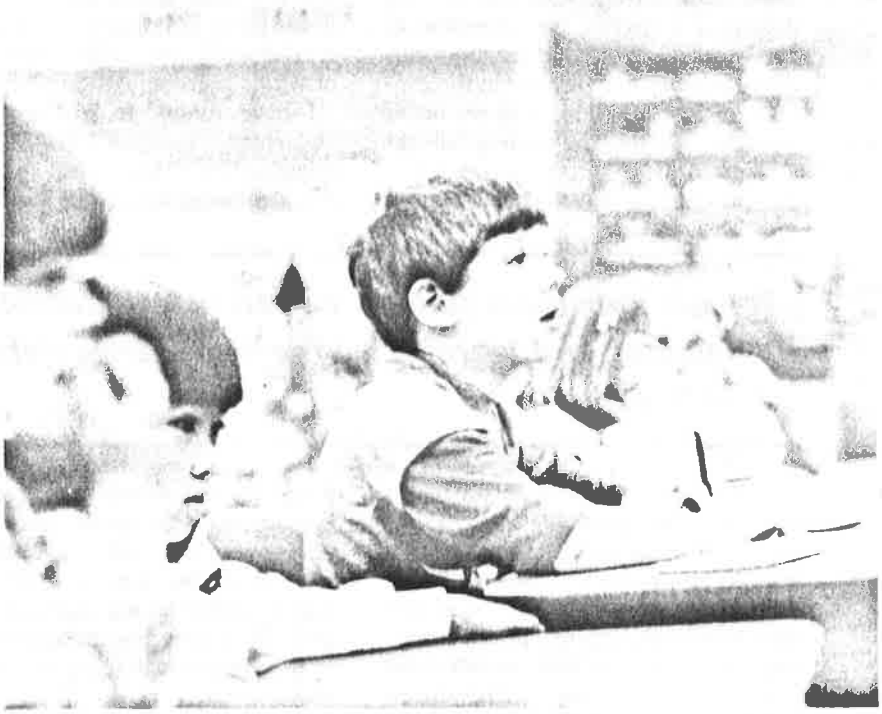


Photo by Ron Miller

The approach seeks to provide a "big picture" perspective on the issues. Such a synthesis, by its very nature, depends upon generalizations. Those in this article are offered with the full knowledge that many can be challenged with details that seem to contradict the conclusions that are presented. However, in our concern for pragmatic accuracy and empirical solutions, we seldom examine the "big picture," and as a result, we treat symptoms while the underlying problem goes unattended. It is only when we explore the issues from this macro-perspective that we can identify the more fundamental problem. The hypothesis upon which this article is based is that the fundamental problem is one of unexamined assumptions. Once this issue is addressed, we can proceed with our task of designing an educational system that is appropriate to the requirements of a global information society.

Students

Stated simply, the paradigm shift *vis-a-vis* students is the movement from an assumption that each student was born with a given, mathematically quantifiable, intellectual capacity, to the assumption that each individual student has an innate potential for thinking and learning whose boundaries defy quantification.

There are three areas in which the assumptions which shape our perception of students have changed.

The nature of intelligence. Traditional wisdom suggests that intelligence is a given, mathematically identifiable quotient. Since the introduction of intelligence tests in the early part of this century, educators have classified students by I.Q. scores based on their linguistic and logical-mathematical abilities. Such classification is based on the assumption that intelligence is a fixed amount which can be measured with a mathematical formula. Traditionally, students have been given I.Q. tests before entering school and, although there has been some recognition of the fact that these scores may be subject to change, most students carry their scores with them throughout life.

Studies by Howard Gardner of Harvard call this assumption into question. His studies suggest that there are at least seven, rather than just two, forms of intelligence. In addition to the traditional linguistic and logical-mathematical abilities, he identifies spatial, musical, bodily-kinesthetic intelligences, and two forms of personal intelligence—inter-personal and intra-personal. While our culture has given precedence to and, therefore, measured intelligence exclusively by the first two areas, Gardner concludes that none of these should have priority over the others. He suggests that it is quite possible that every child has the potential of becoming a genius in at least one of these areas.[1]

Because I.Q. scores seem to follow the distribution pattern of the bell

curve, we have long assumed that student achievement would follow the same pattern. However, in his studies of Mastery Learning, Benjamin Bloom concludes that, given an appropriate learning environment, virtually all students have the potential for achieving above average grades.[2] Similar conclusions are implied by the Rosenthal studies, which suggest that student performance is more the result of teacher expectations than the so-called "given" abilities measured by an I.Q. score.[3]

The nature of thinking. Implicit in the current wisdom on teaching thinking skills is the assumption that children have to be taught the higher order thinking skills such as analysis, synthesis, critical thinking, problem-solving, creative thinking and decision-making. As a result, we have a multitude of programs, each presenting a combination of discrete strategies by which these skills can be taught. These programs seem to be characterized by several features which reflect what seem to be outdated assumptions about the nature of thinking.

Many of them tend to emphasize the discrete functions of the right and left brain hemispheres. Creativity is considered to be the result of right hemisphere activity, while problem solving is considered to be a left hemisphere activity. In recognition of the dominant left-hemisphere orientation of the curriculum, many programs have been developed to train students to use their "right brain."

For the most part, the strategies introduced in these programs are linear and sequential and have been designed as "add-ons" to the curriculum. A typical program is recommended for use in two to five one hour lessons per week for two to three years. We know now that higher order thiking is not a linear, sequential process.

Leslie Hart[4] and David Loye[5] have synthesized the tremendous amount of research that has taken place in the areas of thinking and learning. This research strongly suggests that all higher order thinking is whole-brain thinking, and is an innate rather than a learned capacity.

For example, David Loye describes how the brain functions in a problem-solving mode. There are essentially three, virtually simultaneous, steps. In the first step, the right hemisphere identifies the gestalt, the big picture, the context. Given this holistic perspective, the left hemisphere begins to sort out and arrange details and identify probable solutions. Based on the input from the two hemispheres, and with additional input from the senses and the intuition, the forebrain, acting in its executive role, evaluates the information and makes a decision.

The evidence is strong that all higher order thinking involves these three steps: context, content, conclusion. The difference between the diversity of thinking skills which are taught in current programs may well lie in the context which triggers higher order thought. Whether the context calls for a problem to be solved, an analytical critique or a new way to evaluate learning, the fundamental brain process is the same. Though it takes many forms in response to specific situations, it seems appropriate to conclude that all higher order thinking is, at its most fundamental level, "creative problem solving." It is this capacity, which I call "contextual thinking," that distinguishes humans from other animal species. If these conclusions are sound extrapolations from the latest research, then our children do not have to be taught how to think. What is needed are strategies for triggering this innate higher cognitive function. An example will highlight the difference between the two approaches, each based on a different fundamental assumption about the nature of thinking.

A strategy for teaching elementary students how to summarize a story (synthesis) proposes the following steps:

1. Delete trivial material
2. Delete repetitious material
3. Substitute a general term for a list of specific terms
4. Combine a list of actions into a broader, single action
5. Select a topic sentence
6. Create a topic sentence.

Hart uses an analogy to demonstrate the futility of sequential learning strategies such as this. He hypothesizes teaching someone to ride a bicycle by sequentially teaching them how to steer, to pedal, to balance, to lean into a turn and to stop. He concludes that it is the coordination of these that is the essential learning.[6]

Based as it is on outdated assumptions about thinking and learning, such linear strategies are counterproductive. Like many other models for teaching thinking skills, they tend to ignore context and focus almost exclusively on a linear mode of thinking when in reality, this mode represents only one part of whole-brain thinking.

I have found, in my work with elementary students, that a simple question like, "How would you tell the story in one sentence?" is sufficient to trigger the skill we refer to as synthesis. Indeed, my experience, and that of teachers in CONTEXTUAL THINKING workshops, has been that any of the higher order thinking skills can be triggered by appropriate questions related to the subject matter under consideration.

. . . each individual student has an innate potential for thinking and learning whose boundaries defy quantification.

This research does not deny the usefulness and necessity of what David Perkins calls "tactics" and "thinking frames."[7] Such a "bag of tricks" helps students organize their thinking in more productive ways. It would seem that many of the "thinking skills" that are currently being taught might better be called "thinking tactics" in order to distinguish them from the more fundamental higher level thinking. The danger is that by confusing these strategies with the more fundamental cognitive processes described above, we mistake one for the other. The result may be that the tactics we teach work in opposition with the natural way of thinking.

Research has now reinforced what every parent has known intuitively: The process we call higher level thinking is an innate capacity that begins to develop at an early age. I recently watched my two-year old granddaughter spend ten minutes trying to solve the problem of how to put on her

diaper by herself. She laid it on the floor and tried lying on it. Then she tried sitting on it using a variety of postures. Next she carefully placed it in her rocking chair and tried to sit in it. She experimented with several other strategies, and although she never quite succeeded, the chances are she will try it again. Any parent who has tried to hide the cookie jar from a four-year old knows that young children may be the best problem solvers in our society. Yet, by the time they reach third or fourth grade, teachers have to "teach" them problem solving. What has happened to that innate capacity? Research reported in *The Leading Edge Bulletin* gives us a clue. This study found that "creativity scores invariably drop about ninety percent between ages five and seven."[8] One obvious conclusion, which teachers are quick to reach, is that, upon entering school, the child is programmed for linear, sequential thinking to the exclusion of a more holistic, integrated, innate process.

The nature of learning. The first question that most teachers ask when they begin to write a lesson plan is: What do I want the student to learn? The way the teacher answers this question reflects his or her assumptions about the nature of learning, and obviously will have a significant impact on both what is taught and how it is taught.

A generation of teachers have been trained to answer this question in terms of behavioral or instructional objectives. Such objectives represent, by definition, terminal behaviors on the part of the learner that are demonstrable and quantifiable. Behavioral objectives have two specific purposes: to identify the desired outcome, and to measure the degree to which the outcome is achieved. Thus, two functions—goal setting and evaluation—are directly linked in a linear, causal relationship that moves from the end to the beginning rather than the usual direction from beginning to end. According to Mager,

> "If you are interested in preparing instruction that will help you reach your objectives, you must first be sure your objectives are clearly and unequivocally stated. You cannot concern yourself with the problem of selecting the most efficient route to your destination until you know what your destination is."[9]

The assumption upon which behavioral objectives are based is that learning, like intelligence, can be quantitatively measured. Once we accept this assumption we find ourselves in the same circular trap that we were in with our assumptions about the nature of intelligence. Once you assume that learning can be measured, you end up defining all learning by that which can be measured. Therefore, by using behavioral objectives in the way they were designed to be used, we: 1) identify an end result that is measurable, and 2) decide on what we will teach and how we will teach it in order to reach that measurable end result. The obvious choice is to teach that which is measurable. Once in this circular trap, our only option is to teach what we test. Indeed, in essence, that sums up both the purpose and method of behavioral objectives: how to teach what you test. Carl Rogers describes this circularity as an assumption that "Evaluation is education, and education is evaluation."[10]

Yet . . . upon entering school, the child is programmed for linear, sequential thinking to the exclusion of a more holistic, integrated innate process.

The result of this way of thinking has been an attempt to reduce all learning to that which can be measured. To accomplish this, we have created an elaborate system of testing based almost entirely on those learnings that can be demonstrated and quantified. In so doing we have reduced concepts like understand, know, appreciate, enjoy and believe, into measurable behaviors like write, recite, identify, list, compare and contrast. Since the only learning that can be accurately measured without ambiguity is recall, we have, implicitly if not explicitly, reached the conclusion that the measure of recall is a measure of learning. As a consequence, virtually the entire teaching/learning process is centered around the presentation, memorization and recall of facts.

Photo by Annie Hunt Heiman

Once these assumptions are accepted, it logically follows that learning can be made more efficient if enough time is spent on the task at hand. Thus, we have a current emphasis of *time on task*—all in the attempt to beef up test scores that are based primarily on the amount of material that can be quantified by a test.

New assumptions

The new assumptions about the nature of intelligence, thinking and learning stress that which is potential rather than that which is measurable. Acknowledging both the intuitive and the cognitive aspects of learning, these new assumptions recognize the fullness and richness of learning that can be only expressed through words like understand, appreciate, enjoy, know, and believe. Indeed, it is because of the multi-dimensionality of these ex-

periences that behaviorists reject them as unmeasurable. But in rejecting what these words represent, we are in danger of rejecting both the multi-dimensionality and the potentiality of human learning.

It seems evident that human learning is far more complex than the behaviorists recognized. Even with a virtually infinite list of observable and quantifiable behaviors, it is impossible to determine the exact extent to which a student "understands" the causes of the Civil War, "appreciates" a symphony that was studied in a music appreciation class, or "knows" how a cell functions. As such, these learnings cannot be fragmented and reduced to specific behaviors which can be measured. Whenever we attempt this, we ignore the reality that the whole is greater than the sum of its parts, and therefore, cannot be reduced to or comprehended from its parts.

Understandably, if we have to give grades, we must find ways to measure outcomes. As long as we recognize their limitation, namely that what we are measuring may be only a small part of what has been learned, behavioral objectives have an appropriate place in the evaluation process. However, their use should not extend to identifying what is to be taught and what learning outcomes are desirable. While the two functions of goal setting and evaluation are obviously related, to use behavioral objectives to identify learning outcomes is to let the tail wag the dog. The result is the worst sort of reductionism—reducing the full panoply of human learning to the drabness of what can be memorized and, therefore, measured.

What every teacher and parent wants most of all is for students to understand, appreciate, know, enjoy, and believe. When we acknowledge that this is the true goal of learning, then we are free to expand both the what and how of the teaching/learning process, opening the door to both intuitive and cognitive experiences that enable students to expand their own awareness and begin the process of exploring that untapped potential that lies within each of them.

Implicit in the empirical view of learning is the assumption that learning is objective. We now know without equivocation, that all learning is, at its most fundamental level, subjective in nature. Research by Anthony Gregorc and others makes this clear. While recognizing the individual nature of learning, their work suggests that there are four basic learning styles, or modes of learning.[11] Because all children do not learn the same way, these studies conclude that effective teaching must acknowledge and adapt to these differences. The next step is to acknowledge that because children learn in different ways, there is no standard test by which everyone's learning can be accurately and fairly measured.

We have reduced concepts like understand, know, appreciate, enjoy and believe, into measurable behaviors like write, recite, identify, list, compare and contrast.

The research related to whole-brain thinking reported above, also suggests that learning is deductive in nature. Because it is the context that endows anything with meaning, learning always starts with the context as a frame of reference within which the parts can be taught, understood or deduced.[12]

A study conducted by Even found that seventy-five percent of all adult learners have right brain preferences during the attention and arousal stages of the learning process. It further indicates that in these initial stages of learning the preferred learning mode is holistic, pictorial and broad-based rather than focusing on separate single concepts.[13] In other words, the first stage of the learning process is similar to the first stage of the problem solving or decision making process—a search for context.

If we acknowledge the importance of context in providing meaning, then it seems logical to conclude that all learning begins with context. As Neustadt and May in their study of political decision-making suggest, the first question is not, "What's the problem?" but rather, "What's the story?"[14]

This is in contrast with the inductive strategy of Cartesian thought which teaches that the first step in understanding things is to first reduce them to their smallest component parts. Based on this Cartesian assumption, facts have been taught as the building blocks of knowledge. As a consequence, almost our entire curriculum has been designed to be taught inductively. The implications of this anomaly alone, are staggering. The differences between inductive and deductive strategies and the implications of each will be discussed in greater detail in the treatment of the curriculum.

Summary. Our analogies and metaphors often provide significant insights to our thinking. The primary metaphor for the old paradigm, based as it is on Newtonian and Cartesian thinking, is the machine. Newton thought of the universe as a giant clock. When extended to the way we think and learn, this metaphor suggests that the mind functions like a giant computer. Thus, we logically conclude that just as a computer or any machine must be programmed before it can function, so students must be programmed by the teacher who is then perceived as the master programmer.

And just as the potential capacity of a computer can be quantified by an appropriate number of bytes, so the potential of a child to learn can be quantified by a mathematical score. The underlying assumption is that only that which can be quantified and measured empirically is real. As an extension of this manner of thinking, we organize our schools like factories and emphasize the necessity of treating each child the same, as though they were interchangeable cogs. Through all of this, we expect children to be efficient learners and to produce that which is measurable and quantifiable. It is indeed one of the great ironies of our time, that having designed computers that can perform the function of information storage and retrieval better than any human, we continue to emphasize in our teaching and testing, information storage and retrieval.

The metaphors of the new paradigm are organic. Just as some scientists are now referring to the earth as the largest

single, living organism we know, so an appropriate organic metaphor for children is a seed. Just as every acorn has within it the potential to be an oak tree, every child has the potential to be a genius. As Katharine Kersey suggests in the preface of her book, *Sensitive Parenting*, "They (children) come to us like a packet of flower seeds, with no pictures on the cover, and no guarantees. We don't know what they will look like, be like, act like, or have the potential to become." Pursuing this metaphor, she likens parents (and teachers) to a gardener whose job is to "give proper nourishment, love, attention, and caring, and to hope for the best. The gardener learns to be "tuned in" to the plant. . . . He knows that all plants are different, need varying amounts of care and attention, and grow at different rates of speed."[15]

Research is just beginning to explore the depths of human potential, in the areas of mind/brain and thinking/learning. Therefore, the evidence is not all in and many conclusions are tentative. However, there are two conclusions about which there is absolutely no doubt. The first is that many of the assumptions upon which education today is based are no longer valid. The second is that *each individual has an enormous untapped potential for thinking and learning which, at least at present, is beyond measurement.* If we are to adequately prepare children to live in the global information society of the twenty-first century, the first step is to acknowledge the paradigm shift that is occurring. Once this has taken place, we are ready to design the most creative strategies we can devise that will enable students to "tune into," explore and tap their unrealized potential for thinking, learning and creative problem solving. This then becomes the primary responsibility for teachers.

Teachers

The paradigm shift *vis-a-vis* teachers is directly related to the shift in assumptions concerning the nature of intelligence, thinking and learning. At its most fundamental level, it is a shift from the perception of the teacher as a technician to a recognition of the teacher as a professional.

The old paradigm. The national report, *A Nation At Risk*, recognizes that the teacher is not perceived as a professional when it states: "Individual teachers have little influence in such critical professional decisions as, for example, textbook selection." Before we can address the problem, we must explore the assumptions that underlie the current role of the teacher in the educational system.

Michael Bakalis, formerly Illinois Superintendent of Education, suggests that, like it or not, one of the major functions of schools in our society is custodial. The result is that the primary responsibility for most teachers is to be an effective caretaker of children, i.e., classroom manager. Responsibilities include such diverse elements as discipline, collecting lunch money, making announcements, keeping students busy with seat work, grading essays, entertaining the students and lecturing. Above all, the teacher must keep the students quiet lest the principal walk in unannounced., While an increased emphasis on "time on task" has, perhaps, increased the amount of time given to the curriculum, the focus is still primarily on management.

Once we move beyond the classroom management function, teaching is perceived as being virtually synonymous with lecturing. Mortimer Adler suggests that one of the problems facing education today is the belief that "good teaching is didactic." John Goodlad estimates that as much as eighty-five percent of classroom time is spent by the teacher talking to students.[16] Although we have known for a long time that listening is the poorest way to learn, we still tend to equate good teaching with an interesting and entertaining lecture. Implicit in this perception is the assumption that the best teachers are those who are the best purveyors of knowledge. Because they are perceived as the "font of wisdom" many teachers discourage questions for which they may not have the answer, maintaining tight control on what content is studied and how it is addressed. It is not difficult then, to recognize the truth in Carl Rogers' belief that we tend to equate presentation with learning.[17]

Though they are trained as professionals, teachers have little voice in selecting what they will teach and, except within narrow limits, how they will teach it. In the words of one teacher, Patricia Dombert:

> We affect none of the key elements in our working lives. For example, we have no control over class size or the length of the school day and class periods. We have almost no input into the form and content of report cards. We do not select our schedules, grade levels, or the buildings in which we teach. Indeed, we do not even control the time within our own classrooms, for we are slaves to the P.A., to notes from the nurse, from guidance, the librarian, the main office.[18]

Another fundamental assumption which is explicitly accepted throughout the educational system, is that teachers are primarily motivated by external rewards such as salary and career status. Most responses to the call for improvement of teaching have focused on these two issues. *Educational Leadership* devoted an entire issue to the topic, "Making Teaching More Rewarding."[19] Every major article discussed career ladders and salary scales. The single voice in the wilderness of external reward systems, was that of Patricia Dombert, the only classroom teacher to contribute to the issue. Her conclusion, which is reinforced by my own experience with teachers, is unequivocal. If given a choice, most teachers would prefer to

It is indeed one of the great ironies of our time, that having designed computers than can perform the function of information storage and retrieval better than any human, we continue to emphasize in our teaching and testing, information storage and retrieval.

participate in the major decisions which shape their professional lives, rather than be "bought off" by financial remuneration. While this does not negate efforts to upgrade teachers' salaries, it does suggest that intrinsic personal and professional satisfaction is more important than extrinsic rewards.

The new paradigm. The fundamental assumption of the new paradigm *vis-a-vis* teachers, is that the teacher is a professional. Someone has suggested that there are four qualities that characterize the professional: vision, training, responsibility and accountability. I have found, as has Patricia Dombert, that most teachers have a vision. Having entered the profession for what she calls a "love of subject and students," teachers share common ideals about what constitutes good teaching and effective learning. In my workshops, I find that teachers know what good teaching is and describe the "ideal" classroom without hesitation. They do have a vision, and their outstanding frustration is their perceived inability to make that vision a reality. As Dombert says so eloquently, "The paradox of education as a profession is that it attracts people with visions into a system designed to frustrate those visions."

A second quality of a professional is training. While I have some major criticisms of much that goes on and does not go on in teacher education programs, my experience suggests that most teachers have acquired the fundamental knowledge and skills requisite for being a professional. In fact, I have found that most of them have knowledge and skills that haven't been used yet. For example, in my workshops, teachers design curriculum units which are always more appropriate for their students than the textbooks which they use.

Responsibility goes hand in hand with ownership. In fact, one of the fundamental precepts of our capitalistic democracy is that ownership provides the best motivation for success. A recent poll indicates that the "dream job" for forty-seven percent of women and thirty-eight percent of men was to be head of their own businesses.[20] Professionally, ownership involves full participation in the decisions that influence one's work. Inherent in such participation is both the responsibility and accountability for implementing those decisions. Until teachers are allowed to assume the responsibilities of a professional, a genuinely professional system of accountability is not possible. Teachers resist merit pay plans because they know that in a system where their responsibilities are severely limited, good survival strategies are more often rewarded than are provocative teaching strategies.

