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Editorial

Adolescence: A Time Without Place

Martin Buber began his legendary *I-Thou* with the observation that as human beings, we live our lives in relation, not isolation. Whether the "I" in the "I am" is but one instance of a universal "I" — an "inlet to the great all" as Emerson would say — or a construct built of genetics and social interaction, our identity unfolds contextually. Whether we choose to withdraw from the physical world or to enter it with a sense of reverence and responsibility or to focus our energy on mastery of the environment, we define who we are in the actuality of life, not in abstract creations of mind.

These relational commitments, these modes of relation, give our lives particular form and substance. The attitude and posture that we hold as we address the world and have it address us shape our perceptions of the world and generate our actions. Often, these fundamental qualities of relation are so embedded in our experience of ourselves and of the world around us that they serve rather like eyes, as organs, rather than as objects of perception. The experiences underlie the judgments we make in the course of daily life while they themselves remain virtually imperceptible.

Our perceptions of the world and ourselves are made specific through the relationships we develop. Consider, for example, the evolution of the nature of the world and the identity of the self in the course of child development. Infants and young children normally live in a mode of relation that does not differentiate the world from self; there is unity. Normally, as they develop, they begin to differentiate themselves and approach others with an openness and respect that expresses itself most notably in imitation. Uncritically, young children view those around them as models for exploring and unfolding their own humanity. With openness and trust they refine the way they understand and address others, themselves, and the world.

As children grow, they often refine their sense of identity in terms of the characteristics of specific relationships. At various times the "I" in "I am that I am" is clothed in the experience of being female or male, brother or sister, intellectual or non-intellectual, athletic or non-athletic, rich or poor, black or white, and so on. They come to know themselves within complex constellations of difference from and commonality with others. They learn to see connection or dissociation, to seek compromise or control, to embrace or to cast away, to revere and revile. The "I" continuously develops relationally.

Similarly, children learn to refine their sense of the nature of the world in terms