Once we acknowledge a new set of assumptions regarding the innate capacities of students, we find a new role for the teacher emerging. From being a dispenser of information and knowledge, the teacher becomes a gardener whose responsibility is to nurture growing children so that the innate potential of each organism is allowed to blossom and bear fruit. Another provocative metaphor with which to describe the teacher's function is that of the whetstone. Just as a whetstone does not cut, but rather sharpens steel, so the teacher does not teach, but sharpens and hones the natural "edge" of the brain.

One currently popular response to the perceived need for improving teaching is "mentorship." In such programs, new teachers are placed under the supervision of more experienced teachers. While this idea has merit, I have found that one of the most productive ways to improve teaching is to provide time for teachers to think, plan, share ideas and write, with their grade level or subject area colleagues. Unfortunately, teaching is perceived as such an independent, isolated function, that few teachers expect, nor schools provide them with, time to work cooperatively with colleagues. One of the comments that I hear most often from teachers following a CONTEXTUAL THINKING workshop is how much they appreciated the opportunity to spend a weekend thinking, talking and writing curriculum units with colleagues. Unfortunately, after the workshop they return to a system which allows no time for such professional development.

Summary. I am convinced that teachers represent the greatest untapped resource in education today. For one thing, they have a vision that relates specifically to the teaching/learning process. Second, most of them are proficient in the pedagogical skills of classroom management and know their subject matter. In addition, they know and care for their students and recognize, better than most, what their true needs are. As one high school teacher said on the first day of a workshop, "I am so frustrated because I see so much potential sitting out in front of me going to waste. I don't know what to do about it." Like her, they are eager to be given the primary responsibility to do the job that is required. Once they are treated as professionals, they will be willing to be accountable as professionals.

However, they, too, are victims of an educational mindset that goes against what many of them intuitively know. They feel powerless when, in fact, they have far more power than they know. One of the interesting results of CONTEXTUAL THINKING workshops is the empowerment of teachers that takes place. By the end of the workshop, participants freely acknowledge that they have everything that is necessary to accomplish approximately ninety percent of what they always wanted to accomplish without additional permission, money or time.

What has happened to empower them? First, they have been exposed to a set of assumptions about themselves and students which reinforce their own intuitive sense of what they are about. Second, their professional competence has been enhanced as they re-design their curriculum so that it is relevant to the needs of their students and the realities of our global information society. The one thing that they desperately need on a continuing basis, is a support network that provides them with ideas and the encouragement to try these ideas. This leads us to the next arena, the administration.

Administration

At its most basic level, the shift in paradigm *vis-a-vis* the administration of our educational system is a shift from top-down management to bottom-up management. In a bottom-up school district, the major responsibility and accountability for decisions related to teaching and learning are in the hands of the classroom teacher.

The old paradigm. School administration, with few exceptions, is organized in a traditional, bureaucratic, hierarchical structure. The power is at the top. The school board and superintendent exert control and make

most of the decisions concerning organizational structure, personnel, budget, curriculum and classroom management. This model worked well when the stated purpose of education was to provide public education for the masses in a time when social change was relatively slow. It is questionable whether such a system is viable in a complex society where change and diversity are accentuated.

Yet, little has changed in the way our educational system is structured. Still very much a top-down organization, it is operated according to the traditional factory model. In spite of the current research related to organizational theory, and the impact of new management strategies in the private sector, that knowledge and experience has had little influence on how schools are organized and conducted. Although many superintendents are both conversant with and nominally supportive of this new approach to management, few seem ready to explore the implications of these theories for their own organizations.

The new paradigm. Stan Davis of Boston University calls for a new paradigm of management when he states that: "Just as farms were not appropriate models for factories, the factory organizational model is not an appropriate model for information age organizations."[21]

Schools, along with many other organizations, are in desperate need of new management models. Perhaps more than other organizations, schools should be dedicated to fulfill the organizational purpose set forth in an unpublished speech by Peter Drucker at the National College of Education. When we substitute the word "school" for "organization," we have one of the most challenging definitions of a school that I have ever seen.

> The (school) is a human, a social, indeed, a moral phenomenon. . . . The only meaningful purpose of (a school) as a social and human institution is to make the strengths of individuals productive and their weaknesses irrelevant.

One organizational model, designed for the express purpose described by Drucker, is particularly appropriate for schools. It is a systems model based on general systems theory. Described in detail in *How To Do More With Less: The Art of Systems Management,*[22] this model focuses on the two most controversial aspects of management, responsibility and accountability. The model is based on a philosophy and strategy which William Ophuls calls "macro-constraints and micro-freedoms."[23]

The essence of this model is that, beginning at the top, the school board establishes the macro-constraints within which the superintendent must function. These constraints are primarily four in number: goals, outcomes, timeframe and money. This means that the superintendent is expected to work toward goals established by the school board, and achieve the requisite outcomes within a given time frame and with the designated resources. Within these parameters, he is given the responsibility and freedom to function as a professional. In this model, the school board does not become involved in the decisions which are the responsibility of the superintendent. His accountability is based on his ability to provide the leadership required for everyone to function optimally within this framework.

At the next level, the superintendent establishes the macro-constraints within which each principal functions: again, goals, outcomes, time, and resources. Within these constraints, each principal assumes responsibility for educational leadership, management style and organizational structure within his or her school. Accountability is based on the principal's ability to create a productive learning environment. At this level, each principal identifies the macro-constraints within which classroom teachers will be held accountable. Within the broad constraints of district-wide goals, desired learning outcomes, time-frame and resources, teachers are allowed, and indeed encouraged, to decide on teaching methods, textbooks, curriculum structure and classroom management. Their accountability is based on their ability to function effectively as a professional within the identified constraints.

When carried to its logical conclusion, this strategy is applied by the teacher in the classroom. The teacher identifies the macro-constraints within which students can freely explore their own potential for thinking and learning. Students know the goals, expected outcomes and other constraints that may be appropriate at this level, such as classroom discipline. Within these constraints, students, in order to freely explore their individual potential for thinking and learning, are expected to assume primary responsibility for their own learning.

This is a bottom-up model. Responsibility and accountability are perceived as interdependent and are built into the system. Individuals at each level are given appropriate responsibility and challenged to creatively approach their tasks in a manner and style best suited to their interests, knowledge, skills and goals. Accountability at each level is based on the degree to which this responsibility is exercised. When applied in the classroom, this model places the primary responsibility for learning where it belongs—on the student. In such a classroom, each student is encouraged to develop the skills required to become a responsible, life long learner.

Summary. It is questionable whether or not significant educational reform can take place without the system as a whole changing. The chances of this occurring seem, at first glance, slim. As one observer commented, "Schools are among society's most entrenched and obdurate organizations when it comes to institutional change—rivaled only, perhaps, by correctional facilities."[24]

On the other hand, the most hopeful feature of public education in America is its decentralized nature. Individual superintendents who recognize that a major paradigm shift is in the making in education as elsewhere, have the opportunity and freedom to work independently for change in their schools. One difficulty which they face is that there are few organizational and management models which reflect the assumptions of the new paradigm. Since the reward system reinforces traditional rather than risk-taking behavior, the tendency is for superintendents and teachers alike to take whatever new ideas come along, and force them into the old structures. We forget that new wine requires new wineskins.

"Just as farms were not appropriate models for factories, the factory organization model is not an appropriate model for information age organizations."

While many administrators and teachers disagree with the current sentiment at the federal level for voucher plans, I think that the competition of the market place *in some form* may be the salvation of public schools. For example, competition within a school district could be encouraged within the macro-constraints of the systems model described above. The principal and teachers in each school would be encouraged to design creative educational programs which reflect their unique knowledge, skills and teaching styles. Such a plan would provide parents and students with a variety of options. The principal and teachers of each school would be responsible for implementing their program, and held accountable for its success. Fundamental to that success must be a curriculum that is integrated, interesting, provocative and relevant – in short, a curriculum that addresses both the opportunities and dangers of the global crises that are inherent in the "real" world described by physicist Fritjof Capra.

> Today we live in a globally interconnected world in which biological, psychological, social and environmental systems are all interdependent. To understand the world appropriately, we need an integrated perspective which Cartesian thinking simply does not offer.[25]

Curriculum

The paradigm shift *vis-a-vis* the curriculum is a shift from the fragmentation to the integration of thinking, teaching and learning. The present status of the curriculum can be best summarized by an analogy:

Getting an education is like putting together an ever-expanding jigsaw puzzle. Students spend years memorizing the shapes, colors and sizes of as many pieces as possible. They learn to collect and sort the pieces into appropriate piles, each of which has a label—math, science, history, art. Occasionally they may fit a few pieces together. However, because they seldom receive more than a few hints as to what the puzzle is all about, they have no frame of reference for understanding how the individual pieces fit together. Without some context to aid their understanding, the pieces which they have collected are essentially meaningless and, therefore, useless.

This fragmentation of learning is the direct result of the analytical, reductionist perspective of the old paradigm. What is ignored by this perspective is that *it is the picture of the puzzle that helps one make sense of the pieces.* Apart from the context provided by the picture, there is nothing intrinsically valuable about any single piece of a jigsaw puzzle by itself. I refer to this as the "peephole approach" to education.

Every child knows that the first step in putting together a jigsaw puzzle is to look at the picture *because it is the picture that tells you what to look for and how the pieces fit together.* The picture tells you whether the red piece is a part of a firetruck, a flower, a barn or something else entirely different. It is

this integrated, holistic, systemic, contextual perspective of the new paradigm that I call the "picture window" approach to education. It is this perspective which is crucial for achieving the educational mission set forth by the Carnegie Foundation for the Advancement of Teaching:[26]

THE GOAL OF COMMON LEARNING IS TO UNDERSTAND THE CONNECTEDNESS OF THINGS.

When referring to the curriculum, we are discussing two basic issues. One is the way the content is organized or structured, and the other is the nature of the content itself. What we shall see is that these two factors, structure and content, are inextricably linked together and reflect some fundamental assumptions about the relationship between information or data, and knowledge. Since together these shape the methodology of teaching and learning, it is crucial that we explore the implications of both the old and new assumptions upon the structure and content of the curriculum.

Curriculum structure. To discuss the way curriculum content is organized and structured is to talk about the relationship between information (the pieces of the puzzle) and knowledge (the picture). Traditionally in Western thought, the primary starting point for structuring knowledge has been to begin with the smallest self-evident parts (information), and proceed from these parts to incrementally construct the whole (knowledge). This inductive approach is based on the Cartesian assumption that the whole is equal to the sum of its parts and thus can be predicted and extrapolated from the parts. Based on this assumption, it is logical to conclude that the parts have intrinsic value *in and of themselves*, and that the primary purpose of education is to provide students with as many pieces of the jigsaw puzzle as possible. As a consequence, we teach facts as the building blocks of knowledge.

Almost without exception, our curriculum is organized inductively. For example, every biology textbook begins with a study of the cell and concludes with a study of the ecosystem. As every student who has taken an introductory biology course knows, what you try and remember are facts, i.e., the parts of a cell, the parts of a frog, the parts of a flower. Because these facts are perceived as the foundation upon which any later learning will be based, it is assumed that both the science major and the liberal arts student, who is only surveying the sciences, must accumulate the same building blocks as a starting point for understanding biology.

This fragmented perspective has shaped our entire educational system. It is reflected in the division of knowledge into academic disciplines, each of which continues to be divided into increasingly discrete units. These units are divided into discrete classes where discrete facts are presented to be recorded and memorized for recall in cumulative fashion. As a result, when a high school history teacher makes reference to something from science, the typical response is, "What has that got to do with history?"

Because it is explicitly taught in our schools, this fragmented perspective forms the conceptual framework for most adult thinking. For example, in a recent workshop, a group of middle managers of a multi-national corporation acknowledged that one of the most difficult problems they faced in their own corporation was the fragmented mindset that compartmentalized jobs and responsibilities so that no one—except *perhaps* the Chief Executive Officer—saw the entire picture. Because the way we think shapes the way we respond to the demands of our daily lives, we can only conclude that we are educating people to think in fragmented ways and thus, to live fragmented lives in an increasingly fragmented world. This fragmented thinking may be the most devastating legacy of the Cartesian perspective.

Courtesy of Mountain Open High School, Evergreen, CO — Photo by Tom Gregory

A holistic curriculum

There is a second starting point from which knowledge can be structured. The deductive approach is based on the assumption that "In order to understand anything we must have a sense of the fundamental connections which form the backdrop of all existence."[27] It begins with the whole which provides a context within which the parts, as they are learned, can be understood in relationship to each other and to the whole. From this perspective, it is clear that the whole is greater than the sum of its parts so that, without an understanding of the whole as a context to endow them with meaning, the parts are essentially worthless. As Professor I. K. Taimni puts it:

> A mass of unrelated and unconnected facts is a mere rubbish heap. Discover the underlying principle which connects those facts and it becomes valuable material which can be utilized in innumerable ways.[28]

This deductive strategy for organizing information follows what appears to be the natural mode of thinking and learning which always *starts with the context as a frame of reference within which the parts can be taught, understood or deduced.* Described earlier, this process seems to involve a movement from right hemisphere (context), to left hemisphere (content, *i.e.*, details), to the forebrain (conclusion, *i.e.*, evaluation and decision making). Thus, in the new paradigm, emphasis is given to context as a frame of reference for understanding content. Alvin Toffler recognized that this was one of the major characteristics of the new paradigm. He wrote: "We are moving from a . . . culture that studies things in isolation from one another to a . . . culture that emphasizes contexts, relationships and wholes."[29]

What should be clear is that the way knowledge is structured determines the nature of the content of what is studied. Hilda Taba provides us with a taxonomy of knowledge that helps us understand the relationship between structure and content.[30] She identifies four levels of knowledge:

THOUGHT SYSTEMS
CONCEPTS
BASIC IDEAS
FACTS

When this taxonomy is viewed inductively, facts, as the building blocks of knowledge, are the starting point of learning. When viewed deductively, the starting point is the thought system, *i.e.*, the "big picture." From this big picture, concepts, basic ideas, and facts which are relevant to the topic at hand can be deduced. If we compare the structure of knowledge with the structure of a house and think about building knowledge like we build a house, this difference in perspectives becomes clear.

THOUGHT SYSTEMS = BLUEPRINTS
CONCEPTS = FRAMING: JOISTS AND STUDS
BASIC IDEAS = WALLS AND ROOM DIVIDERS
FACTS = FURNITURE

The blueprint provides the big picture, the overview that shows how all of the parts fit together. The blueprint literally provides more knowledge with less information. One does not build a house without a blueprint. But, once one has seen the blueprint, one can deduce where the joists and studs belong. And, once the framing has taken shape, the walls and room dividers become evident. *Only then* does one select the furniture.

This analogy suggests that even inductive thinking assumes a blueprint or plan. One does not take a pile of bricks and, willy-nilly, begin to build. There is always at least a mental image or plan of what one wishes to build. In reality, the present emphasis on facts as the building blocks of knowledge, without some context to provide meaning is, at best, a spurious representation of genuine inductive thinking.

understanding, problem solving and decision making. It is this knowledge which enables one to turn facts into valuable knowledge which can be utilized in innumerable ways.

Taba's taxonomy provides us with an answer to our question. Students need to know the underlying principles and concepts which make up the structure of thought systems and which help us make sense out of the world. Because a concept is often worth a thousand facts, through an understanding of these fundamental concepts and principles students can literally "know more with less" information.

In a world where the amount of available information is estimated to double every five years, one of the most significant and controversial questions facing educators is the question: "What should all students learn? . . ."

Curriculum content. In a world where the amount of available information is estimated to double every five years, one of the most significant and controversial questions facing educators is the question: "What should all students learn?" If the response to this question is based on the Cartesian paradigm, they are caught in an almost intolerable double-bind. Forced to choose from the virtually infinite amount of facts and information, educators invariably select math and science and eliminate music, art and environmental education, *not because the latter are perceived as being unimportant, but because schools can't teach everything.* As long as curriculum content decisions are based on the old assumptions which highlight the importance of facts, educators will be forced to make either/or choices among a smorgasbord of subjects, each of which is rightly considered by someone to be of primary importance.

When the question of what all students need to know is addressed from the perspective of the new paradigm and its assumptions, one reaches a different conclusion. Students need to know the "big picture" as the context within which relevant facts can be selected, organized and used for

This is not new. Twenty-five years ago Jerome Bruner identified the need for teaching the structure of knowledge and insisted that students could be taught the structure of a subject, i.e., its fundamental concepts, in some form, at any age. His proposal of a spiral curriculum was based on such a structure.[31] Research has made it clear that when concepts are taught first, *as a structure for learning,* retention of detail is eighty percent higher than when facts are presented in the more traditional way.[32] On the other hand, when concepts are taught as additional facts to be memorized for recall rather than perceived as cognitive structures for understanding "the connectedness of things," their usefulness is severely limited.

In CONTEXTUAL THINKING workshops, teachers are provided with models and strategies for identifying and teaching structure as the context within which relevant facts can be learned. One high school social studies teacher designed a curriculum unit on the Great Depression that was organized around four interdependent concepts that are fundamental to social studies as a discipline: political, social, economic and ecological. After identifying additional sub-concepts that were

relevant to each of these four major concepts, he found that he had designed a basic structure based on twenty-five concepts which could be used to study any period in any society or culture. Once the students understood these basic concepts, they had the framework and tools with which to select, organize and analyse, compare, contrast or synthesize, the facts which were relevant to the particular social studies topic or issue that was being studied. One might presume that when students who were taught like this are ready to vote they will be better prepared to make mature decisions because they recognize and understand the interdependent nature of all political, social, economic and ecological systems. In short, they "understand the connectedness of things."

Summary. One thing can be said about the curriculum without danger of contradiction. If it is not inherently interesting, substantive, provocative, and relevant, effective learning will not occur. No amount of money, training, classroom management skills, organizational strategies, teaching methodologies or external reinforcements can lead to effective learning without a curriculum that stimulates the interest and captures the imagination of the students, and, not so incidentally, of the teachers. Many studies verify the fact that most students and many, if not most, teachers are bored, frustrated and often angry about having to "put in time" when nothing of significance takes place. On the other hand, when students and teachers are both genuinely interested in the subject matter, external factors take on secondary significance.

The key to designing a curriculum that meets this criterion is integration and context. Inherently, a curriculum that focuses on the learning of facts without a context to give them meaning, is neither interesting, substantive, provocative nor relevant. Most curricula are based on textbooks which, because they reflect the assumptions of the Cartesian paradigm, focus on facts. The irony is that while there seem to be few educators who really like the available textbooks, like the weather, they complain but do nothing to change it.

I believe that what is needed more than anything else is a curriculum that will stimulate the imagination of both students and teachers, and challenge them to think deeply and become profoundly involved in some of the significant issues in life. This is why we encourage teachers to design curriculum around "questions worth arguing about." Using CONTEXTUAL THINKING models and strategies, one private school re-designed its entire K-8 curriculum around the "question worth arguing about": WHAT DOES IT MEAN TO GROW UP IN A GLOBAL INFORMATION SOCIETY?[33] The curriculum for various age and grade levels was designed around such questions as HOW AM I A MEMBER OF MANY FAMILIES?(K-1); WHAT ARE THE PATTERNS THAT MAKE COMMUNITIES WORK?(2,3); HOW DO HUMANS AND CULTURES EVOLVE AND CHANGE?(4,5); and HOW DOES ONE LIVE RESPONSIBLY AS A MEMBER OF THE GLOBAL VILLAGE?(6,7,8). Each of these questions was explored from various perspectives – the humanities, the natural sciences, the social sciences, and, because it was a private school, the religious. Vertical articulation was based on ten fundamental concepts which spiraled through the entire curriculum.

. . . Forced to choose from the virtually infinite amount of facts and information, educators invariably select math and science and eliminate music, art and environmental education.

Conclusion

The traditional purpose of education in any culture has been to transmit to each succeeding generation the stored knowledge of that culture. In our nation of immigrants, the goal of mass public education was to build a common storehouse of meaning based on shared knowledge. Given this context, the assumptions that shaped our educational system were appropriate to its mission. Needless to say, that mission was highly successful.

But, almost without our knowing it, the primary mission of education has changed. Today, there is common agreement that the mission of education is to provide students with the knowledge and skills required for "learning how to learn." What has not been recognized is that this new mission requires both a new content and a new process for education. And because content and process are so interdependently woven together, they cannot be addressed in the former, fragmented, piecemeal fashion. In short, what is needed is a new curriculum and a new teaching/learning/managing methodology based on a new set of assumptions about human potential. Instead, what we have done in the name of educational reform, has been to take a few exciting new programs based on a new set of assumptions and force them into the old mold. The result is that the new programs are either watered down or soon dropped because they don't work. It's the reform movement of the 1960's all over again. We keep trying to pour our wine into old wineskins.

The first step in addressing the new mission is to acknowledge the emergence of a new paradigm for education. Contrary to much that has been written about the inadequate preparation of teachers, my experience with thousands of teachers suggests that most of them are open to new ideas and ready for substantive change. For the most part, they have the training, experience, qualifications and desire to design and teach a curriculum that will address the new mission of education. They require two things. The first is administrative leadership and support structures that not only recognize the need for change, but encourage the teachers to assume both responsibility and accountability for what happens in the classroom.

Second, they require integrated, holistic, contextual models and strategies with which to turn their present curriculum into one that is integrated, interesting, substantive, provocative and relevant to the real world described above. As a teacher at one of our state's most prestigious high

schools said to me, "Everyone out here is talking about curriculum integration but no one knows how to do it."

A simple strategy for change involves four steps. 1) Strong initiative by the superintendent and a willingness to provide the management and support structures that are required. 2) The recognition that the key to quality teaching and learning is the teacher, and that ownership is the best motivator for professional development. 3) Providing the training required for teachers to design a curriculum that is integrated, interesting, substantive, provocative and relevant. 4) Keeping the focus at the individual building level.[34] The cost is low and the potential impact is great.

A major paradigm shift is taking place. The chances are that by the year 2000 we will have a vastly different system for educating our children. If this is to occur, however, we must explore both the old and the new assumptions relating to every facet of the educational process. Only then can we determine those which are most appropriate to the needs of young people who will spend most of their lives in the twenty-first century.

Almost without our knowing it, the primary mission of education has changed. . . . What has not been recognized is that this new mission requires both a new content and a new process for education.

Notes

1. Howard Gardner, *Frames of Mind* (New York: Basic Books, 1984).
2. Benjamin Bloom, "The Search for Methods of Group Instruction As Effective As One-To-One Tutoring," *Educational Leadership*, May 1984.
3. Richard Rosenthal and Lenore Jacobson, *Pygmalion in the Classroom: Expectations and Pupils' Intellectual Development* (Irvington Press, 1986).
4. Leslie A. Hart, *Human Brain and Human Learning* (New York: Longman, 1983).
5. David Loye, *The Sphinx and the Rainbow* (Boulder: Shambhala, 1983).
6. Hart, *Human Brain*.
7. David Perkins, "Creativity By Design," *Educational Leadership*, September, 1984.
8. Niles Howard, Untitled article. *Leading Edge Bulletin*, Sept. 28, 1981.
9. Robert F. Mager, *Preparing Instructional Objectives* (Palo Alto: Fearson Publishers, 1962).
10. Carl Rogers, "The Facilitation of Significant Learning," *Instruction–Some Contemporary Viewpoints*, edited by Laurence Siegel (New York: Chandler Publishing Company, 1967).
11. Anthony Gregorc, *Style Delineator* (Maynard, MA: Gabriel Systems, Inc., 1982).
12. Edward T. Clark, Jr., "Making A Difference" Unpublished manuscript, 1985.
13. Mary Jane Even, "The Functions of Brain Lateralization in the Process of Adult Learning." Unpublished manuscript presented to the National Conference on Research in Adult and Continuing Education, 1981.
14. Richard Neustadt and Ernest May, *Thinking In Time: The Uses of History for Decision-Makers* (New York: The Free Press, 1986).
15. Katharine Kersey, *Sensitive Parenting* (Washington: Acropolis Books, Ltd., 1983).
16. John Goodlad, *A Place Called School* (New York: McGraw Hill Books, 1984).
17. Rogers, "The Facilitation of Significant Learning."
18. Patricia Dombert, "The Vision of an Insider: A Practitioner's View" *Educational Leadership*, November, 1985.
19. *Educational Leadership*, November, 1985.
20. Kenneth E. John, "Dream Jobs," *The Washington Post Weekly Edition*, June 30, 1986.
21. Stanley M. Davis, "The Case of the Missing Management Model," *The Review*, January/February 1982.
22. Edward T. Clark, Jr., "How To Do More With Less: The Art of Systems Management." Unpublished manuscript, 1982.
23. William Ophuls, *Ecology and Politics of Scarcity* (San Francisco: W. H. Freeman, 1977).
24. Kenneth A. Sirotnik, "Let's Examine The Profession, Not The Teachers," *Educational Leadership*, November 1985.
25. Fritjof Capra, *The Turning Point* (New York, Bantam Books, 1982).
26. Ernest Boyer and Arthur Levine, *A Quest For Common Learning* (Washington, DC: The Carnegie Foundation for the Advancement of Teaching, (n.d.)).
27. Jonas Salk, *Anatomy of Reality* (New York: Columbia University Press, 1983).
28. I. K. Taimni, *Man, God and the Universe* (Wheaton: Theosophical Publishing House, 1969).
29. Alvin Toffler, *The Third Wave* (New York: William Morrow & Co., 1980).
30. Hilda Taba, *Curriculum Development: Theory and Practice* (New York: Harcourt, Brace and World, Inc., 1982).
31. Jerome Bruner, *The Process of Education* (New York: Vintage Books, 1960).
32. Laine I. Gurley, "Use of Gowin's Vee and Concept Mapping Strategy To Teach Responsibility for Learning in High School Biological Sciences." Ph.D. Thesis, Cornell University, 1982.
33. "What Does It Mean To Grow Up In A Global Information Society?" Statement of Curriculum, Beaver Dam, WI, Unified Catholic Parish School, 1987.
34. Edward T. Clark, Jr., "Making A Difference," Unpublished manuscript, 1985.

Peace is the most urgent need of this age, and we agree with this next author that the pursuit of peace should be at the heart of holistic education. We also agree that this essay is only a "beginning exploration"; it raises a number of vitally important questions that need to be addressed further:

Can the author's ecological definition of peace make sense to a culture that is fundamentally competitive and materialistic? What political and moral issues are involved in seeking a "citizenry bound by . . . shared beliefs"—even beliefs as seemingly universal as "truth," "non-violence," and "hope"? Also, we invite further discussion of the educational techniques suggested here, as well as issues related to the mass media. Please send us your thoughts.

Peace Education for Young Children—A Beginning

by Donna Leveridge

At our school we feel that a holistic education should have at its heart a program designed to convey a sense of peace and an awareness of peace issues to students, teachers, and parents. This is a beginning exploration of the meaning of peace and peace education as these concepts relate to the education of young children. We have found it very helpful to keep the elements discussed below in mind in our ongoing search for appropriate materials and activities for peace education. This type of education is an integral part of our program.

As we review our existing program in general, and when we incorporate new elements, we find it especially important to look at everything we are doing from the perspective of understanding what values are being promoted. Are these the values that we hope to teach our children? Are our actions consistent with our words? This type of analysis can be very useful for concerned parents as well as for teachers.

Are we preaching about being kind and respectful of others while we subtly put down the children through lack of true respect? Can we see our relationship with them as one between persons of very different needs and abilities but who are ultimately due equal respect and consideration? Do we expect children to be calm and quiet in our classrooms yet raise our voices to get their attention or compliance? Do we speak of cooperation while we actually foster competition? Do we allow and encourage children to think independently and act responsibly while fostering their own sense of fairness—or do we constantly tell them what to do and subvert the development of their sense of personal power and their self-discipline? These are but a few of the many questions we can ask ourselves.

Educators can teach for peace at the personal, interpersonal, and international levels by creating a climate of respect, caring, and mutual responsibility.

Donna Leveridge is the director of Children's House (New Childhood Learning Center, Inc.) a private non-profit Montessori-oriented school in Bandon, Oregon. She holds a B.A. degree in sociology from New York University (1970) and a diploma from St. Nicholas Training Center (1976) recognizing her as a Montessori Teacher for children aged 2-1/2 to 7 years.

Another helpful approach in our program planning and implementation has been to visualize what it is we are trying to achieve in ourselves and with our children. Imagining this vision as the new reality can help facilitate its manifestation.

We focus on the positive as much as possible (while remaining honest about the "real world"). For example, with young children especially, peace rather than war should be the focus. And sharing information about how various people throughout history and in our own times have worked for peace and justice can be reassuring, inspiring and empowering.

Our goals are high and though we may not always reach them, we believe that by working toward the vision we are bettering ourselves and our surroundings.

Lighting candles for International Peace Day in a Montessori elementary class. *Northwoods Montessori Center, Atlanta*

Peace—a state of harmony

In a broad sense, peace can be seen as a state of harmony existing among all people and between humankind and the "natural world." We recognize that humankind must live within ecological principles in order to live truly peacefully. Environmental domination brings destruction of many life forms, habitat and natural "resources" and all too often leads to domination of human inhabitants as well. Therefore, an education for peace should be designed to promote learning to live in harmony with the Earth and all of its inhabitants.

Peace is understood to mean not just the absence of war, but the absence of war preparations as well and, as important, it implies justice and freedom from fear or coercion. So an effective peace education (especially as it progresses through the years) would entail learning how to help others (including those in power) operate within these life-fostering principles, too.

Peace education should promote:

Awareness—sensitivity, openness, a realization of the beauty and the problems in our world. As children develop they naturally move from a necessarily self-centered awareness to being more other-directed. Parents, and teachers to a lesser degree, obviously have a great deal of influence on what form this interest takes. Through guidance they can help the young ones learn about what is going on around them and empathy (not sympathy) can be fostered.

Knowledge—may come from parents, teachers, personal experiences, research, etc. Sound knowledge of "what is" must serve as the basis for creating what might be. As we all age and mature, our knowledge hopefully will broaden and deepen. Discussions, activities, etc. must be carefully chosen and age-appropriate in order to be effective and not confusing or frightening. This takes a great deal of sensitivity and knowledge of where the individual children "are at" as well as a good knowledge of various approaches and activities. It is important to match the most suitable experiences to the particular children we are working with at any given time.

Values—such as truth, trying to do "what's right," appreciation of peace, sharing love, non-violence, and joy plus a sense of justice, respect (for oneself, others, and the natural world), caring, hope, etc. The teaching of values is inevitable in our lessons and in our interactions with the children in school. Values permeate nearly everything we say and do. It is advisable when working with children coming from varied sub-cultures and home environments to emphasize the many common values which unite us and are expressed by a broad spectrum of cultures. To quote Arthur J. Kropp explaining the importance of values education in American schools in his preface to *Values, Pluralism, and Public Education, a National Conference*: "our survival as a democracy depends on a citizenry bound by such shared beliefs and active on behalf of those beliefs."

Responsibility—for one's own actions and for helping the world be a better place. When the majority of people act from a strong sense of responsibility, a conscientious minority doesn't have to expend so much precious time and energy trying to make up for others' failings. Attitudes for living responsibly in the community, like most attitudes, are most easily formed in the early years.

Skills—ability to act effectively in order to accomplish what needs to be done.

Each individual has differing aptitudes and skills depending on his or her age, physical and mental characteristics, etc. These can be enhanced through encouragement and appropriate education.

Spiritual fulfillment—not connected to any particular religion. This fulfillment can come from a sense of knowing who we are as individual humans and understanding our place in the universal order of things. It engenders a feeling sometimes referred to as "shalom"—which may be described as a sense of wholeness, peace, justice, unity, community, well-being. Spiritual fulfillment leads to a good self-image and feeling of empowerment. And it serves as a sound basis for other growth.

Some considerations for early peace education

The peace we seek for ourselves and others is on three main levels: personal, interpersonal, and international. The following are samples of some important educational considerations and may serve as objectives for a well rounded peace-oriented curriculum. Most of these areas are interrelated.

Personal peace—includes development of: Sense of security, high self-esteem, body awareness, health, feeling of "wholeness," creativity, aesthetics, problem-solving skills, self-help skills, development of the will, empowerment, imagination, expression of feelings, curiosity, sense of wonder, reverence for all life, spiritual fulfillment, joy, relaxation, "centeredness," serenity, commitment to one's ideals, courage, avoidance of greed.

Interpersonal peace—includes learning: Communication skills, co-operation, appreciation of differences, respect for all, sense of community, conflict resolution, sharing, expressing love, having fun with others, mutual encouragement, sense of justice, and compassion, also playing non-violent and cooperative games.

International (world) peace—includes: Study of geography, and history, study of the "races of man," knowledge and appreciation of other cultures, global awareness and the realization that we are all interconnected on so many levels, an understanding of the fundamental human needs and how they may be met, a feeling for human rights, communication skills, creative thinking, beginning understanding of the politics of power, greed, national and religious zealotry, etc., learning about world hunger, learning to live simply (including a basic "appropriate technology readiness"), learning simple political action strategies, sharing vision, willingness to educate others, and, so important—maintaining hope.

Also related to all these levels of peace and acting as a great obstacle in our peace education efforts, are the problems often associated with television viewing and mass media consumerism (particularly of war and violence-oriented toys). We are all aware of the rampant violence and apparently growing militarism in both adults' and children's programming. Also very damaging, especially for the young child, is the TV viewing itself. This issue has been discussed at length in several good articles and books (see references). Learning how to avoid being manipulated by these powerful influences is a real challenge for parents and educators as we attempt to guide our young ones toward a more peaceful future.

An education for peace should be designed to promote learning to live in harmony with the Earth and all of its inhabitants.

These aspects of peace education for young children discussed so far are but a starting point for designing a dynamic, multi-faceted curriculum to meet the needs of teachers and students in the early childhood classroom. They are serving as a foundation for further study and I invite comments and ideas from interested parents and teachers of young children as well as from peace activists and other educators.

Peace Education for Young Children References and Further Reading

Bell, John, ed., *Children of War—The Family Newsletter*, Religious Task Force, 366 Marsh St., Belmont, MA 02178.

Carlsson-Paige, Nancy and Levin, Diane E., *The War Play Dilemma: Balancing Needs and Values in the Early Childhood Classroom*, Teachers College Press, Columbia University, New York, 1987.

Edwards, Carolyn Pope with Patricia G. Ramsey, *Promoting Social and Moral Development in Young Children: Creative Approaches for the Classroom*, Teacher's College Press, N.Y., 1986.

Englehardt, Tom, "Saturday Morning Fever: The Hard Sell Takeover of Kids TV," *Mother Jones*, September, 1986, p. 39.

Fellowship of Reconciliation, *Sharing Space*, Newsletter of the Children's Creative Response to Conflict Program (CCRC), Box 271, Nyack, NY 10960.

Galante, Dianna, "Human Values: Education for Your Children," *The Constructive Triangle*, (American Montessori Society Magazine), Vol. XIII, No. 2, Spring, 1986.

Greiner, Rosmarie, *Peace Education: A Bibliography Focusing on Young Children*, Resource Center for Non Violence, 515 Broadway, Santa Cruz, CA 95060, 1986. ($4.00)

Judson, Stephanie, ed., *A Manual on Nonviolence and Children*, New Society Publishers, Philadelphia, 1977, 1984.

LaFarge, Phyllis, *The Strangelove Legacy: Children, Parents, and Teachers in the Nuclear Age*, Harper and Row, N.Y., 1987.

Larson, Jeanne and Micheels-Cyrus, Madge, eds., *Seeds of Peace: A Catalogue of Quotations*, New Society Publishers, P. O. Box 582, Santa Cruz, CA 95061, 1987.

Leveridge, Donna, "A Case for Censorship: Television and the Young Child," article submitted to the *Montessori World Journal*, P.O. Box 3808, San Luis Obispo, CA 93403.

Mander, Jerry, *Four Arguments for the Elimination of Television*, N.Y., Morrow Quill Paperbacks, c. 1977,78.

Montessori, Maria, *Education for a New World*, (India, 1946), from American Montessori Society, 150 Fifth Avenue, N.Y., N.Y. 10011.

Montessori, Maria, *Peace and Education*, Kalakshetra Publications, Thiruvanmiyur, Madras 41, India.

Peachey, J. Lorne, *How To Teach Peace to Children*, Herald Press, Scottdale, Pa., 1981.

People For The American Way, *Values, Pluralism, and Public Education—A National Conference*, The National Press Club, Washington, D.C., April 3, 1987.

Thrush, Ursula, "Education as Peace," paper submitted to the Erkinder Study Group by Ursula Thrush, 20 Woodside Ave., San Francisco.

Winn, Marie, *The Plug-In Drug: Television, Children, and the Family*, N.Y., The Viking Press, 1977.

Humanistic Education: Exploring the Edge

by Jerome S. Allender and Donna Sclarow Allender

Our experiences on a recent visit to the Soviet Union have triggered new thoughts about humanistic education. We began to recall other vicarious and personal incongruous examples of humanistic education. We remembered our feelings in the 1960's the first time we read about Summerhill, a small residential school in rural England.[1] Just recently we were stunned and charmed by *Totto-chan*, a book about a Summerhill-like school that existed in Tokyo in the period before World War II.[2] Our own experiences with humanistic education in Japan a few years ago, and in a Thai open school a few years before that also came to mind. Reflecting on this spectrum of cross-cultural education, we noticed some telling differences within it and with our experiences as American humanistic teachers. Naturally, there are cultural differences, but there seems to be something more. We found ourselves wondering about the meaning of humanistic education. What is it really?

In general, we've not been satisfied with the occasional attempt to produce a neat and tidy definition. The 1987-88 National Board of the Association for Humanistic Education (AHE), under the leadership of board member Mary Blankenship, is engaged in writing an acceptable statement of the basic tenets of humanistic education. The outline includes four focuses: the individual, the planet, the learning environment, and the future. A few years ago, the National Coalition for Democracy in Education, with helpful leadership from Howard Kirschenbaum, published a flyer entitled "What Humanistic Education Is and Is Not." One of the major aims was to clarify for the public how ultra-conservative accusations about the dangers to society were unfounded. Arthur Combs, who had a significant influence on the formation of AHE, succinctly outlined the parameters in an article in *Phi Delta Kappan*.[3] He related them to humanity's pressing problems, the inner life of students, and learning as an affective process. All of these definitions are helpful, but there is an arbitrariness about them that doesn't capture the spirit of their endeavors—each one different from the other as it reflects the point of view of the author. Over the last ten years, the *Journal of Humanistic Education*, appropriately, has voiced a cacophony of opinions. The article "Affective Education" in the *Encyclopedia of Educational Research* distinguishes a dozen viewpoints that might be identified as humanistic education.[4]

We have shied away from offering yet another better mouse-

Looking at a variety of schools in different cultures, it becomes evident that the meaning and goals of humanistic education depend on its social and cultural context. Ultimately, "humanistic education" means exploring possibilities for growth at whatever point a society defines its experiential edges.

Jerome S. Allender is professor of education at Temple University in the Psychoeducational Processes Program. He coordinates the initial undergraduate teacher training course and teaches seminars in humanistic education and research, mental imagery, and the nuclear threat. Co-editor of Real Learning: A Sourcebook for Teachers, *his writings have appeared in the* Journal of Humanistic Psychology, *the* Journal of Humanistic Education, *the* Confluent Education Journal, *the* Review of Educational Research, *and the* Encyclopedia of Educational Research.

He is past president of the Association for Humanistic Education and a member of the second and fourth AHP delegations to the Soviet Union. He is most pleased when he is making some contribution toward a more humanistic world, and skiing with his family.

Donna Allender is co-founder and Educational Coordinator of Project Learn School in Philadelphia. She has had more than twenty-five years of experience in teaching, curriculum development, school organization, and educational consulting worldwide. She was a member of the fourth AHP delegation to the Soviet Union, and the coordinator of a joint US/Soviet educational seminar in Moscow. She is a longtime member of the Association for Humanistic Education, and an active member of Educators for Social Responsibility.

trap and instead have simply described in a series of letters to each other the work we do in Philadelphia at Temple University and the Project Learn School. Oddly, the original letters were published in the Japanese journal, *Seito Shido,* but they were later republished in English in the *Confluent Education Journal*.[5] We covered effective learning environments, cognitive and affective learning, group processes, and issues of freedom and limits—all from the point of view of theory *and* practice. Many influences are evident. The contributions of Dewey, Maslow, and Rogers stand out, as well as the ferment of the 1960's and the plethora of literature that it produced.[6] Brown's concept of confluent education, and its underlying Gestalt theory, were particularly influential and helpful.[7] Today, still, two writers who were part of that early influence, Carl Rogers and Herb Kohl, have given us up-to-date versions of practical applications of humanistic education.[8] Today we would also focus on exploration of the untapped powers of human learning that are revealed by the literature on how the human mind functions.[9]

There are persistent and common themes in this literature that can be used to create a picture of humanistic education. There is concern for individual needs and concern for person-to-person connectedness that are meant to come before stressing achievement. Rogers' emphasis on realness, acceptance, and empathy is central. The need for balancing affective and cognitive learning is recognized. Without losing sight of this balance, the critical importance of intellectual challenge has finally come to light. Somewhat less salient, but present, is an understanding of the need to expand the powers of the human brain through such avenues as mental imagery techniques.

The problem of definition is not apparent when we are working within our own context. There are many good ideas to draw upon, and our students have shared their appreciation for our innovative efforts. The picture changes when we attempt to put our work in perspective. Cremin, in his classic book *The Transformation of the School,* describes how many achievements of progressive education were incorporated into the mainstream of educational practice and are no longer identified as progressive.[10] Ironically, or maybe quite logically, these changes in American education were finally in place about the time, the middle 1950's, that the Progressive Education Association folded. It's easy to see that what once was called progressive can eventually become traditional, and it is likely that a definition of humanistic education will not remain static either.

We want to express our appreciation to the many people who were an integral part of the projects we describe here. Special thanks to the Southeast Asia travel team, our hosts in Japan, and the members of the Soviet planning team, in particular, Fran Macy. We also appreciate the generous support of the Temple University Research and Study Leave Committee and the Project Learn School Community. One last thank you to Gene Stivers who thought to bring us the book *Totto-chan* from Japan.

realize that *the meaning of humanistic education is contextual.* Our thinking about innovative schools in other cultures has helped to make the picture clearer.

England

Neill's *Summerhill* provided us with a vivid vicarious experience. At the time, together with so many other educators, we saw in Summerhill the answer to the big problems of education. Here was a school, although small, that truly strived to give equality to students, teachers, and administrators. In weekly town meetings, everyone had one equal vote—from the youngest child to the oldest adult. "Ridiculous," some thought, and yet the school had already existed for forty years. Students only came to class if and when they wanted. It didn't matter how they were taught, said Neill, because by choosing to learn, they were highly motivated, ready, and eager.

There is concern for individual needs and concern for person-to-person connectedness that are meant to come before stressing achievement.

Teachers do not have to identify themselves as humanistic educators to apply the variety of possibilities that others have found useful and helpful, but the question persists for us. *The Lives of Children: The Story of the First Street School* is a good example of why.[11] To our knowledge, this small school of twenty-three children existed for only a few years in the middle 1960's. When we went to visit it in the early 1970's, it was already out of business. As one of the initial experimental free schools, its educational philosophy was aimed at maximizing freedom for growth and learning, and it served to provide an alternative for repressive conditions that its children had experienced in other schools at the time. The mark of the First Street School was *energy.* Teachers and students were involved in a high energy system that gave nearly everyone a new spark for teaching and learning. Its philosophy was incomplete when compared with our current attempts to define humanistic education, but the school felt right in its place and in its time. We are slowly coming to

The message most everyone sees in the description of the school is freedom. It was a response to methods of upbringing that created the repressed child. Even now, most of our students still see this same message in Neill's philosophy of education. Upon analysis, though, it is not difficult to understand that it was a reciprocal structure of relationships that made Summerhill work. The structure was largely carried by Neill's charisma, but it had strong roots in Freudian psychology and in a wonderful commonsense. Lots of time was taken to help youngsters work through their problems, and there was a keen ability to anticipate students' needs, often before they were expressed. Achievement clearly took second place to personal growth, and because Summerhill was a residential program, there were many opportunities for the development of a strong community.

Our feeling is that the underlying foundation was *trust.* Neill was able to see tremendous potential in each child. He conveyed this belief in his words

and actions. The children felt his trust and responded sufficiently in kind—enough to make the program viable and exciting. Neill's attitude made it possible to work through the many difficult problems that were constantly occurring.

In some important ways, Summerhill was not a humanistic school. "With Freud as its grandfather?," Maslow and Rogers, whose theories developed in opposition to Freudian psychology, would wonder. And it certainly doesn't seem practical. Yet, it gave birth to important elements of our humanistic thinking. We think it is the climate of trust that is central.

Japan I (Tokyo)

Discovering that there was also a "Summerhill" in Japan in the 1930's was quite a surprise. Its headmaster, Mr. Kobayashi, was not a writer, nor did he want publicity, so it took a long time for the story of Tomoe to reach us. One of his very appreciative young students, Tetsuko Kuroyanagi, is now a famous television personality in Japan. In his honor and in his memory, she has written a book about the school—partly from an adult and partly from a child's view. In its original Japanese, it has sold millions of copies, and it is now available in English translation. The title, *Totto-chan: The Little Girl at the Window* includes Kuroyanagi's childhood nickname and the Japanese expression "that referred to people being 'over by the window,' meaning they were on the fringe or out in the cold."[12] Totto-chan's mother had found her way to Tomoe because her daughter had been expelled from first grade. The book is a charming account of a "free school," Japanese style.

Actually, Tomoe differed greatly from Summerhill. It is curious that Neill had acquired two old railway cars in which his students were permitted to bash about and that Mr. Kobayashi had actually set up his school in six such abandoned coaches. But this is where the similarity mostly ends. Mr. Kobayashi was much more focused on providing exciting educational alternatives for his students as the way to help them deal with their repressed nature. And for him, student achievements were very important. He believed that they built self-esteem.

At Tomoe, the teachers were encouraged to use innovative teaching methods. Mr. Kobayashi had spent many years studying the art of teaching in Japan and throughout Europe. He was particularly skilled in music, and he brought to the school the methods, known as eurythmics, of the Swiss teacher and composer, Emile Jaques-Dalcroze. Rhythm was important and so were the lessons of nature in general. These concepts affected the teachers' approach to the curriculum as a whole. Mr. Kobayashi did not have a preconceived notion of success, but he did want his students to determine goals for themselves. He insisted that their achievements be ones for which they would feel inner pride. From intuitive knowledge, he and his teachers found ways to challenge each student in personal, growthful ways.

Reading *Totto-chan*, we feel the school's energy and we sense the great trust that exists between the teachers and the students, but somehow they do not seem to be the key. The significance of Japanese culture is not lost at Tomoe, and we see the spirit of the school carried in an atmosphere of *mutual respect*. Integral to Japanese culture, yet expressed in such an open way, this is how the teachers and the students create an environment for themselves that facilitates a high quality of teaching and learning. Most of all, one can feel the deep respect that Mr. Kobayashi has for each of his students.

Japan II (Yokohama, Kyoto, Kobe)

We ourselves have visited Japan on two occasions and have spent time working with Japanese teachers and students. During our last visit in 1983, we met with members of the Ja Association for Humanistic Ed (JAHE), facilitated a teacher ed workshop, and taught elem school students English lesso part of a cross-cultural study of imagery techniques. At the tir had not yet read *Totto-chan*, and not visit any of today's Ja humanistic schools. In fact, if were any, none was notable eno be brought to our attention in ou with JAHE members. Consisten the popularity of *Totto-chan*, ho there was great interest in hum education.

Professor Ito from the Departm Humanistic Education at Yok National University is a major so energy for the humanistic edu movement in Japan. Under his l ship, the University sponsored t ternational Meeting on Con Education in 1982. For our vi

Donna and Jerry Allender (front row center) with Japanese colleag

organized a brief afternoon confe for us and twenty JAHE men There was an excellent interchar ideas as we discussed our tho about humanistic education an work we do in our respective cour Certainly there was evidence of th that respect plays for them in edu that we subsequently noted in *chan*, but it was not a major featu our discussions. Clearly, the mo day Japanese educators with who spoke had a high regard for trad but they were now looking for possibilities that might be built upo old. It was as if they were searchi respectable, new traditions that

A workshop on teacher-student relations, Japan

be used to modernize and improve the quality of education in Japan. What was striking was their *openness and excitement about new ideas.*

We had also been invited to give a teacher education workshop at the Kyoto University of Education. In a day-long meeting, we asked teachers-in-training and college professors, ten people in all, to participate in an experiential presentation on teacher-student interaction and the use of mental imagery techniques for classroom teaching. There had been warnings that the norms of Japanese culture would interfere with our usual highly interactive workshop designs. At one point, quite unsure of ourselves, the group was asked to form pairs and to spend four or five minutes each telling positive traits about themselves. Such bragging is contrary to normal polite behavior. Maybe it is because it is also impolite not to follow teachers' instructions that they, timidly at first, but finally, energetically engaged in this activity. What followed was a series of activities that emphasized and demonstrated the power of a here-and-now focus for teacher-student relationships. Photographs of the workshop reveal the same kind of intense interactions that we find in our work with Americans. The participants were not members of JAHE, yet it was clear from the concluding discussions and from the feedback that they were also excited about the new possibilities that had been opened up for them.

For us the most fascinating part of this visit to Japan was the opportunity to teach elementary school children in the area around Kobe. In all, we worked with sixty-nine children in two schools in six different classrooms over a period of a week. With the help of our colleague and translator, Yoshia Kurato, we were able to make arrangements to collect data on the practical usefulness of mental imagery techniques that we had designed. Our students for the week, who had had very little if any experience with humanistic approaches to teaching, were clearly delighted with the exercises we used for teaching them English lessons: writing with their eyes closed, learning words by their shape, turning meanings into pictures, associating new words with the feeling of textures, guided fantasies, and others. Their teachers assured us of the students' progress, and they seemed to have gained some new tools for learning as well. Even with the burden of translation, it was possible to establish the magical rapport that sometimes comes in teaching. The children had been as open to us as had the adults with whom we had worked.

In these three instances, the highlights of this trip to Japan, we see another kind of humanistic education. It was not so much the definition that our traveling road show conveyed but the common response of each audience. For the Japanese teachers and students, their adventure came by virtue of their openness to what we offered. We suspect that humanistic education in Japan today is developing along this dimension.

Thailand

Ten years earlier, on our first trip to the Far East, we had the opportunity to spend a week at an open school in a rural northeastern part of Thailand. With a team of six, including a photographer and a translator, we were visiting schools in Southeast Asia. Contacts at Chulalongkorn University in Bangkok encouraged us to include this school and gave us a letter of introduction. Connected with Khon Khaen University, the school was directed by the head of the Department of Education, Dean Saisuree Chutikul. She had been educated at the University of Indiana during the 1960's and upon returning home had managed to set up a model open school in Khon Khaen.

If that seems strange and unusual, you can begin to imagine how the Thais felt. As in Japan, tradition is very important in Thailand. Thai schools, although without ancient historical roots, have always looked like other schools everywhere in the world: neat rows of desk-chairs facing the teacher's desk in a rectangular room with little space to spare. Here in Khon Khaen was a beautiful campus with each class located in its own separate building. Covered walkways connected the classroom buildings with each other to form an indoor/outdoor school. There was a variety of spaces within each building including, of course a large classroom space. But the desk-chairs and teachers' desks were absent. Tables, benches, corners, walls, and spaces on the floor offered many different activity centers. There was movement from large-group to small-group learning and sometimes the instruction was highly individualized.

We don't mean to imply that everything happened smoothly. The Thai teachers indicated to us in taped interviews that they had their share of difficulties making this new American model work in their culture. The teachers, the children, and the parents, too, had been placed in a world which was missing many of the normal rules that make smooth social interaction possible. Even so, the teachers expressed their optimistic commitment to what they considered an important educational experiment. Our observation of classroom activities, and

sometimes participation, consistently revealed a highly supportive and challenging educational environment. There was no doubt that the children were enjoying learning, and though there was much more freedom than in their traditional schools, the students were usually busily working on their studies.

Dean Saisuree thought that the school was not as foreign as many Thais would have themselves believe. The regular Thai schools had followed and copied the development of Western notions of schooling. Her model, she said, was much more consistent with the way education had taken place in Thailand in the temple courtyards for centuries before the advent of the "modern" school. She suggested that these, the *watt* schools, were the real model for the open classroom. She felt that this provided an historical perspective that partly accounted for the program's success.

Upon reflection, it is not energy, trust, respect, even openness, or any such value that comes to mind when thinking about this school. In our opinion, the change from the Thai traditional school to the open school is mostly a matter of form. A humanistic school, from our cultural perspective, is primarily concerned with freedom for personal growth and the development of greater interpersonal responsibility. These were not the salient issues. All around us in rural Thailand, we felt a strong sense of self and nurturing social connections—among and between ages—which we attributed to a more traditional way of life. Making school freer seemed to impose very little demand for a psychological shift in the nature of the learning environment. In fact, the interviews showed that the teachers' behaviors and attitudes were not fundamentally different from when they were teaching in traditional schools. What stands out here is the concern for simply finding new ways to help children do their regular school work more effectively.

Thailand

It is reasonable to wonder in what way the school is an example of humanistic education. We remember feeling how wonderfully effective the learning environment was and how many of the values expressed matched our own. The feeling appears connected with our hunch that *school* learning in and of itself is an *adventure* for these Thai students. Worthwhile achievement in their culture is often related to the fulfillment of the roles in life that traditions define. School learning, in contrast, seems to be taking these Thai children beyond what is normally expected of them. Humanistic education would be defined as teachers helping students to discover their connections with a world that is outside of their own sphere—beyond their town and maybe beyond their country. An autobiographical story of a Thai woman who grew up in an isolated village, who became a teacher and who eventually learned English, conveys this message.[13] Intellectual knowledge serves as the critical stimulus for fostering personal and social growth. The need for the development of self and the creation of connections, in this case, is on a different frontier than it is for us.

[The open classroom model] was much more consistent with the way education had taken place in Thailand in the temple courtyards for centuries before the advent of the "modern" school.

The strength of our conjecture is supported by an observation we made of a traditional classroom in a Laotian school, even more rural, a few hundred miles north of Khon Khaen. In an ordinary size classroom, eighty children sat bunched together on benches in front of long desks. Without any of the commotion that one would expect under such crowded conditions, they sat beaming as they alternately listened and recited lessons about letters, numbers and words. For these children, the particular structure of the educational environment is not of great importance. Although the school and daily life in Khon Khaen were more modern, the feeling was similar. Indeed, as a freer school environment, one might imagine that it fostered even more excitement for the journey that these teachers and students were taking together into the unknown. From our world view, so much of the program was focused on what we ordinarily call achievement. From another view, the daily school activities could be perceived as challenging students to broaden their concepts of self and as an opportunity for making new and responsible connections with others.

Soviet Union I (Moscow)

We were surprised that we even considered going to the Soviet Union. To say the least, it was not on our list of the top ten places to go looking for an interesting example of humanistic education in another culture. Given our kindred backgrounds, we are particularly bothered by how the Soviet government treats refusniks—Jews who are refused permission to emigrate. But we are active members of Educators for Social Responsibility (ESR), the Association for Humanistic Psychology (AHP), and AHE. As a result, we have participated in a host of activities centered on working for world peace. Given our professional interests, it was natural for Fran Macy, the director of AHP's Soviet Education Project, to ask us to form an American team that would plan with the Soviets, for the fall of 1986, a small conference on humanistic education. Macy had had long talks with Alexei Matyushkin, the director of the Institute of General and Educational Psychology of the Moscow Academy of Pedagogical Sciences. Matyushkin wanted a two-day seminar focused on such issues as creativity, teaching, research, and psychological services from a humanistic point of view. The conference was one part of the itinerary for a thirty-person American delegation of humanistic psychologists and educators who would visit the Soviet Union for two weeks as citizen diplomats. Adventurous spirits that we are, although feeling a little foolish, we accepted the invitation and the responsibility.[14]

The difficulty of planning the conference proved to reveal yet another view of humanistic education. The conference actually had two parts for the Soviets. In the first part, members of the Institute met with Carl Rogers a few weeks before we arrived. For the second part, the common Soviet/American goal was to design a seminar built on Rogerian concepts and thinking. To accomplish this goal effectively, the American planners, five of us altogether, insisted that the design itself had to be a model of humanistic educational process. Initial correspondence led us to believe that Matyushkin and his colleagues understood and agreed with this premise.

We proposed that the conference would include our delegation and an equal number of Soviets—sixty in all. There would be six small groups, again with equal membership from both countries, each with a translator or two (a combination of ours and theirs). The task of the small groups would be to discuss informal presentations by three or four members on agreed-upon themes. In an effort to build a close working relationship, the plan included for these groups to meet for at least four two-hour-long work sessions. We would assign a process person to each of the small groups who would assist the group in two tasks: to hear each other carefully and to bring productive material to the plenary sessions. Plenary meetings for the beginning and end of each day were planned as process-only sessions. This would be a time for expressing expectations, exploring differences, problem solving and sharing the accomplishments and questions that resulted from the work of the small groups. Given the professional experience of the planning team, we were prepared to lead the large group with structured activities that have a high probability for creating conditions that would facilitate real dialogue. It was our hope to demonstrate in action, through the work of the small and large groups, what we meant by humanistic education. Achieving some understanding and common meaning with the Soviets was one of our goals, but the process of how we worked together was of more importance to us.

Good theory. It wasn't so much that the Soviets disagreed; they had to contend with their own agenda. Besides correspondence and telephone, there were three critical planning meetings: in Washington, in Helsinki, and in Moscow. All along there was marvelously good will on both sides, but the negotiations seriously brought into question whether this would be a humanistic conference. Most important for the Soviets was not to have a series of papers read and translated. That, they knew, would be deadly. Matyushkin, however, insisted that we had to allow for as many people as wanted to participate, maybe three hundred. He was under a lot of pressure after Rogers' presentation not to exclude any members of the Academy who wanted to be there. As well, plenary sessions had to be formal presentations. He wanted everyone to hear about the Project Learn School, an action research design for changing school climate, and our views on future scenarios. Technical problems reduced the time for the small groups and their number to four. Agreement on the content, interestingly enough, had evolved easily: Humanistic Teaching, Humanistic Research, Creativity, and Psychological Assistance.

Humanistic education in this instance turned out to be an exploration by Soviets and Americans, together, of very troublesome ground. How we might grow personally and socially in peace, in fact, is the ultimate humanistic planetary question.

Despite these difficulties, the negotiations begun months before accomplished our goals. A couple of paragraphs from the planning team report tell the story:

> What finally became of this seminar for which we had so excitedly planned during the summer months is intriguing. Our interactions with the Soviets had already resulted in some close relations. The translators on both sides were caring, involved professionals; they added an important dimension and depth to the dialogue that had already begun. As we talked with Professor Matyushkin the day before the meeting, we could see that he was very excited about this seminar and felt it was a radical endeavor. He was committed to the idea that presentations should involve *all* those present and that papers should *not* be read. This, it seemed, was the radical departure from the usual Soviet seminar. He was excited about our being there and was clear about what he considered important for the success of

this endeavor: an open exchange of ideas was the essence. In this exchange, we began to understand one important element of humanistic education. Matyushkin recognized the cutting edge of his own culture.

The small groups . . . provided opportunities for stimulating discussions for thirty to sixty people each day. For some, the Soviets had prepared presentations, and in others, the Americans presented. In all of them, there was thoughtful interaction among those present.

The plenary sessions with two hundred people in attendance were as different from our preconceived ideas as night and day. . . . Following the presenters' directions, the Soviet audience was more than willing to move around and form small groups. In fact, they moved into small groups as if they had done this all their lives and didn't seem to mind the inconvenience of the room or the extra time it took. . . . Our experience in Moscow showed us that, like us, many Soviets were responding to a universal human need that creates the energy for making education more humanistic. Our vision of a humanistic seminar and the Soviet vision interacted to produce an experience far richer for us all than either one by itself could have achieved.[15]

Our experience in Moscow was mind boggling. After the effort we had made in reframing our thinking to understand how the open school in Khon Khaen, Thailand is an example of humanistic education, one might imagine oneself prepared to recognize how preconceptions block seeing the world of others. With hindsight, we now know that the differences between ourselves and the Thais is simply cultural. "Simply" we say because there is no underlying psychological tension between us that marks us as potentially mortal enemies. Between ourselves and the Soviets, there is a strong commitment to think differently. Because of the tension, we remind ourselves constantly that we are not alike in important ways.

There is good reason, then, to appreciate the unique results of this small conference. Throughout this travelogue, we have shown how looking at education in other cultures is an opportunity for expanding our horizons and our vision. Here, though, special risks were taken. For the Soviets, the key to humanistic education was *an open exchange of ideas*. They negotiated with us in a spirit of real dialogue because of their commitment to this. It is no small risk in a country where one's commitment to ideology is under close scrutiny. Humanistic education in this instance turned out to be an exploration by Soviets and Americans, together, of very troublesome ground. How we might grow personally and socially in peace, in fact, is the ultimate humanistic planetary question. In a tribute to the memory of Carl Rogers, John Vasconcellos remembered him saying after his return from Moscow,

> "The Soviet Minister of Education invited me to Russia to consult on individualizing instruction and fostering creativity. I asked him, 'Isn't it somewhat dangerous to be doing that in a collective society?' and he replied, 'Yes, but not as dangerous as not doing it.'"[16]

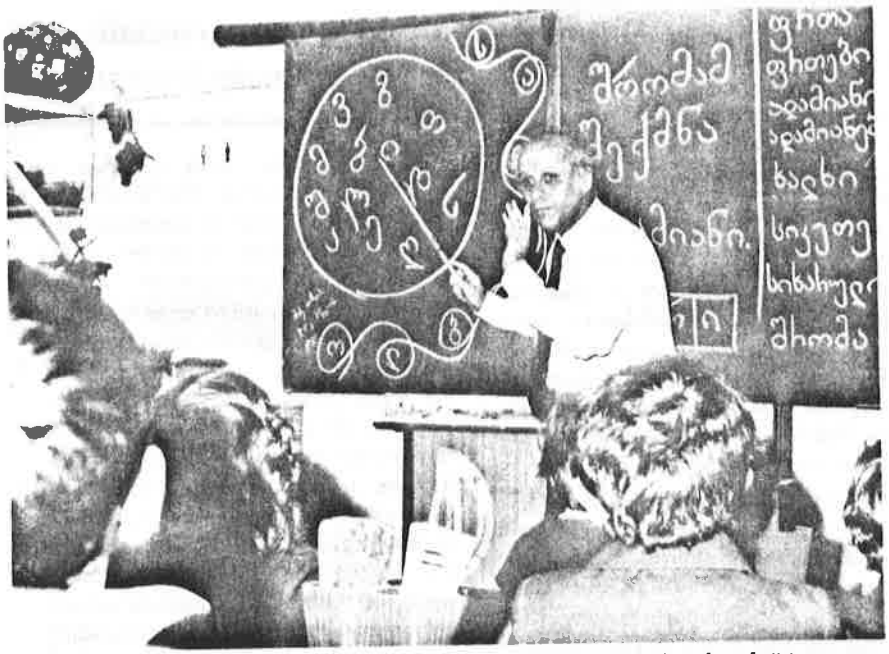
Negotiation in a climate where there is truly an open exchange of ideas is yet another view of humanistic education.

Soviet Union II (Tblisi)

Our last stop on this educational world tour is Tblisi, Georgia in the Soviet southwest. This is a city of a million people nestled in a horseshoe valley among high mountains not far from Turkey. Its character is more Mediterranean than Russian, and the delegation had come here to broaden its impressions of the Soviet Union. The feeling is not the same as Moscow. The climate is warmer, the food is Middle-eastern, the people initially are more expressive, and even the language is different. Among themselves, Georgian is spoken, not Russian.

Our big surprise here was Experimental School Number One. Our itinerary had included schools in Moscow, Leningrad, and Tblisi. Because the others we visited were also called experimental, our impression was that all Soviet schools must be very traditional. Innovation referred to equipment and architecture, subject specialites, and the education of faculty. But from the moment we entered this building, we knew it was unusual; the feeling was familiar.

Throughout the school, there was a constant bustle of activity. We were immediately reminded of Project Learn School in Philadelphia.[17] The halls were lined with children's paintings. In these same halls, with and without the presence of teachers, students were engaged and involved in small group activities such as language-learning games, art projects, chess, and others. The structure of classrooms did look quite traditional, but the interaction level was bouncey and energetic. As part of their learning activities, students interacted with each other as well as with the teachers. Small groups had



Dr. Amanashvili teaching first graders at Tblisi School #1

created a record of their class work in books they themselves made. Included was everything from stories, academic projects, art work to baby pictures. Each book was a unique history of the group over the years so far. There were other opportunities for self-expression, and even in large-group lessons, the teachers were particularly sensitive to individual differences. Some aspects of the teacher-student relationship were formal, but they were coupled with an ease on the part of the students and caring on the part of the adults. The high priority that was placed in the school on relationship was palpable as we watched administrators and teachers relating to students, teachers with other teachers, and students with other students.

The school's founder and director is Dr. Amanashvili, who is also head of an educational research institute in Tblisi. His charismatic leadership was immediately obvious. He first introduced himself to us by teaching language and math lessons to a first-year class. He demonstrated his skill as a master teacher using innovative methods with games, problem solving, imagery, chanting, whispers, movement, and touch. It was a joy to watch how delighted the children were as Amanashvili moved hurriedly from child to child, their eyes shut, folding the number of fingers they held up to let them know that an answer to an arithmetic problem was correct—quietly changing their fingers if they had a different answer. Teachers in other classrooms demonstrated similar skills.

Later in the day, through dinner and late into the evening, we had a chance to talk at length with Amanashvili about the school's program. It was particularly startling to find so many similarities with Project Learn when we recognized at the outset that the alternative school in Philadelphia has only sixty-five students and Experimental School No. One has twenty-five hundred! In both places, it is assumed that quality education first of all depends upon *connections* between everyone involved: children, teachers, administrators, parents, and whoever else might have a role. We found that we agreed on the importance of affective learning, especially as a balance for the attention that is always given to cognitive learning in each of our cultures. We also agreed on the need for teachers and students to develop common meaning, the value of cooperative planning, and the responsibility that education has to help create a more peaceful world. Because we knew it was essential to the accomplishment of these goals, neither program emphasizes tests. Unusual for the United States, and unheard of in the Soviet Union, in neither school do students receive grades.

Finding so much in common with the Soviets was disquieting. We have unresolved personal issues and, more remote but equally troublesome, constantly brewing political tensions. In Moscow, we had good *talks* about humanistic education, and we found areas of agreement that offer promise for continued work together. That is the general expectation for citizen diplomacy; more camaraderie is suspect. It was beyond our ken to imagine we would find humanistic concepts, not only endorsed, but active in a real live school. Further, the contextual key element in Tblisi required no new perspective for it to be understood. It took some doing to appreciate what humanistic education meant for the conference in Moscow. Not so for our understanding in Tblisi; it literally could have gone without saying. One has to reframe the concept of a climate for negotiation to understand how that is an example of humanistic education, but connected relationship is *sine qua non*.

In the hallway at Tblisi School #1

Don't let our exuberance be misleading. Experimental School No. One is as unusual in the USSR as it would be in the USA. It doesn't seem to be so "over by the window," as Kuroyanagi would say, but it in no way represents mainstream Soviet educational theory or practice. From our discussions with Amanashvili and others, we learned that he is part of the educational and political establishment. It is reasonable to believe that no educational innovation could survive in the USSR unless it were connected with the power structure. The reason for Project Learn's viability in our country is quite different. Put these reasons aside; it is more important to think about the role that both of these schools play in their respective societies.

Exploring the edge

What role does humanistic education play in any society? The memory of our personal experiences as children growing up with the faults of American education sometimes gives our work as humanistic educators a missionary zeal. There is an urge to review all of the different definitions we have encountered and to combine them into one grand plan. It is appealing, too, to invent some broad concepts that will encompass the experiences we have told of humanistic education in cultures that are so different. "See," we might say, "look at these common problems and pay attention to the universal human need that is being expressed." It is tempting to clearly raise a flag and argue and fight for what one believes is right. This response is all too human, but it is not creative. A few minds are changed, and a few comrades are won to one's side. It is a dance that mirrors all of mankind's problems, and it is woefully inept. It seems more insightful for us to focus on the differences that have been highlighted. In every instance, there is a glint in the beholders' eyes that tells us that quality education is in progress. You can't miss it. The differences tell us something, and we need to ferret out the message.

In the beginning we noted the National Coalition for Democracy in Education's flyer, "What Humanistic Education Is and Is Not." For the Coalition, "humanistic education is an educational approach." It teaches a wide variety of

skills, it is humane, and it deals with basic human concerns. Included are the teaching of basics, values education, and the goals and involvement of parents. Humanistic education is considered essential preparation for democracy, and years of research support are cited. Some troublesome "nots" are also mentioned like religion and psychotherapy. The description is quite comprehensive yet agreeably argues that humanistic education is not the only valid approach to schooling. The wording is assertive, specific, clear and fair. It may well be that all or most of our international examples could be fitted into this broad view. But something gets missed by doing so. Humanistic education, in these terms, is just another educational method. It becomes one more variation after progressive schools, Steiner schools, Montessori schools, alternative schools, open schools, etc. Something is missing when we look at humanistic education in this way.

There is a frontier in view, and these examples of humanistic education, each with its own mark, are evidence of exploration. If the work of these educators is a response to an underlying universal need, it is surely some force that impels us to explore the edge.

Metaphorically, we think of our examples as gems to which we, rather than comment from the distance on their overall beauty, need to come up close and notice which facets are reflecting special light. In each country, special problems are being addressed which insightfully reflect relevant educational issues, and the issues are related to the larger cultural context. The meaning of each of these approaches to education is only understandable within its context. When the context shifts, so does the meaning of humanistic education.

At the First Street School, Summerhill and Tomoe, there is a specific focus which is responsive to a matching need. The mission of the First Street School was to release blocked energy. The teachers felt that the children suffered primarily from the repressive conditions of their earlier school experiences. An educational environment that removed these repressive conditions released energy that could be focused and utilized for the joy of learning. At Summerhill, Neill was primarily concerned with the children's belief in their self-worth which he felt was undermined by general child rearing practices. Repression played its part in his theorizing, but it isn't the key. Offering what seemed to be unlimited amounts of trust shook children loose from the self concepts with which they arrived at the school. Its democratic process, of one vote for every person of whatever age, powerfully demonstrated Neill's belief and trust in every student. Tomoe too had its mark. Mr. Kobayashi turned Japan's traditional high regard for respect into self respect. He would not imagine that the children should be encouraged to disrespect or disregard their cultural mores. For him, one simply must nurture the budding natures of children and help them to appreciate their own unique achievements. He successfully broadened his students' world view so that there was more room for them to grow.

To understand our personal experience in Japan, at the open school in Thailand, and at the conference in Moscow required significant shifts in our own world views. Japanese teachers and students alike responded to humanistic educational experiences with an openness that initially we believed was uncharacteristic of their culture. But they showed themselves capable of suspending their need for tradition and allowed themselves to become fully engaged in our activities and exercises. Our experience at the Thai school was much different. The school's program at first looked mostly like changes in form. Only from a broader cultural view was it possible to see how the encouragement of greater academic achievement was the program's mark as a humanistic endeavor The more informal classroom structure was less important than the educational need to balance cognitive and affective learning. In this case, it was the intellectual pursuits that needed bolstering as a means to personal and social growth. Shifting our perspective in Moscow was even more difficult. As Americans, the cultural significance we attribute to negotiation and the open exchange of ideas is second nature to us. We don't normally think of an emphasis on them as a humanistic endeavor. The problems in Moscow are substantially different. We found people in the Soviet Union today who are striving to achieve a new balance of cognitive and affective learning in education. Humanistic education means allowing for an honest struggle between collective ideology and personal growth. The people we met in Moscow are aware that their views of both have to be modified.

Just as we had grown accustomed to finding such telling differences everywhere, we discovered an alternative school in Tblisi, Georgia, USSR that reminded us of home. The key characteristic, for us, of Experimental School No. One and Project Learn School is connection. Reciprocal relationships exist between teachers and students, as well as among teachers and students themselves, that reflect an understanding of each others' needs, mutual caring, and a respect for each others' power—the rightful power of the teachers, and the rightful power of the students. The usual tension that is often present when the exercise of power only goes in one direction is absent. These learning environments, like all others, are not utopian, but they do have a noticeably higher level of enjoyable and productive interpersonal interaction. Visitors usually see it immediately and comment on it frequently—just as we did during our short visit to Experimental School No. One. There is an easier chance for mutually staisfying goals aimed at personal and social growth.

We see these experiences as exploring the edge of yet uncharted possibilities in their specific cultural context. There is a frontier in view, and these examples of humanistic education, each with its own mark, are evidence of ex-

It is really a question of balance. Education is rarely without numerous advocates for its traditions. Humanistic education is a force within schools that stimulates growth in the educational culture and potentially in the culture as a whole.

ration. If the work of these educators
response to an underlying univer-
need, it is surely some force that im-
ls us to explore the edge. Without a
ubt, there is a complementary force
it draws on us to maintain traditions.
ddiwell's *The Saber-Tooth Curriculum*
idly comes to mind. The pressure of
dition on education is cleverly sati-
ed in his example of a curriculum that
uires learning how to scare away
er-tooth tigers after they are already
inct.[18] Albeit there are excesses, the
intenance of tradition and the ex-
ration of edges are fundamental
ects of any culture. Survival and
wth depend upon these processes;
y are a symmetrical pair of univer-
needs. The role of humanistic educa-
n, we feel, is to explore the edge for
w educational possibilities—when
t edge is likely to nurture personal
d social growth.

What happens in schools mirrors the
penings of cultures in general. The
ne forces interplay on science,
gion, art, and probably all of
nankind's arenas. There is an enor-
us quantity of discussion, for exam-
, on how science impedes its own
gress as well as stimulates exciting
coveries. Kuhn shows how both
dencies are an integral part of scien-
inquiry.[19] Recognizing the need for
h tendencies in education is equally
portant. Our examples from
gland, Japan, Thailand, the Soviet
ion, and our own country are ob-
usly on the side of exciting new
coveries. We see this function as the
of humanistic education. It is real-
question of balance. Education is
ly without numerous advocates for
traditions. Humanistic education is
rce within schools that stimulates
wth in the educational culture and
entially in the culture as a whole.
s is a force to redress the balance that
eeded when traditions in education
pulling too strongly in the direction
he past.

his view of humanistic education
s each of us to recognize our per-
al possibilities for acting as em-
vered and responsible educators. It
ounts thoughts of educational prac-
s as mainly governed by the swing-
of a pendulum in each historical
iod. We are discouraged by notions
the effect of our actions are over-
den by current philosophies,
hods and fads. We discourage our-
selves when we discount our inner knowledge in the face of others' theory and research. We heighten our vulnerability when we uncritically accept abiding pessimism of other teachers and students. There are many reasons why a humanistic educator can feel frustrated, and the difficulties are aggravated when we view ourselves as simply trying to apply another method. Empowerment comes from knowing that our job is to explore for possibilities that work in our own given context. Sometimes in growing, we feel that we are constantly facing the same old problems and that helpful solutions are beyond our creative abilities. There is no better reason for finding a new edge to explore—one that offers some other fantasies that indeed are within our power to make real.

It is most important to strive for an understanding of our own personal educational context. We aren't responsible for changing the world. The long-range effect of what each of us does is unknown; there is always the possibility that the ripples of our individual efforts will make waves. Sometimes we wish that we hadn't made waves. Our vicarious and personal travels have made us aware of many new possibilities. For all of us, these are possibilities for finding effective avenues for personal action as humanistic educators.

Notes

1. A. S. Neill, *Summerhill: A Radical Approach to Child Rearing.* (New York: Hart, 1960).

2. T. Kuroyangi, *Totto-chan: The Little Girl at the Window* (1981) trans. D. Britton (Tokyo: Kodansha International, 1982).

3. A. W. Combs, "Humanistic Education: Too Tender for a Tough World?" *Phi Delta Kappan,* 62, (1981), pp. 446-449.

4. J. S. Allender, "Affective Education," in H. E. Mitzel, ed., *Encyclopedia of Educational Research* (5th ed.) (New York: Free Press, 1982).

5. J. S. Allender & D. S. Allender, "Real Learning: A Series of Letters," *Confluent Education Journal,* 18, 1984, pp. 1-42.

6. J. S. Allender, "Affective Education"; M. L. Silberman, J. S. Allender, & J. M. Yanoff (eds.) *Real Learning: A Sourcebook for Teachers* (Boston: Little, Brown, 1976).

7. G. I. Brown, *Human Teaching for Human Learning: An Introduction to Confluent Education* (New York: Viking, 1971).

8. C. R. Rogers, *Freedom to Learn for the 80's* (Columbus: Charles Merrill, 1983); H. Kohl, *Growing Minds: On Becoming a Teacher* (New York: Harper & Row, 1984).

9. J. C. Pearce, *Magical Child: Rediscovering Nature's Plan for Our Children* (New York: Bantam, 1977); L. V. Williams, *Teaching for the Two-sided Mind: A Guide to Right Brain/Left Brain Education* (New York: Simon & Schuster, 1983).

10. L. A. Cremin, *The Transformation of the School: Progressivism in American Education, 1876-1957* (New York: Vintage, 1961).

11. G. Dennison, *The Lives of Children: The Story of the First Street School* (New York: Vintage, 1969).

12. Kuroyangi, p. 18.

13. P. Thirabutana, *Little Things* (Godalming, Surrey, Great Britain: Fontana/Collins, 1971).

14. J. S. Allender, D. S. Allender, & L. B. Miller, "Humanistic Education Goes to Moscow," *Celebrations,* 12:4, 1987, pp. 1-2; D. S. Allender, J. S. Allender, et. al., "Humanistic Education: What Is It? Where is It?" *AHP Perspective,* Nov. 1987, pp. 4-5.

15. D. S. Allender, J. S. Allender, et. al., "Humanistic Education: What Is It?"

16. J. Vasconcellos, [A tribute in memory of Carl Rogers]. *AHP Perspective,* May, 1987, p. 7.

17. J. S. Allender & D. S. Allender, "Real Learning."

18. J. A. Peddiwell, *Saber-tooth Curriculum* (New York: McGraw-Hill, 1939).

19. T. S. Kuhn, *The Structure of Scientific Revolutions* (2nd ed.) (Chicago: Univ. of Chicago Press, 1970).

Educating as an Art: The Waldorf Approach

by Roberto Trostli

In the early decades of this century a seed was planted which has born fruit manyfold. It was planted in faith and in hope: faith in man's capacity to transform himself and his society; hope for the future of mankind and of the earth. Out of an impulse towards social renewal the first Waldorf School was founded.

Waldorf education has now spread throughout the world. During the last decade so many new Waldorf schools have been founded that it is difficult to keep track of how many there are. Together they form one of the largest independent school systems in the world—with more than one hundred schools in North America, over four hundred schools worldwide, and an estimated enrollment of fifty thousand students. Every Waldorf school is truly independent; no central organization determines that a Waldorf school should be established in a particular town or city. Rather, a group of parents who desire a Waldorf education for their children work together for a period of years to establish a social and financial base that will support a school. Waldorf schools usually begin as a nursery or kindergarten; when conditions are right, new classes are added year by year until the school reaches its full complement of grades. Given that every Waldorf school has been founded independently and has had to overcome both internal difficulties and external challenges, the rapid growth of Waldorf schools reveals the eagerness with which this form of education is being sought by parents throughout the world.

Waldorf education, founded by Rudolf Steiner, aims to serve the developmental needs of children and adolescents enabling them to become sensitive and whole persons. The method requires great sensitivity and self-awareness on the part of the educator—a willingness to grow along with the children.

History

The first Waldorf School was founded in 1919 in Stuttgart, Germany by Emil Molt, the director of the Waldorf Astoria Company. Molt's decision to found a school grew out of his concern for the future of Germany and the other central European countries that had been devastated by the First World War. He recognized that central Europe's hope lay not with those who had experienced the destruction and upheaval, but with the new generation of schoolchildren. If they could leave behind the old modes of thought that had proved inadequate for the modern world and could develop new capacities, perhaps they would be able to forge a brighter future.

If these children were to develop capacities that would allow them to transform society, they would need to be taught in a new way—in a way that addressed their essential humanity,

Roberto Trostli received his B.A. from Columbia College and his M.A. from the University of Cambridge. For the past seven years he has been a class teacher at the Rudolf Steiner School in New York which he attended as a child.

that enhanced their concern for other people, and that fostered a sense of responsibility for the earth. They would need an education that went beyond the dry, intellectual schooling of the past, an education that would cultivate their artistic abilities, and develop their practical skills; above all they would need an education that nurtured the capacities that would allow them to adapt to a rapidly changing world. Emil Molt knew the man who could develop a form of education that would meet these needs; this man was Rudolf Steiner.

Born in 1861 in Austria, Rudolf Steiner studied sciences at the Technische Hochschule in Vienna. As a young man he edited the Weimar edition of Goethe's scientific writings, studied philosophy, and received his doctorate in that field. Rudolf Steiner's first major work, *The Philosophy of Freedom*, appeared in 1894 and established the foundation for the world view known as anthroposophy. In the early decades of the twentieth century Rudolf Steiner became increasingly well known throughout Europe as an author and lecturer; he published over fifty books and gave approximately six thousand lectures in subjects including philosophy, history, the sciences, the arts, and education. In 1919, at Emil Molt's behest, Rudolf Steiner trained the teachers for the first Waldorf School. He developed the curriculum, gave practical courses in teaching methods, and worked with the faculty of the school until his death in 1925. Because of its philosophical base and its innovative teaching methods, the original Waldorf School quickly grew, gaining international recognition and inspiring the establishment of new Waldorf schools in Germany and many other countries.

Waldorf education: a total approach

What characterizes the Waldorf approach to education? In my view, three salient features may be distinguished:

Waldorf education is based on a developmental approach that addresses the needs of the growing child and maturing adolescent.

Waldorf teachers strive to transform education into an art that educates the whole child—the heart and the hands, as well as the head.

Waldorf schools are committed to developing capacities as well as skills; their highest endeavor is "to develop free human beings who are able of themselves to impart purpose and direction to their lives."

Child development

In Rudolf Steiner's view, the process of human development unfolds in cycles of approximately seven years each. Waldorf schools base their curriculum and methods on the recognition that during each of these stages children need forms of instruction and specific subjects and activities that will encourage the healthy process of development.

In his first seven years, a child undergoes a tremendous process of physical development. At no other stage of life is the actual physical development of the body so striking, so profound. During these years, when the young child establishes his relationship to the physical world he is deeply affected by everything and everyone around him. Because it is in his nature to imitate all that he encounters, the words, gestures, activities, and objects in a young child's life make an impression that may remain for the rest of his life.

In an age where relationships so easily dissolve for lack of commitment, a child is strengthened by the knowledge that his class teacher loves him, will stand by him, and will accompany him through this part of his journey through life.

In the second seven years of life, the child's physical growth continues, but this process is overshadowed by his inner development. During these years, the elementary school age child develops his inner life, his life of imagination and fantasy. Between the ages of seven and fourteen the child is deeply influenced by the people around him. Those people whom a child encounters at this age make a strong impression on him and leave an indelible imprint on his life of feeling.

In the third stage, from about age fourteen to twenty-one, the adolescent again goes through a dramatic process of physical and emotional development, but this process is overshadowed by the development of the thought life. During this stage of development, the adolescent is particularly receptive to the ideas and ideals he encounters. By considering and contemplating the thoughts of others, the adolescent is helped in developing the ability to form his own thoughts.

The sections below are an attempt to illustrate how the curriculum of the Waldorf school addresses the needs of each stage in the life of the growing child.

The Waldorf preschool

Young children soak up impressions of all that surrounds them. Waldorf teachers thus strive to provide their students with examples that are worthy of imitation in a setting that is full of beauty. Because the physical environment of the preschool age child affects him so strongly, great care is taken in the choice of materials which surround the child and with which he works and plays.

Anyone who has watched young children at play knows that they become totally engaged in whatever they do; to them play is work and work is play. The young child lives in a world of deeds, and Waldorf preschool programs strive to imbue these deeds with an imaginative and practical element. In the preschool, children are encouraged to engage in creative play which strengthens their power of imagination. As a complement to creative play, children also participate in a variety of household tasks. They learn to cook and to bake, to sweep and to wash, to hammer and to build. These activities are a great educative force, for at a time when the child is becoming aware of his body and of his movements, these practical tasks develop both large and small muscle coordination and a sense of spatial relationships. By participating in meaningful tasks children's love of work is strengthened, and they learn to

apply themselves with devotion and joy.

Young children respond strongly to rhythm, and they thrive when there is rhythm and regularity in their lives. Waldorf preschools therefore organize their schedule of activities so that they will have a strong rhythmic element. In all Waldorf preschools each day has a rhythm. The morning might begin with a period for play and work followed by circle time, consisting of verses, nursery rhymes, songs and circle games. A local park or play area allows for a session of outdoor play, and the morning session ends with a nature story or a folk tale. Each week has its rhythm as well, with one day for baking, another for painting, a third for crafts, and so on. Seasonal activities such as harvesting grain, planting bulbs, tapping maple trees, or gathering nuts serve to deepen the children's awareness of the natural world around them, and colorful seasonal festivals, which celebrate the bounty of the autumn or the advent of spring foster a connection to the cycle of the year. Through such activities, which are imbued with a rhythmic element, a child's feeling for the cycles of life and of nature is strengthened. In later years this feeling may translate into a sense of well-being in the world and a sense of connection to the natural world.

Waldorf teachers recognize that the first seven years are a time when the child must be free to grow and develop without the intellectual demands of formal academic instruction. In our experience, academic learning at too early an age is achieved at the expense of the healthful unfolding of the best qualities and capacities inherent in this stage of childhood. Although children in the Waldorf preschool are not taught to read or wirte, the daily, weekly, and seasonal activities in which they participate prepare and strengthen them for their elementary school years. Called by different terms, learning readiness activities have been a part of the Waldorf preschool curriculum for the past seven decades. Songs and nursery rhymes cultivate a sense for language and the world of words. Listening to stories, watching marionette shows, and participating in dramatic play strengthen the power of memory and the imagination. Similarly, counting games and rhythmic activities build a solid foundation for arithmetic and number skills, while the various practical tasks help children develop coordination and the ability to concentrate.

Through such activities, Waldorf preschools prepare students for the intellectual learning in the years ahead. By strengthening the imagination, cultivating a sense of wonder, and developing their students' enthusiasm for work Waldorf preschool teachers work to prepare children not only for their years in school, but for the rest of their lives.

The elementary school

During the first seven years children establish the foundation of their relationship to the world around them. During the ages of six or seven to fourteen, they undergo a tremendous process of inner growth and begin to discover the world within themselves. Whereas the young child learns primarily from his environment and by imitating the words, gestures and actions of those around him, the child of elementary school age learns through his feelings for those who teach him. Rudolf Steiner emphasized the importance of cultivating this element of feeling for the teachers in a child's life, so children in the elementary grades have a class teacher for a number of years ideally from first through eighth grades. Although each class is also taught by teachers who specialize in foreign languages, or in music, crafts, wood work, physical education, etc., the class teacher is in the unique position of working with a class over a long span of time and of introducing and developing the various subjects of the curriculum.

Photo by Annie Hunt Heiman

When they first encounter the idea of a class teacher people typically ask: "What if a child doesn't get along with his teacher?" or "How can one person teach all the academic subjects from first through eighth grades?" These are legitimate questions which deserve consideration, although it should be mentioned that most parents who have been connected with a Waldorf school for a number of years find that their initial concerns proved unfounded.

In our experience, children enter elementary school with tremendous eagerness and with boundless faith in the individuals who stand before them. The young child usually feels a natural and deep connection with his teacher because the teacher stands as a representative of mankind who, day by day, will lead the class into ever wider explorations of the world. By his sincere interest in each child and his genuine enthusiasm for each subject, the teacher tries to prove himself worthy of the children's confidence and love.

Unfortunately, teachers are not always blessed with the gifts of love and trust that children display in such abundance. If a teacher finds that he does not naturally relate well to certain children, he has the duty to understand what lies behind his feelings. More than understanding is needed, however; the class teacher must work on such difficulties within himself until he has transformed them. The fact that he will face these children every day for many years provides both a context and an incentive to pursue such inner work with vigor.

Children are remarkably perceptive beings, and they respond to the special efforts a teacher makes to work on himself and to rise above his shortcomings. Thus the children themselves help teachers in their inner tasks; through their response, our feelings for them are transformed and our relationship with them enriched. Many teachers experience an extraordinary bond to those

children with whom they have had difficulties and for whom they have had to struggle within themselves. This bond grows out of the teacher's striving, out of his work to transform himself, and out of a child's response to these efforts. In an age where relationships so easily dissolve for lack of commitment, a child is strengthened by the knowledge that his class teacher loves him, will stand by him, and will accompany him through this part of his journey through life. Such knowledge gives children faith in the power of human relationships to endure.

Throughout the years, the class teacher uses every opportunity to develop in the children a sense of the unity and interconnectedness of the world of knowledge. He teaches each subject with reference to other ones, developing and establishing connections between them. Although he must work to attain a basic foundation of knowledge in all subjects, the class teacher need not be a specialist in every field. More than expertise, it is the teacher's interest in, and enthusiasm for the subject which inspires his students. Many teachers find that those subjects in which they have had the least prior experience are those which they most successfully teach, because through the teacher's own learning process, a magical ingredient enters his teaching.

Class teaching thus demands the continuing education of the teacher. He must become a mathematician as well as a musician, a poet as well as a painter, a sculptor as well as a scientist. Few teachers have a natural aptitude for all of these areas, and as he works to refine his skills in the various subjects, the teacher demonstrates to the children that much can be achieved through application and effort. In a time of increasing specialization and narrowness, the class teacher stands as an example before the child, confirming the child's belief that the possibility for understanding the world is within his grasp.

The Waldorf curriculum

Developed by Rudolf Steiner and refined over the past seven decades, the Waldorf curriculum is designed to introduce students to all the important branches of knowledge. It is conceived as a unity, and its subjects are introduced and developed in a sequence that mirrors the inner development of the growing child.

Since mathematics occupies a central position in a Waldorf school's academic program, a sketch of the mathematics curriculum might indicate how topics introduced at a particular time meet the child's interest and needs at each stage of development.

In the first grade, mathematics work grows out of the child's inherent love for numbers and for the process of counting. Every morning classes participate in an arithmetic routine that includes arithmetic poems and games, songs and drills, which are performed in a variety of rhythms. Whereas many schools shy away from drill, we have found that rhythmic drill actively engages the child and helps him master the arithmetic facts and tables.

. . . because learning is based on experience as well as thought and feeling, whatever is studied will live in the students' memory for many years to come.

First graders live in a world of imaginative pictures; they have a natural feeling for the archetypes implicit in the world of numbers. Through stories and descriptions that speak to the child's imagination, the teacher tries to engender in the children a sense for the inner qualities of the various numbers. The number one, for instance, represents more than a digit; it embodies the principle of unity. It can be thought of as the largest number, for it contains all other numbers within it. The number two, in contrast, denotes duality, contrast, opposites. The children in first grade might encounter some of these dualities in stories which contrast a bright sunny day and dark, gloomy night, or a mighty king and the queen who rules with him. With the number three comes a dynamic quality, with four a quality of stability and form. There are four seasons, four directions, four elements. Through his stories and descriptions, the teacher strives to bring the numbers to life in the hearts and minds of his students. A student who has gone through this process will never again consider a number simply as an abstraction or merely as a mark upon a page.

By third grade students have begun to venture out into the world. The pictorial consciousness of the first and second grade has begun to fade, and children want to know more about the world around them. At this time the Waldorf curriculum suggests that teachers begin to teach their classes about the practical activities in life: how houses are built, how food is prepared, how clothes are made, etc. The arithmetic work therefore also enters the practical sphere, and the third grade learns the many forms of measurement which are used in daily life. Since third graders are so active, it is important to allow the children to work with measurement in different ways. A class will measure their desks, their classrooms, themselves. They might pace out the length of the school building, the school yard, or a city block. Third grade students might learn how to make change by having a class store, and they might learn dry and liquid measurement by making muffins and hot chocolate. The specific examples may change, but in Waldorf schools teachers try to bring the material into direct experience, into life.

In the sixth grade, as children become able to think in more abstract terms, they begin to study geometry. Students will already have done a great deal of free hand geometric drawing in the early grades; now they are ready to learn how to use a compass and straight-edge and to perform all the basic constructions possible with these tools. Just as arithmetic grew out of stories which revealed something of the inner nature of the numbers, geometry grows out of the beauty inherent in geometric designs. As the sixth grader learns how to subdivide a circle into six, a flower form is revealed, and an element of magic enters into his work. As all the permutations of the six-division of the circle are worked out and understood, this magical element is transformed into the beauty of logic. Drawing beautiful geometric forms speaks to the child's love of beauty and precision, but these forms are not con-

structed for their own sake, they are also studied because of the laws they reveal about ratios and geometric progressions, spirals and the geometry of natural forms.

Much more is done in the elementary school mathematics lessons than can be indicated by these few examples, and by high school, students who have gone through the grades have a firm foundation and a deep appreciation for the worlds of arithmetic, algebra, and geometry. When they now pursue studies in the various fields of higher mathematics, they do so with mobility of thought, with an eye for beauty, and an understanding for the practical applications of mathematics in our life and work.

These qualities are developed in all the subjects in the curriculum. For example, by the time they enter fourth grade, most students have developed an active interest in the natural world. At the same time, they are becoming more aware of themselves as individuals and more interested in other people. The Waldorf curriculum of the middle grades meets these new interests through a lively study of man, and of the animal, plant, and mineral kingdoms. The nature study sequence begins with the study of man, and students are led to a deeper understanding of man and of his special tasks upon the earth.

Seventh grade can be a tumultuous year for most students. As they approach this age, many of them start experiencing that sense of profound loneliness that will increase with adolescence; sometimes they begin to feel that their world no longer makes sense. The upper elementary school grades are therefore an ideal time to study the physical sciences with children, for the beauty, order, and consistency of physical phenomena speak strongly to their need for inner logic and for order in their lives. The science curriculum of the upper grades meets the students' needs by drawing them out of their own personal concerns and engaging their interest in the phenomena before them. In the high school, students continue these science studies in the realms of physics, chemistry, earth sciences, zoology, botany, and human anatomy and physiology. Through their work in the elementary school they have gained a foundation for these more advanced studies; at the same time they have had experiences of the natural world vivid enough to last for a lifetime.

The high school

The third seven-year stage of child development begins at about the age of fourteen. Whereas the child before the age of seven relates to the world primarily in physical terms and the child from seven to fourteen relates to the world much more through his feelings, the adolescent begins to establish a relationship to the world based on the power of thought. The early stage of adolescence is still largely colored by intense feelings; but in their sixteenth year, students begin an intellectual awakening that allows them to recognize, appreciate, and identify with the great ideas, ideals, and achievements of mankind.

High school students need an entirely different kind of relationship with their teachers. Unlike the elementary student who learns largely through his emotional connection to the class teacher, the high school student learns because he respects his teachers' knowledge and expertise. Consequently it is to individual subject teachers, each an expert in his field, that the education of the high school student is entrusted. The Waldorf high schools offer a rich and diverse academic curriculum in the sciences, mathematics, and the humanities, including literature, history, and history of the arts. The courses address the most basic questions about the nature of the human being, society, and the natural world and they help students in their attempt to establish a sense of meaning and definition in their lives.

In Waldorf high schools throughout the world, for example, students in the eleventh grade study the classic Medieval romance, *Parzival*, by

Wolfram von Eschenbach. The story of Parzival is a quest for glory, a quest for the highest, a quest for his true being. Through his steadfast striving, even in the face of the abyss of darkness and loneliness, Parzival achieves the goal of his quest—and of his questioning. And eleventh graders, facing the crises of adolescence which lead to so many empty answers—drug abuse, sexual promiscuity, and even suicide—may draw comfort and strength from this ageless tale.

Through this brief overview we have tried to show how the organization of the three parts of the Waldorf school—preschool, elementary school, and high school—is structured to meet the needs of the growing child and maturing adolescent. In each section of the school, a student's relationship to his teachers is determined by the kind of relationship most suitable to the student's age, and for every age our teachers strive to provide the type of instruction which most directly speaks to the forces and capacities which need to be developed at that time.

The Waldorf method: education as an art

In his work with the teachers of the Waldorf School, Rudolf Steiner challenged his colleagues to transform education into an art. To this day Waldorf teachers strive to meet this challenge and continue to work to become artists in education who can educate the whole human being, addressing the spirit, soul, and body of the child.

What does it mean to be an artist in education? Is it different from being an artist in another field? One salient feature of artistry is that the artist achieves such a mastery over his medium that he is left free to create and to serve as the vehicle for that which seeks to express itself through him. How does this apply to the teacher? What is his medium? Just as the musician works with melody, harmony, and rhythm, and the painter with light, color, and form, the teacher works with the curriculum, with his pedagogical methods, and, most of all, with the children whom he strives to educate. Especially in the elementary school his method derives directly from art; he uses the arts—verbal, pictorial, musical, dynamic, and plastic—to achieve that which only art allows: a connection between the subject and object; a sense of communion engendered by the feeling life of the child.

The "main lesson" in a Waldorf school is the canvass upon which the process of education as a work of art can be rendered. Every day, students in the elementary school and high school begin their studies in a main lesson—a double academic period in which the same subject is studied for a block of three to six weeks. The main lesson allows a class to become thoroughly involved in a subject, for these lessons include a lively presentation, a review and discussion of the previous day's study, and work on academic and artistic projects. Subjects such as history, geography, and the sciences are usually taught in one or two main lesson blocks per year, while subjects needing regular practice, such as English and mathematics, are supplemented by weekly classes as well.

The main lesson contains, in a kernel, many aspects of the Waldorf approach to education. Consider how a person becomes involved in a new activity or field. Do we not first become involved in something because of our feelings—feelings of curiosity, attraction, interest, or awe? Everyone who has ever experienced a vocation, a calling to do something, will recognize that this call came not from the realms of thought or deliberation but from the life of the soul. Only after the stage when the feelings are aroused does a person stop and think about what he has experienced. A second stage then begins, and we further develop our interest by thinking. When we decide to pursue an interest and to find out more about it, we may plan a line of inquiry or follow a course of study. This second stage thus leads us into a third stage of involvement—that of action. As soon as we begin to be active in a new interest, we begin truly to reap the fruits of our involvement. This sequence of activities—the stimulation of feeling, the development of thoughts, the spur to activity—is a natural process in the human being. Teaching according to this sequence insures that the child will thoroughly learn what is taught, and that his love for the process of learning is strengthened.

How does this sequence apply to a main lesson block in the elementary school? Let us present a block in the sixth grade as an example. A new main lesson block—let us say early Roman history, which is taught in the sixth grade—is introduced. The students who have been in the school for a number of years have anticipated this course of study, for they have seen the work that previous sixth graders have done in this field. Beginning with the story of Aeneas, students are taken back to ancient times. As the teacher tells the story of the Aeneid, the students' imaginations are stirred and they form living pictures of Aeneas as he carries his old father, Anchises, out of the burning town. They wait in suspense as the Trojans' ships are driven across the oceans by violent storms; they mourn as Dido sacrifices herself for this most perfect of men, and they rejoice as Aeneas founds the settlement of New Troy.

The courses address the most basic questions about the nature of the human being, society, and the natural world and they help students in their attempt to establish a sense of meaning and definition in their lives.

Now that their curiosity and interest are awakened, students are eager to hear of what became of that settlement. As the weeks progress, the students still become caught up in the mighty dramas of the stories, but the element of thought now figures more prominently in their studies. It is not enough to hear about the lives and adventures of great men and women, they want to know more about the Roman civilization: how people lived, what they thought, and what their great culture achieved. Throughout the main lesson block, students work actively on various types of projects. They may learn to recite poems in Latin or to draw perfect Roman capitals. They might write their own accounts of the stories of the kings and heroes in the form of

narratives, letters, poems, or plays. Pictures are drawn to illustrate their written work, elephants sculpted to bring Hannibal's invasion to life; a meeting of the Roman Senate might be held to try a case, and with lofty gestures and high rhetoric the sixth grader tries to appeal to his classmates' faculty of reason and their love of justice. By the end of a four week main lesson block, the sixth graders have probably learned more about the essence of early Roman history than many a college student in a semester course. Because the main lesson block allows a student to become totally involved in a subject, because learning is based on experience as well as thought and feeling, whatever is studied will live in the students' memory for many years to come.

Every day the main lesson begins with a morning verse, followed by singing, recitation, and concentration exercises to focus the children on the tasks ahead. Now the teacher makes a presentation. Having familiarized himself thoroughly with his subject, the teacher brings a myth, a biography, or a historical event to life; he awakens interest and amazement for different geographic regions of the earth, or he inspires awe and wonder by his descriptions and demonstrations of the natural world and the physical processes of the universe. Bringing a subject to life is akin to performing a concerto. Every note, every phrase and nuance must be studied in order not to be forgotten when the performance actually takes place. During the actual presentation, the teacher must be free to create – his words must take wing so that the images he invokes in the students' minds will be vivid and true. This part of the lesson stirs the students' feelings, engages them directly in the material by speaking to their hearts.

If making a presentation is akin to performing a concerto, conducting a review and discussion on the following day demands even more artistry and insight, for now one has to be free enough to improvise. In the review the teacher works with what the students learned from the presentation of the previous day, and he brings what was experienced through the feelings into the light of thinking. The students may have been touched by a particular element in a story, or by a specific facet of a science experiment. During the review the teacher listens to what the students are really asking and steers the discussion into realms which he may not have planned, but which are obviously right. Here the teacher's knowledge of his class bears fruit; if he has studied the children carefully and knows their needs, these unplanned moments can be used to help a child grapple with his deepest questions and most pressing concerns. Yet the subject must not get lost in digressions, for, like a mighty theme, the essence of the lesson must sound forth so that the class will develop clear concepts of the material they have studied.

The presentation and review take, at most, one half of the main lesson. What do the students do in the remaining time? They work, thereby experiencing the subjects on another level. Herein lies the key to Waldorf education: something that has stirred the feelings and stimulated thoughts must be transformed into another level of experience – into deeds. And if they can be creative deeds, the child's experience will be enriched a hundredfold. In Waldorf schools the arts are not taught for their own sake; rather, they are taught because they allow a child to experience a subject on a level far deeper and richer than the intellectual level. The class teacher is fortunate in having all the arts at his disposal to involve the children more deeply in a subject. He must, however, first have schooled himself sufficiently in the arts so that he can lead the children in the artistic experience. He need not be an expert at drawing, but he needs to have experienced the dynamic power of line and form; he need not be a theatrical director, but he needs to have developed beautiful, clear speech and gestures; he need not be a consumate artist in any medium, but he needs to have schooled his eye, ear, hand, and heart so that he can recognize the beautiful and help his students in their desire to achieve it. In our experience, it is the artistic experiences that leave lasting impressions in a student's life. Information can be gathered or retrieved, but the experience of the subjects through individual work and through the arts builds a foundation in the soul which will enrich all further learning and the whole of a student's life.

Waldorf teachers in training *Courtesy of Rudolf Steiner College*

Through these methods, Waldorf teachers seek to transform teaching into an art. Yet the greater artistry lies in the transformation of the art of teaching into true education, into the schooling of capacities, into a preparation for life.

Developing capacities: an education for the future

Waldorf teachers who hope to prepare students to be citizens in the

. . . the teacher is essentially one who shows, points out, or instructs. The educator, on the other hand, is one who leads forth that which lives in the child, or one who leads the child forth into life.

next century must work to transform the teaching profession into an art of education. Is there a difference between teaching and educating? In my opinion there is, and if we examine the etymologies of these two words we may gain some sense of what this difference might be. The verb "to teach" derives from the Old English verb *taecan*, which meant to show, to point out, to instruct. This Old English verb has a modern English cognate in the word token, a sign, symbol, or mark. The verb "to educate" derives from the Latin *ex ducere* which means to lead out or lead forth. If one pursues this line of thought beyond the literal meanings of the words, one might see that the teacher is essentially one who shows, points out, or instructs. The educator, on the other hand, is one who leads forth that which lives in the child, or one who leads the child forth into life. The difference between these words may be academic, but the difference in approach between an ordinary teacher and a true educator is not. A teacher sees the child as a vessel which needs to be filled, a *tabula rasa* on which the lines of learning must be written; an educator sees the child as a being of unfolding capacities, who must be nurtured so that he may take his rightful place in life.

Waldorf teachers see their responsibility as that of preparing children for life—but for which aspects of life do we seek to prepare them? Should we prepare them to meet the "real world" of the present or of the future? Should we teach our students the skills which are needed in contemporary life or those which will be needed when the children reach maturity?

We live in a century of change. Improvements in technology—and especially in the field of communications—have so rapidly altered our way of life that we seem to have less and less in common with our forebears. How much more the world will change during our time and in the coming generations is beyond our power to speculate. We can be certain, however, that children now in school, who will be adults in the twenty-first century, will live in a world where much of what we experience today will be obsolete. We cannot prepare them for entering a new age by teaching them only of this one. Rather, we must prepare them by nourishing in them the ability to work with and adapt to whatever the future might bring. Of course students in Waldorf schools must develop up-to-date, in-depth knowledge about the subjects they study, and we certainly give them the skills and resources necessary for success in their future studies and careers, but if Waldorf schools are to prepare students for their lives in the next century, they must go beyond these immediate tasks of schooling and strive to educate capacities which can mature and can serve students in the unimagined and unimaginable situations of the future.

What capacities do we strive to nourish, to draw forth from our students? First and foremost, we work to foster the capacity to think clearly, logically, and creatively, and we work to guide the child towards self-knowledge. Secondly, we hope to engender the capacity to feel deeply, to be sensitive to the beauties, the joys, the sorrows of this world, to experience compassion for others. Finally, we try to cultivate the strength and willingness to act, to do what must be done, and to work not only for oneself, but for the benefit of all mankind and for the earth.

The education of these capacities is not only achieved through our rich curriculum and our teaching methods, but also through the attitude with which we, as teachers, approach the process of education itself. From the descriptions above it should be clear that we perceive education as a process of inner growth promoted by students' relationships with their teachers and peers, their exposure to our rich curriculum, and their work in the arts and in the practical spheres of life. Most graduates of Waldorf schools attest to the fact that the education they received made a vital difference in their lives. They recognize that this difference derived largely from the teachers' values, from the teachers' fundamental respect for the individuality of each child, and from the teachers' willingness to serve each child and meet his needs.

Ultimately, any form of education can only go as far as those individuals who practice it. The most profound philosophy, the most interesting curriculum, the most innovative teaching methods cannot succeed if the individuals who work in the school are not working on themselves. Whether in the preschool, elementary school, or high school, Waldorf education succeeds because the teachers try, consciously and constantly, to develop themselves, to transform themselves into self-aware, compassionate individuals who can translate their ideas into ideals and their ideals into reality. The rapid spread of Waldorf education in this century is more than a social fact: it is a testament to the power of an ideal and the striving of men and women who are working for the development of the human being, the transformation of society, and the renewal of the earth.

THE IMPORTANCE OF PARENT INVOLVEMENT

In our concern for schooling and educational theory, we must not forget that ***parents*** *are the most important adults in a child's life. Without a supportive, nurturing environment at home, holistic education is incomplete. It is when parents do become actively interested in their children's development that they discover the inadequacies of traditional schooling.*

The following two articles give two very different responses of concerned parents. Although neither writer attempts a systematic presentation of the holistic approach, several important themes are evident in their ideas of what good education should be about—cultivation of the child's innate curiosity and interest in learning, encouragement in place of competitive pressure, respect for the child's independence and self-determination, genuine personal relationship between adult and child rather than the teacher being an authority figure, and a more spontaneous, natural rhythm to the day.

Sudbury Valley School: Where Ideals and Reality Cross Paths

by Daniel Greenberg

Wanting to respect their children's autonomy and self-responsibility in education as they had at home, a group of parents began a school where students make their own choices about what and how they will learn, and participate as equals in determining school policies.

The time was 1967. We were a small group of parents living in the greater Framingham (Mass.) area who had been hunting all over the country for a school that met our requirements. We had travelled far and wide, visited and read about all sorts of places—and had come up empty-handed.

The one (and only) thing we all had in common was a deep commitment to a new style of childrearing, and the unshakable conviction that the existing educational system would do our children irreparable harm.[1] Armed with these beliefs, there was really not much choice. We *had* to do whatever was necessary to provide the kind of environment we wished a school to have.

So it was that Sudbury Valley School was founded in 1968.

The starting point for all our thinking was the simple, revolutionary idea that a child is a *person*, worthy of full respect as a human being. These are simple words with devastatingly complex consequences, the most important of which is that the child's agenda for its own life takes priority over anyone else's agenda—parents, family, friends, or the community.

As we were raising our children from infancy, this guiding principle led to a whole new approach to childrearing.[2] Time and again we were called upon to accommodate ourselves to the reality of our children's independent existence. They ate when they were hungry, not when we thought we should feed them. They slept when they were tired, not when we wished them out of the way. They learned to crawl, sit, walk and talk in their own good time, not when some expert thought that they ought to. It meant endless adjustments in our daily lives, but we were ready to make them.

Parts of this article have appeared in Home Education Magazine *and the new book* Alternatives in Education. © *1987 Home Education Press. Reprinted by permission.*

Daniel Greenberg was, in 1968, one of the founders of the Sudbury Valley School. He, along with his wife, Hanna Greenberg, have been preeminent among the people guiding the school's philosophy, and giving Sudbury Valley direction and stability. His background includes many careers, including science, history and business. He has written extensively about Sudbury Valley, and about child rearing. Many of his books are available through the Sudbury Valley School Press.

Around us, people were critical, contemptuous, and angry. We were seen as neglectful parents, over-indulgent, undisciplined. But as we watched our children grow with a deep sense of inner strength and self-knowledge, we knew that for us there was no other way.

And so it was that we came to realize that, above all, the school we would either find or found for our children would have to extend to them, as a matter of principle, the same basic respect that we had been extending during the early years. At every point, their inner needs would have to be given the highest pirority in their education.

As a practical matter, this meant that our children's activities at school would have to be determined by their own initiatives, not someone else's. There could be no set curriculum, no group of requirements, no externally imposed time periods, no outside dictation of what they should do with themselves. The school had to be a nurturing environment in which the children themselves schedule their times, choose what they wish to do. For us, nothing less than this basic personal respect would do.

In our lives, childrearing had not implied an inevitable conflict between children and adults. On the contrary, in their early years our children had come to look on us (and those of our adult friends who understood what we were doing) as friendly facilitators. What we wanted in our children's school was a set of adults who would not be teachers or administrators or secretaries or janitors as such, but rather who would be all-purpose facilitators, available when needed to attend to needs of the school community. The adults at the school had to be comfortable with the idea that children need space and deserve respect. Only self-directed adults could thrive in an environment designed to nurture self-directed children, and such adults were what we were looking for.

The idea of personal respect leads almost directly to the concept of democracy as an institutional imperative. It is all too true, as Winston Churchill once said, that democracy is a terrible form of government, but all the others are worse. Democracy alone is built on the solid foundation of equal respect for all members of the community, and for their ideas and hopes. And so it became a cornerstone of our philosophy to involve everyone at school, without exception, in the full process of running the school. No special powers were reserved for some inner circle or special person.

An interesting feature of this respect extended to all members of the school community had to do with parents. So many educators viewed parents as a nuisance at best, a downright menace at worst.

This did not seem right to us, mostly because we were founding a school primarily *as* parents! Any way we looked at it, parents definitely had a place in children's education. From the beginning, we held to this belief, and structured the school accordingly.[3]

So it was that we set our path in 1967 and opened the Sudbury Valley School in 1968.[4] We found a beautiful ten acre campus, home of the magnificent old Bowditch estate (the famous sailor's family) complete with granite main building, constructed in 1865, a millpond, a grand old barn, and a millhouse; surrounded by conservation land and a state park, a virtual little paradise nestled in the northwest corner of Framingham.

Eighteen years later, we have become an established institution in the educational landscape—a status that was partially achieved because of our insistence in going through the rigorous evaluation and accreditation procedure of the New England Association of Schools and Colleges. The NEASC was reluctant to have anything to do with us, but eventually studied us from top to bottom, and left issuing glowing reports that led to our accreditation and re-accreditation without demurrer.[5] We enroll students from the age of four through nineteen—or older—and currently have approximately 140 students.

In a school where all students are completely free to do as they wish, when they wish, how do people learn?

For us, the answer to that question derives from a prior question of a more fundamental nature: What motivates children—*people*—to learn? Everything we see about us, especially in the early childhood years, leads us to believe that human beings are driven mercilessly by *curiosity*, the greatest, most consistent, and most persistent of all drives. Indeed, during the past few decades, innumerable studies have shown that mammals of all levels of intelligence are driven more by curiosity than by any other drive, even hunger and sex.[6] Parents of small children really don't have to be told this, for no one exceeds an infant in the ability to explore and "get into trouble."

This innate curiosity is, of course, *the* reason the human race has made the great advances of the last million years. Quite independently of the existence of any sort of formal schooling, people young and old in all eras of history have

A science lab at Sudbury Valley School

surged onward in their quest to conquer the unknown, to dominate the environment, to *understand.*

Unfortunately, for the most part, schools nowadays spend their major effort in killing this drive of curiosity, taming it, "socializing" it. The phenomenon is well known, and has been widely commented upon.[7] The lively, curious children who enter preschool are usually dull-eyed, angry youngsters by second grade, and remain that way, gaining yearly in alienation and hostility until they are cast out into the world to be on their own—those who make it. The high rates of drug abuse, violence, parent-child estrangement, and divorce are all tragic testimony to the damage inflicted on our young and, one might add, equal testimony to the determination of the human spirit to rebel against confinement at all costs.

At Sudbury Valley, children look adults straight in the eye, with no fear. They are open and friendly, curious about newcomers, nurturing each other. Competition for approval by school authorities is totally absent because school authorities are totally absent. The atmosphere is open and lively. There is virtually no vandalism, though the building is ancient and could easily be trashed in a week. There are no locks in the school and theft is essentially unknown. The whole campus is freely accessible to everyone, as is the right to come and go. School opens at 8:30 in the morning, closes at 5:00 and people arrive, leave, return, and do as they wish all day, subject only to the state's laws on compulsory school attendance.

Sudbury Valley is a school with completely open admission at any time of the year: we neither know nor care about the prior experiences of students. The tuition is extremely low; at $2,300 a year for the first child in the family and less for others, it is a fraction of customary private school tuition and well below the per-pupil expenditures of public schools, thus assuring us of a wide cross-section of socio-economic status in the school population.

The students we get are your everyday, normal, flesh-and-blood people. Yet, the quality of the children's minds has to be experienced to be believed. What a transformation occurs in "common" people when they are given their freedom! Their brains work overtime, opening into new experiences, delving now here, now there, seeking relentlessly after that greatest of all goals, immortalized by the ancient Greeks: Know Thyself.

From the sublime to the petty: let's take a small example, so overblown in the minds of so many people these days. Let's talk about reading. We don't make children learn how to read any more than we make them learn anything else. They and they alone decide when to learn to read, and how to learn. Some teach themselves, some seek help from other older children, some ask for adult help, from teachers or parents. Some learn at five, others at age seven, others much later.

Quite independently of the existence of any sort of formal schooling, people young and old in all eras of history have surged onward in their quest to conquer the unknown, to dominate the environment, to understand.

As a result of this approach, everyone without exception is comfortable with reading. It really takes a very short time for any child to become a reader once they've put their mind to it, and in eighteen years, we have yet to see a single case of so-called "dyslexia." It seems to be just another of many school-induced disorders with which we have mercifully no direct contact.

The management of the school is run entirely by the School Meeting, which meets once a week to govern the school, and which consists of the students and staff. Each member has one vote. There, the school's expenditures are determined penny by penny. (Is this why the operating budget has only doubled in seventeen years, at a time when school expenditures nationwide have gone up over sixfold?) There, teachers are hired, and staff contracts are decided. There, the administrative structure is established, reviewed and modified and administrative officials are elected.

For most of the school's history, the School Meeting Chairman—the top official of the school—has been a student. The eligible voting population has, of course, a vast majority of students, since each person has one vote, regardless of age. Attendance is not compulsory, and varies tremendously from week to week, depending on the subject matter being discussed, as published in advance in the weekly School Meeting Record.

Discipline is handled by a judicial system established by the School Meeting. It is a simple and effective system, based on a Judicial Committee consisting of six students of all ages and one staff member. Membership is for monthly periods. The Committee handles all complaints about infractions of the rules and decides on punishments for guilty parties. There is an overwhelming sense of fairness relative to this system and serious disciplinary problems are few and far between.[8]

Of course, the key to maintaining a sense of order is the spirit of community which permeates the school. Because everyone has an equal voice in school affairs, there is truly a spirit of commonality hovering over everything. Sudbury Valley is *our* school, not *mine* or *theirs.* It is a matter of deep pride to all of us, young and old, to keep it going on an even keel.

The inevitable question is: after eighteen years, how are we doing? What has happened to our graduates and to those who moved on before graduation? What do they do with their lives? And, without requirements, without grades or report cards or school evaluations of any sort, how can they go on to college and other schools of higher education?

To begin with the last question: every graduate who has ever wanted to go to college has gotten in, usually to the college of first choice. This really should not come as a surprise. Most schools would welcome to their ranks a student who is self-motivated, self-directed, and self-possessed. After all, the only graduates of ours who go on to college are those with a clear idea of why they are doing so, and what their goals are. Armed with this knowledge, they are

inevitably able to make an excellent case for themselves in the college admissions process, and they are usually welcomed with open arms. Our graduates have been admitted to the fanciest schools and to the plainest, to liberal arts colleges and specialized institutions all across the country. Many have gone on to gain graduate degrees.

The others go on to productive lives in the arts, trades, and in business. Since Sudbury Valley has no "track system" children with every conceivable interest coexist side by side. They learn to cherish each other as human beings, not as "college preps" or "voc eds," or "home ecs." The disgusting pecking order of traditional schools is unknown among us, and the friendships and bonds formed by students in their years here remain strong for the rest of their lives, regardless of the professions they ultimately choose.

For those interested in what happens to our graduates, a major study has recently been published, and is available through the school.[9] There, the researchers concluded that our former students show a stability, self-confidence and self-knowledge exceptional in this day and age.

Perhaps the best way to end is with an excerpt from a recent edition of the school's catalog. Entitled "A Typical Day . . . A Typical Year," it says:

> Even after reading and hearing about the school, and often even after visiting, many people still wonder and ask what a "typical day" is like at school, both for students and for staff. It often comes as a surprise that we have so much trouble responding to such a question.
>
> Our problem is twofold: first, people at school are so different from each other, that no two of them ever do the same thing, at least not for long. Second, there is such total freedom to use time that each person often varies his activities from day to day, or week to week, or month to month.
>
> The variety is truly amazing—until you realize that in the world outside of schools, chances are that any group of people not pre-selected will show just as many differences. At Sudbury Valley, we see just about everything. One person will settle into a perfectly predictable pattern for months on end, always doing the same things in the same sequence at the same times—and then suddenly change to another predictable pattern. Another person will attend erratically, and at totally unpredictable times, doing something else each time. Another person will go on a series of short term binges—a few intensive weeks (or months) of this, followed by a few intensive weeks (or months) of that.
>
> Some people play all day. Some people talk all day. Some people paint or study or cook all day. Some people do a little of each of these things, according to some schedule they have for themselves. Some come early and leave early, some come late and leave late. One week you are likely to find many people at school by opening time, and a bustling school soon after. The next week the school may be quiet until mid-morning.
>
> Time assumes a different aspect at Sudbury Valley. Here there are no bells, no periods, no terms, no grades, no "freshmen," no "sophomores," no "juniors," no "seniors"; no "preschoolers," no "post-graduates." Time belongs to each student in a very personal sense. Each student learns to understand and work with his own unique internal rhythm, pace, and speed. No one is a fast learner, no one a slow learner. All have in common the quest for a personal identity that is whole, and individual, and that, once found, makes all reference to time seem trivial.

And that is the heart of the matter. By combining absolute respect for self with a deep sense of community, Sudbury Valley has put into practice ideals we have long struggled for. It is the stuff dreams are made of, brought to life.

Further reading

The following books are available through The Sudbury Valley School Press, 2 Winch Street, Framingham, MA 01701. They provide extensive background material describing the school's operation and educational philosophy.

The Sudbury Valley School Experience. Framingham, Mass.: The Sudbury Valley School Press, 1986.

Daniel Greenberg, *Free At Last: The Sudbury Valley School.* Framingham, Mass.: The Sudbury Valley School Press, 1987.

"And Now for Something Completely Different": An Introduction to Sudbury Valley School. Framingham, Mass.: The Sudbury Valley School Press, 1986.

Notes

1. A summary of our views can be found in *The Crisis in American Education: An Analysis and a Proposal* (Framingham, Mass: The Sudbury Valley School Press, 1970).

2. This has been developed at length in *Childrearing,* by Daniel Greenberg (Framingham, Mass: The Sudbury Valley School Press, 1976, 2nd edition, 1987).

3. See, for example, *About The Sudbury Valley School* (Framingham, Mass: The Sudbury Valley School Press, 1968). For the precise legal structure of the school, see the By-Laws of The Sudbury Valley School, Inc., available from the school's office (send a SASE).

4. The early history of the school, from its initial conception through its first year, has been detailed in *"Announcing a New School . . .": A Personal Account of the Beginnings of The Sudbury Valley School,* by Daniel Greenberg (Framingham, Mass: The Sudbury Valley School Press, 1973).

5. Excerpts from the various successive accreditation evaluations of the school can be found in *Evaluations of Sudbury Valley School: How Professional Educators See Us* (Framingham, Mass: The Sudbury Valley School Press, 1986).

6. For a thorough discussion of this and other related material, see *Outline of a New Philosophy,* by Daniel Greenberg (Framingham, Mass: The Sudbury Valley School Press, 1974), especially Part 2, "The Human Mind."

7. Among several classic treatises on this subject, perhaps the best are *How Children Fail* (New York: Pitman, 1964) and *The Underachieving School* (New York: Pitman, 1969), both by John Holt; and *Crisis in the Classroom,* by Charles Silberman (New York: Random House, 1970).

8. *The School Meeting Lawbook,* available from the school office, contains a constantly-updated compendium of all the rules, regulations, and procedures through which the school is governed, as passed and revised over the years by the School Meeting of Sudbury Valley School.

9. Peter Gray and David Chanoff, "Democratic Schooling: What Happens to Young People Who Have Charge of Their Own Education?," *American Journal of Education* (February 1986), pp. 182-213.

Home schoolers think not. They've seen a need for common sense, family unity, and nourishing what Albert Einstein called "the holy curiosity of learning." They intuitively know that the "booklearning" will happen soon enough. Our children become less mysterious when they are not gone for eight to ten hours every day. The small patterns and rhythms of their lives—and ours—can be seen. When our children are with us the cycles and seasons become more apparent. Small discoveries can be shared; more important triumphs are magnified, and seen in their true context. Our children become as small apprentices, learning from us their daily skills, seeking our wisdom as their own. Their day no longer revolves around school bus schedules and what's on the lunch menu, and learning is no longer something which happens only in an institution with hundreds of other children.

Excellent results

With many professional educators insisting that home schooling will produce nothing but academically deprived social misfits, the results of actual research may be surprising. Thousands of home schooled children have been tested and assessed by the public school system's own standards, and they have been found to be equal to or above their public and private school counterparts. Those who have studied the facts concur. Author-educator John Holt stated

> With few exceptions, home schooled children learn more things, and learn them faster and better, have more contact with adults, and are socially better adjusted and more adaptive than most children in schools.[1]

Edward E. Gordon writes of research conducted by his Educational Services,

> Long-term follow-up studies . . . showed permanent academic skill improvement resulting from a home tutorial program. Most important, attitudes toward study, personal motivation levels, and individual achievement needs were strengthened.[2]

Clearly, home schooling gives children an educational advantage. Supported by caring parents, removed from the pressures and distractions of school life, home schooled children are free to pursue meaningful education, to follow their own interests and to develop a lifelong love of learning.

Yet in many states, home schooling is still difficult and risky. Parents have been accused of parental neglect, convicted of criminal violations, have been told by the courts to comply with the school's requirements or to move out of the state, have gone to jail, and have had their children removed from the family and placed in foster care—not for child abuse or actual neglect, but for simply wanting to keep their children at home to continue their education.

stated in 1986 that

> People who have their finger on the pulse of change in this country know that something significant is beginning to happen.

Fifteen years ago only a handful of people knew what the term "organic gardening" meant. Ten years ago people who wanted to have their children born at home were considered kooks. Five years ago very few people had ever heard the term home schooling. People

Anyone can teach a child to write his name or to solve a math problem, but it takes a special attitude to patiently nurture independence or a sense of self-esteem.

Home schooling families are setting precedents, not only in education, but in overlapping areas of family rights and responsibility. While on the surface home schooling would seem to be simply an educational issue, it has pointed out the contradictions between ideology and actual practice in this country regarding individualism versus institutionalization. At some point in our history it was decided by (or for) us that compulsory attendance laws were necessary to insure equal educational opportunities for all children. Whether they are still necessary and advisable is debatable. The states' interest in an educated citizenry may be a valid one, but their assumption that parents cannot be trusted to educate their own children beyond the age of five or six is naive and dangerous. Parents are very capable, and do not need testing restrictions, minimum hours, curriculum approvals, or state-certified teachers to insure that they will provide their children with an adequate education.

Assuming control over our lives

Education, like religion, should be a personal family matter. It should not be regulated, mandated, supervised, restricted, or approved by the state. This is a foreign idea in our present society; we've all grown accustomed to the state benignly controlling our children's futures for us. But the laws, and attitudes, are rapidly changing. Jerry Mintz, of the National Coalition of Alternative Community Schools, are seeing needs, and are moving to fill those needs. As with organic gardening and home birthing, people are seeing a chance to reassume control of their lives, and the lives of their children. They are finding that schools do not necessarily have all the answers—or even the best answers. They are finding that their children do not have to leave the home at an early age only to return as total strangers, hooked on peer dependency.

In these hectic times it too often seems that a family is simply a collection of people who eat and sleep under the same roof, and whose older members do all they can to maintain control over the younger ones. The day-to-day joy is too often bypassed in a scramble for "more meaningful" relationships and activities. A family holds all the potential for being the strongest social unit in our society, and yet too often it fails, becoming several individuals who just happen to live together.

A wise man once said "We can teach our children to have courage, and faith, and endurance; they can teach us to laugh, to sing, and to love."

For families who choose to do their learning together, the world is a marvelous classroom!

Notes

1. John Holt, quoted in *Newsday*; April 30, 1982.
2. Edward E. Gordon, in *Phi Delta Kappan*; February, 1983.

Why Homeschool?

by Helen and Mark Hegener

How a family can provide a more nurturing educational environment than a school.

Our present educational system has held a monopoly on teaching and learning for close to one hundred years, and has only grudgingly allowed options such as private and church schools and private tutors. But within the last ten years, an unusually effective grassroots movement has been quietly building momentum among thoughtful, concerned parents. Perceiving that the public and private school system in this country has become mired in its own bureaucracy, these parents have simply removed their children from the schools, and the family has assumed the responsibility for educating them.

When parents make the decision to teach their children at home it often opens the doors to a whole new world, a world in which the parents, as well as the children, will be learning and exploring and discovering new ideas. In most cases, the usual subjects are covered: reading, spelling, math, science, history . . . but there are other lessons taking place in the home school as well. Anyone can teach a child to write his name or to solve a math problem, but it takes a special attitude to patiently nurture independence or a sense of self-esteem. In developing that necessary "special attitude," parents stretch their own abilities, and grow as well. It gets a bit tricky to make distinctions between "teacher" and "student."

Home schooling offers children and parents a chance to grow and learn together, to nurture the special bonds of trust, understanding, and love. In helping our children learn about the world around them and their special place within it, we cannot help giving serious thought to our own reasons for being. And if we can accept that life is simply one long learning experience, then we can believe that our children are here to provide its most interesting and valuable lessons. We need only pay attention.

Home schoolers are fond of saying that children like to learn, are good at it, and don't have to be forced or coerced into learning. Consider a toddler of two years. His natural daily activity is searching, probing, feeling, climbing, testing, trying to learn all he can about the world and how it works. Are we to believe that this fantastic capacity for seeking and growing fizzles out at the age of minimum compulsory attendance, and must be thereafter propped up by disciplined teaching and homework assignments?

Portions of this article are reprinted from the booklet Getting Started with Home Schooling.

Mark and Helen Hegener are the authors of the new book* Alternatives in Education, *and are the editors of the monthly publication* Home Education Magazine. *The parents of five children, they make their home near Tonasket, Washington.

Letters to the Review

Dear editors,

In August, 1977, Sharon Wagner and I started Puget Sound Primary School in Seattle. We wanted it to reflect our convictions that the best learning (the most enjoyable, most useful, longest lasting) happens when a need to know arises from within the child. This occurs naturally all the time in a good educational atmosphere, one which balances stimulation, respect, and freedom. We believe that a child can learn to initiate, follow through, and evaluate his/her learning with the teacher as a partner in the endeavor.

We want kids to be responsible, independent thinkers with a passion for finding out for themselves the answers to their own questions. We want them to have a sense of themselves, their particular specialness. We want them to care passionately about themselves and others. We want them to grow into beings that exhibit warmth, integrity, self-esteem, and openness. A tall order perhaps, but definitely reachable.

I do have strong feelings about how children are being educated today. Much I observe is bad for kids, bad for teachers, bad for parents, bad for society, bad for the world! Hence, P.S.P.S. became a place where our ideas could be tried out to see if they would make a difference. I'm convinced they do.

A model school

We practice an integrated day rather than set times for math, reading and writing. Worktime encompasses and integrates activities such as painting, construction, and play making as well as the "academics." Learning is experienced based. A well-equipped math lab, weekly field trips, cooking, and solving everyday problems (both social and academic) replace workbooks, dittos, and posed problems. The teaching of specifics is done on an individual basis as the need arises.

The ages are integrated as well, with children from five through nine enjoying learning from one another. Nine of the thirty-two are minorities. We aim for a healthy mix of the sexes, ages, abilities, and backgrounds. We are a city school and we use the city's parks, buses, downtown YWCA, public library, theatres, museums, art galleries, waterfront, and nearby community college.

Teaching kids how to resolve personal conflicts should be just as much a part of a child's daily education as the "three R's." Class meetings and individual behavior plans reduce rules to a minimum. We have a complaint procedure which encourages children to make known their complaints to one another and to participate in settling them. In this process children do learn to be fair and reasonable. Squabbles are settled without either child feeling that they have been victimized.

Each teacher has sixteen children, kindergarten through third grade. Children stay with the same teacher for four years. The teacher gets to know the child well. The child gets to know the teacher well. Time isn't lost from year to year "settling in" with a new teacher, a new child. Four years allow the teacher to be a participant in the unfolding of a child's abilities, an excitement for both teacher and child.

Learning flows between teacher and child, child and teacher, and child to child. The child can develop his own working and learning style, in his own way, in his own time. Each child is responsible for doing "his-size job," competing with himself, not others. He can learn to read when ready, a wonderful benefit for everyone's peace of mind. There is no sense of cheating as everyone is encouraged to share his knowledge and his "know-how" with others.

We believe that for a child to grow in responsibility and independence, it is necessary for one to take care of one's own business. (Of course, a child must have many opportunities to be so involved before accepting responsibility becomes natural to him.) This means that the parents must let go of some of their authority. That is hard for some of them to do. But let go they must, if the child is to thrive and grow into a responsible, independent individual. (We educate parents as well as children!)

And just as parents must share power, so must the teacher! Opportunities are there in abundance to let the child take care of what is rightfully his/her business—for example, writing the weekly field trip notification letter, managing the bus and swimming money and library books.

Steps to good education

Underlying all is a respect for the ability of children to assume responsibility for their learning, with teachers as sharing partners. But until we reduce schools to manageable sizes with no teacher being responsible for more than sixteen kids at most (and preferably lower), I don't think our dream for kids can ever be fulfilled. I don't blame the teachers presently. They have too many children, and you cannot ask them or expect them to do a job that is impossible. Reducing numbers will make a difference. Individualizing for each child will make a difference. Eliminating workbooks, basal readers, and dittos will make a difference.

I have discovered one fact, and that is that children will learn to read, write, and compute in their own way, and on their own time schedules. Kids will do it naturally if nobody messes them up or makes them feel insecure and unsure about themselves. It seems so obvious to me. What a pity that our present public and most private schools seem to act without the best interests of the kids at heart; it is such a waste of human potential.

Billie Johnston
Puget Sound Primary School
1305 Seneca Street
Seattle, WA 98101

Dear editors,

In England I teach on a one year program that I guess would be called "holistic," although we have never used that term to describe our approach. Based in a college of Higher and Further Education, (the nearest equivalent in the U.S. would be a community college), we attract students who either do not know what they want to do, or do not have the qualifications to start a course in the vocational area of their choice. Our "Certificate of Pre-Vocational Education" (CPVE) was designed by a team in the college, and is validated by a National Board. Students are full time, spend-

ing two days doing "core curriculum," which includes improving basic skills in communication (English) and numeracy (Math), and exploring the world of work, leisure, the local environment, etc. Unpaid work experience is a compulsory part of the course. The other three days are spent on introductory courses to four or five vocational areas, designed to give the students an idea of what kind of jobs they would be suited for. They also learn some skills needed in each vocational area.

The Core Curriculum is totally integrated and taught by a team of three (of which I am one). The whole course is assessed by outcome based objectives—the students receive a certificate with a list of "can do" statements on it, and are encouraged to compile a portfolio of work to show prospective employers. Our emphasis is on helping youngsters with the transition from school to work; most youngsters leave school at sixteen in England. We also aim to provide a non-threatening, friendly atmosphere in which they can learn. Most of our students have not had very positive experiences at school. We encourage students to take responsibility for their own learning, often acting as "facilitators" rather than teachers.

Over the years we have got vocational teachers who are sympathetic to our "cause," and can relate well to our type of student—subject expertise is not enough. Some degree of integration has been achieved between the core and vocational areas. Our "staff room" is always open to students and much of what we do is counseling, helping students to mature and become more responsible for their lives.

I enjoy my job in England very much, but felt I needed a change. Applying for a Fulbright Exchange seemed the perfect solution—allowing a change with the security of return to my job and home at the end of the year. I was rather doubtful that a "match" could be found; so were my colleagues who were dubious about having a stranger try to take my place in our team. Imagine my concern when I got a letter proposing an exchange teaching English, (OK I thought, I have a degree in English) at an alternative high school (help! I imagined guns, knives and thugs) in Colorado Springs (where the hell is Colorado Springs?).

Discovering alternative education

My initial misgivings were totally unfounded. The students are some of the neatest kids I have ever met, and Colorado Springs is not as isolated as I had thought. The alternative high school in which I taught is alternative in approach—not curriculum. The students take the same courses as in a "regular" high school and the credits they earn are sent to their home school, from which they hopefully graduate. All students are on individual contracts and all work they do earns them points. They need one hundred points to get one semester credit—one point is roughly equivalent to one hour's work. Individuals can progress at their own pace, and many accelerate beyond where they would be in a "regular" high school.

From my own observations, I would say the students fall into four categories: 1. those who have to work to support themselves so they need a flexible schedule; 2. pregnant girls and young mothers (we have a day care facility); 3. those who only need a few credits to graduate and 4. youngsters who did not like the atmosphere and competition of a large "impersonal" high school.

The school has an informal but structured atmosphere. Students know they have to work and attend regularly, and if they don't they are dropped from the program and have to wait two weeks before they can re-apply. They are then put on the bottom of the waiting list. Teachers work individually with students which gives us more of a chance to get to know the whole student. Students are treated as if they can succeed without dwelling on their past "failures." I think their "failing" in the mainstream of education is a reflection on the inflexibility of the system rather than on the youngsters.

I feel I had a very enlightening and profitable year. I enjoyed working with the students and staff and believe that having an exchange teacher was beneficial to my students and to the whole school. Fulbright certainly did a good job in matching, as my exchange partner fitted in well with my colleagues and my job in England. If you would like to know more about my program in England please feel free to contact me.

Marian Woolhouse
Mid Kent College of Higher
and Further Education
City Way
Rochester
Kent ME1 2AD.

If you would like to know more about Educational Opportunity Program, please feel free to contact the Principal:

Dick Robinson
E.O.P.
730 N. Walnut
Colorado Springs
CO 80905

Editors' response:

What makes an educational approach "holistic"? The programs described by Marian Woolhouse are "alternative" because they try to appeal to students whom traditional methods have failed—the so-called "at-risk" population. Those elements of alternative programs which address the learning styles of individual students, which aim for a deeper self-knowledge and self-esteem, are holistic elements. If, however, an educator is merely using alternative methods to lure "at-risk" students back into the educational and career mainstream, in what sense is this holistic? In our next issue we will focus on the difference between "alternative" programs meant for those who do not measure up to the standards of traditional schooling, and holistic education that helps all people explore their highest potentials.

HOLISTIC EDUCATION READING LIST

There is already an extensive literature on holistic education and related subjects, and it is growing continuously. This listing is intended to provide an overall introduction to the field, and is by no means complete. We will expand and update this list in future issues, and invite readers to make suggestions for inclusion. We also invite book reviews on these or any other relevant works.

The holistic paradigm in Western culture

Marilyn Ferguson:
The Aquarian Conspiracy; 1987, Tarcher
Theodore Roszak:
Where the Wasteland Ends; 1972, Doubleday
Unfinished Animal; 1975, Harper & Row
Person/Planet; 1978, Doubleday
Jeremy Rifkin:
Entropy; 1980, Viking
Time Wars; 1987, Holt
Fritjof Capra:
The Tao of Physics; 1976, Shambhala
The Turning Point; 1982, Simon & Schuster
Robert Theobald:
The Rapids of Change; 1987, Knowledge Systems, Inc.
Peter Russell:
The Global Brain; 1983, Tarcher
Morris Berman:
The Reenchantment of the World; 1981, Cornell

Philosophical & social discussion

Douglas Sloan:
Insight-Imagination; 1983, Greenwood
Joseph Chilton Pearce:
Magical Child; 1977, Dutton
Louise C. Mahdi;
Betwixt & Between—Patterns of Masculine and Feminine Initiation; 1987, Open Court
Theodore Roszak:
The Cult of Information; 1986, Pantheon
Thomas Roberts & Frances Clark:
Transpersonal Psychology in Education; 1975, Phi Delta Kappan Ed. Foundation

Research on intelligence

Howard Gardner:
Frames of Mind; 1984, Basic Books
Robert Sternberg:
Beyond IQ: A Triarchic Theory of Human Intelligence; 1984, Cambridge

Montessori & Steiner

Paula P. Lillard:
Montessori—A Modern Approach; 1972, Schocken
Rita Kramer:
Maria Montessori—A Biography; 1976, Putnam
Mario M. Montessori, Jr.:
Education for Human Development; 1976, Schocken
Maria Montessori:
The Absorbent Mind; 1976, Delta
The Discovery of the Child; 1972, Ballantine
The Secret of Childhood; 1972, Ballantine
Mary C. Richards:
Toward Wholeness—Rudolf Steiner Education in America; 1980, Wesleyan
A. C. Harwood:
The Recovery of Man in Childhood; 1958, Anthroposophic Press

Holistic classroom (and home) practice

Donna Brandes:
A Guide to Student-Centered Learning; Harper & Row
Barbara Clark:
Optimizing Learning: The Integrative Model of Education; 1987, Merrill
Bernice McCarthy:
The 4 Mat System; 1985, Excell
Linda Verlee Williams:
Teaching for the Two-sided Mind: 1984, Simon & Schuster
Barbara Meister Vitale:
Unicorns are Real: A Right-Brained Approach to Learning; 1982, Jalmar
Micky McKisson:
Chrysalis: Nurturing Creative & Independent Thought in Children; 1984, Zephyr
Carl Rogers:
Freedom to Learn for the 80's; 1983, Merrill
Bob Samples:
Openmind/Wholemind; 1986, Jalmar
Gabrielle Rico:
Writing the Natural Way; 1983, Tarcher
Jack Canfield & H. Wells:
100 Ways to Enhance Self-Concept in the Classroom; 1976, Prentice Hall

Of course, the holistic approach must be understood in the context of larger issues in education and social change. Many writers have had a significant influence on the authors listed above and on practicing holistic educators. Some of these writers include John Dewey, Jean Piaget, Pierre Tielhard de Chardin, Carl Jung, Abraham Maslow, Roberto Assagioli, and educational critics of the 1960's—A. S. Neill, Paul Goodman, Edgar Z. Friedenberg, John Holt, George Dennison, Jonathan Kozol, Herb Kohl, Ivan Illich, James Herndon, Neil Postman & Charles Weingartner, Paulo Freire, George Leonard, Charles Silberman and many others.

The blossoming of holistic education in the 1960's and early 1970's came under many names: "humanistic," "transpersonal," "confluent," "affective," "integrative," or "open" education. Some of the writers on these movements include George I. Brown, Beverly Galyean, Paul Nash, Gerald Weinstein, Sid Simon, Howard Kirschenbaum, Lillian Weber, Joseph Featherstone, and others.

It is also important to mention that scholarship on the social history of American education has become much more critical in recent years, pointing to the ways that mainstream schooling is more concerned with maintaining the social and economic *status quo* than with the development of human potentials; the works of David Tyack, Marvin Lazerson, Carl Kaestle, Michael Katz, David Nasaw, Joel Spring, Michael Apple, Henry Giroux, and others give a cultural and historical context for understanding the emergence of holistic alternatives.

A Guide to Student-Centered Learning by Donna Brandes and Paul Ginnis. Published by Basil Blackwell, Ltd., Oxford, England, and Harper & Row, New York.

Reviewed by Mary E. Sweeney

This is an encouraging book for traditional classroom teachers feeling frustrated and powerless. The authors utilize the philosophy of Carl Rogers and advocate student-centered learning. Their working definition of this approach is stated early on: "we have chosen student-centered learning because it is graphic; it describes exactly what we are hoping to achieve, that is, a system of providing learning which has the student at its heart" (p. 1).

The book enlists a wide audience, intending to attract all educators and group leaders. It combines theory and practice. For example, in Section I, the theoretical background of student-centered learning is given in a context explaining it in terms of alternative and progressive education. This text could easily be used as a primer for educators who are not familiar with true alternative school approaches. The authors build an argument for the worthiness of this approach.

Many techniques could be utilized without question or controversy, although the authors make a radical departure from the traditional approach when they ask teachers to utilize student-centered evaluation. This is an area where teachers would most likely meet the most resistance from traditional parents and administrators, who expect quantified grading systems issued by the teacher. The authors could have spent more time in their book detailing how interested teachers could overcome the numerous obstacles involved in this facet of the student-centered philosophy.

In Section II, teachers in the Birmingham (England) project who implemented the student-centered approach recount and react to their endeavors. They reflect on the successes and failures and provide insights for teachers contemplating this philosophical approach. Section III contains over one hundred examples of activities, games, and ideas for teachers to try in the classroom to build group skills and self-esteem.

The strength of this book is the comfort it offers to traditional teachers in need of hope. It provides the theoretical base, the how-to steps, and numerous and varied activities for implementing a student-centered approach. Unknowingly, numerous traditional teachers have naturally instituted some of these ideas; this book provides a philosophical logic for them, and numerous hands-on activities to continue and expand student-centered learning.

Mary Sweeney has been involved in alternative schooling as a teacher/learner/student since 1973. Her doctoral dissertation included a case study of Mountain Open High School in Evergreen, Colorado. She has been a teacher in the public schools for thirteen years. She believes that more choice and holistic approaches are needed to provide students with the skills necessary to survive and contribute to the ever changing society they inhabit.

CLASSIFIED ADS

(Rates for classified ads are .25 per word.)

Teacher needed: Alternative, parent-governed, elementary (K-6), set in Monongahela National Forest. Send resume: Valley School, P.O. Box83, Elkins, WV 26241.

Wholistic, Integrative Teacher Programs in the Seattle area.

These three day programs are structured so that the body, minds, feelings and social and intuitive natures of the participants are engaged in the learning process. Course content includes:

- a synthesis of contemporary research in psychology, neurology, and education that all stress the necessity of the wholistic approach in learning
- an overview of wholistic, lifelong learning for pre-natal through adult learners
- actual classroom processes that engage the body, the mind, the feelings, the social and intuitive dimensions of all students
- an integrated, wholistic curriculum

The course fee is $250 per person which includes a course booklet as well. College credit may be available. For information, contact Linda Campbell at LearningWorks at (206) 652-9502.

RESOURCES IN HOLISTIC EDUCATION

(This listing includes resources known to us at this time. We invite readers to send in information about other groups and publications.)

Networks and Organizations

Association for Humanistic Education
P.O. Box 923
Carrollton, GA 30117

Sponsors annual conferences, journal and newsletter. Members include public school educators and others with a broad interest in human relations & human potential issues.

National Coalition of Alternative Community Schools
c/o Jerry Mintz
417 Roslyn Rd.
Roslyn Heights, NY 11577

A network of parent cooperatives, free schools, homeschoolers. Facilitates student exchanges and travel. Sponsors annual and regional conferences, a journal (*Skole*) and newsletter. Has published a directory of member schools with a resource listing.

New Horizons for Learning
P.O. Box 51140
Seattle, WA 98115

Publishes *On the Beam*, describing the latest research in learning and thinking skills; also a clearinghouse for seminars, workshops and ideas for applying these findings. Sponsors extraordinary conferences.

American Montessori Society
150 Fifth Ave.
New York, NY 10011

Publishes *The Constructive Triangle* magazine about the Montessori movement in the U.S. Also supervises teacher-training programs and accreditation of schools, sponsors workshops and conferences.

Association Montessori Internationale
1095 Market St.
San Francisco, CA 94103

American branch of the teacher-training and accreditation organization originally founded by Maria Montessori in 1929.

International Montessori Society
912 Thayer Ave.
Silver Spring, MD 20910

Publishes *The Montessori Observer* and *Montessori News*. Offers teacher training and conferences. A network of independent schools using a broader interpretation of Montessori's ideas.

Association of Waldorf Schools of North America
17 Hemlock Hill
Great Barrington, MA 01230

Directory of Waldorf schools and teacher training.

Publications

Center for Teaching and Learning
Box 8158
University of North Dakota
Grand Forks, ND 58202

Publishes journals on progressive and open classroom approaches, as well as a series of research papers.

Changing Schools
Teachers College 918
Ball State University
Muncie, IN 47306

A newsletter/journal on alternative schools, including public school programs.

Green Teacher
c/o Lisa Glick, Lifelab
809 Bay Ave.
Capitola, CA 95010

Published in Britain by the Centre for Alternative Technology. Focuses on environmental education, organic & ecological principles, renewable energy, peace education.

News from Zephyr Press
Zephyr Press
430 South Essex Lane, Dept. N7B
Tucson, AZ 85711

Bi-annual newsletter on issues "at the forefront of education and learning." Lists many relevant books and curriculum guides for sale, and includes networking information.

Home schooling

Holt Associates
729 Boylston St.
Boston, MA 02116

National network, resource center. Publishes *Growing Without Schooling* newsletter.

Home Education Magazine
P.O. Box 1083
Tonasket, WA 98855

Covers social & philosophical issues, practical ideas.

The Family Learning Connection
P.O. Box 1683
Durant, OK 74702

Newsletter covering issues of concern to homeschoolers.

Peace education/citizen diplomacy

Educators for Social Responsibility
23 Garden St.
Cambridge, MA 02138

Curriculum materials on nuclear issues, conflict resolution. Sponsors teacher workshops.

Parents and Teachers for Social Responsibility
P.O. Box 517
Moretown, VT 05660

Curriculum materials and books on peace, conflict resolution.

Youth Ambassadors of America
P.O. Box 5273
Bellingham, WA 98227

Sponsors exchange of American and Soviet children and educators. (Coming in July—2nd annual educational conference in Moscow.)

Association for Humanistic Psychology
325 Ninth St.
San Francisco, CA 94103

Sponsors exchanges of American and Soviet educators and psychologists. (Coming up—6th AHP delegation to the USSR.)

Environmental education

Institute for Earth Education
Box 288
Warrenville, IL 60555

Curriculum ideas, workshops and conferences. Publishes *Talking Leaves* newsletter, and books such as *The Earth Speaks.*

Vermont Institute of Natural Science
Woodstock, VT 05091

Publishes *Hands-on Nature: Information and Activities for Exploring the Environment with Children.*

Other resources

National Women's History Project
P.O. Box 3716
Santa Rosa, CA 95402

Offers a catalog of resources and materials on women's history, in-service workshops and summer conferences.

HOLISTIC TEACHER EDUCATION

(We would like this to become a comprehensive listing of innovative teacher training programs, and invite you to send information about yours.)

Northern Illinois University
Department of Learning, Development, and Special Education

NIU's College of Education is a large, established graduate program offering degrees in many fields. Unlike most such programs, however, NIU students have an opportunity to work in the area of "Transpersonal and Consciousness Studies." Courses are offered on humanistic social theory, transpersonal psychology, and other leading-edge topics.

This program is the home base of Dr. Thomas Roberts, a leader in the movement to apply humanistic and transpersonal psychology to education (*Four Psychologies Applied to Education; Transpersonal Psychology in Education; The Second Centering Book*). Dr. Roberts teaches that mainstream education, in its emphasis on verbal, logical reasoning, has neglected other, deeply creative and intuitive states of consciousness. Exploring and tapping into these ways of knowing is essential for understanding, and expanding, our human possibilities.

Students report that because the transpersonal studies courses are contained within a more traditional program, graduates are well prepared to apply their humanistic ideas in the traditional settings in which most of them will teach.

For more information contact Dr. Thomas Roberts, Dept. of Learning, Development and Special Education, Northern Illinois University, DeKalb, IL 60115.

Antioch/New England Graduate School
The Integrated Day Concentration of the Education Department leading to the degree of Master of Education in Elementary and/or Early Childhood with certification

In the education programs at Antioch/New England Graduate School major emphasis is placed on clarifying a teacher's vision of the possible person and society and translating this into a plan of action for the classroom curriculum. At the core of our focus is the development of the child. We encourage the planning and development of concrete, integrated curriculum activities which begin with the needs and interests of the child. We believe that teachers should bring the richness of their life experiences into their classrooms. We encourage students from the widest variety of work and living backgrounds to join our program. Diversity within a context of philosophical commitment is our model for a healthy classroom and a healthy teacher training program.

As children need hands-on experiences with materials in order to learn, teachers in training need involvement in classrooms to learn how to teach. The work-study concept has been part of the Antioch experience since the 1920's. Students participate in internships and take courses simultaneously and this simultaneity insures a constant dialogue between the "theory" of coursework and the "practice" of daily work with children.

The term "Integrated Day" refers to a style of classroom teaching that attempts to draw connections between the life of the child and the life of the classroom and attempts to weave together the reading, writing, math, science, social studies, and arts components of the elementary curriculum. A day in the life of a child in school should not be a sequence of unrelated lessons, but a tapestry of integrated pursuits. Our aim is to teach all the discrete subjects and skills of classroom teaching and to teach the interdependence of all the components—the ecology of the classroom.

Contact: Antioch/New England Graduate School, Education Department, Roxbury Street, Keene, NH 03431.

Rudolf Steiner College

Waldorf teacher training at Rudolf Steiner College is a two-year program. In the Foundation Year (which may also be taken as a complete course of study in itself), students intensively explore philosophy and the arts from the perspective of Rudolf Steiner's world view. Courses on the nature of the human being, evolution of consciousness, inner development, Goethean science, American studies and in-depth seminars on Rudolf Steiner's basic books are complemented by studies in drama, painting, eurythmy, clay modelling, singing, drawing and crafts.

Focus in the second year is on Waldorf Pedagogy and child development. Students are prepared for kindergarten, grade, or high school teaching in Waldorf schools (of which there are presently four hundred worldwide). The program includes practical and detailed work with the Waldorf curriculum in language, literature, history, geography, mathematics, science, music, painting and crafts. Explored as well are the teacher's inner development and broader social responsibilities. Observation and practice teaching are arranged in Waldorf schools throughout North America.

Rudolf Steiner College also offers a year-long Arts Program to help men and women discover their creative potential and develop new powers of perception, and sponsors an ongoing program of lectures, workshops, and courses on a variety of topics related to Waldorf education, human development, and social and spiritual concerns.

Contact: Rudolf Steiner College, 9200 Fair Oaks Blvd., Fair Oaks, CA 95628. (916) 961-8727.

Waldorf teacher training is also offered in the U.S. by the Waldorf Institute, 260 Hungry Hollow Rd., Spring Valley, NY 10977, and by Antioch/New England (see above listing).

Holistic Education Review
P.O. Box 1476
Greenfield, MA 01302

Bulk Rate
U.S. Postage
PAID
Amherst, MA
Permit No. 85

EDUCATIONAL CONFERENCES – SPRING & SUMMER, 1988

April 15-17; Cincinnati, Ohio
American Montessori Society—National Seminar
Keynote speaker: Dr. Ashley Montagu. Extended presentations on infant/toddler and preschool education, and other presentations of interest to parents, teachers, and other professionals.
Contact: Beth and Ken Bronsil, Dept. of Montessori Education, Xavier University, Cincinnati, OH 45207

April 15-16; Paducah, Kentucky
Association for Humanistic Education—"Self-Esteem: The Bottom Line"
Featuring psychologists Dr. Dennis Waitley and Dr. Art Combs.
Contact: Dr. John G. Taylor, Rm. 229 Wells Hall, Murray State University, Murray, KY 42071 (502) 762-2590

April 20-24; Summertown, Tennessee
National Coalition of Alternative Community Schools—Annual Conference
Keynote speaker: Herb Kohl. An international gathering of alternative educators, home schoolers and young people.
Contact: Jerry Mintz, NCACS, 417 Roslyn Rd., Roslyn Heights, NY 11577 (516) 621-2195, (215) 458-5138

April 22-23; Sonoma State University, California
Rudolf Steiner College—"Adolescence"
Workshop with Joseph Chilton Pearce and Betty Staley.
Contact: Rudolf Steiner College, 9200 Fair Oaks Blvd., Fair Oaks, CA 95628 (916) 961-8727

April 22-23; Breckenridge, Colorado
"Strategic Options for Reconnecting Youth"
Facilitating school change and restructuring. Public school teams invited.
Contact: Arnie Langberg, 1050 Sherman #311, Denver, Co 80203

Late April; Atlanta, Georgia
"Exploring Soviet and American Education: A Dialog Between Soviet and American Educators"
Dr. Alexi Matushkin, Director of the Institute for General and Educational Psychology, USSR, and other Soviet educators will be hosted by participants of the Soviet/North American project of the Association for Humanistic Psychology.
Contact: Jack Hassard, Georgia State University, University Plaza, Atlanta, GA 30303

April and May; Rockford, Illinois
"Educating the Whole Person" & "Soul Making"
Presentation by M. C. Richards, author of *Centering* and *Toward Wholeness* (an introduction to Waldorf education), April 15-16; and "Teaching for Intelligent Behavior (Helping Students Think About Their Thinking)"
Presentation by Dr. Arthur L. Costa on higher level thinking skills. Participants will learn about the planning, monitoring, and evaluating aspects of metacognition, May 4.
Contact: New Learning Institute, 1069 Lake Summerset Rd., Davis, IL 61019 (815) 248-4251

May 4-8; Sandy Lake, Pennsylvania
Institute for Earth Education—Third International Conference.
Experiential workshops on environmental education and IEE curriculum materials. Keynote speaker: Dave Foreman of "Earth First!" Open to members of IEE. For membership information:
Contact: IEE, Box 288, Warrenville, IL 60555

June 25-29; Fairfax, Virginia
"The Education Explosion: Lifespan Learning"
Focusing on human development from pre-birth to the senior years, this conference will feature an international group of distinguished educators and scholars, including Paul MacLean, Howard Gardner, John Goodlad, Bob Samples, Marian Diamond, and others.
Contact: New Horizons for Learning, P. O. Box 51140, Seattle, WA 98115

June 27-29; St. Paul, Minnesota
National Alternative Education Conference—"Educational Options, Today and Tomorrow"
Public schools of choice, programs for at-risk students.
Contact: Gus Bjorklund, Conference Coordinator, 529 Montrose Lane, St. Paul, MN 55116

July 31-August 6; North Bennington, Vermont
Prospect Center Summer Institute—"Children's Ways of Knowing"
Descriptions of children's art and writing; an approach to studying children and classrooms, emphasizing children's and teachers' strengths. Advanced seminar on "Ways of Knowing" (for those who have attended a previous Prospect program) July 31-Aug. 12.
Contact: David Carroll, The Prospect Center, P.O. Box 326, N. Bennington, VT 05257. (802) 442-8134 or 442-8333.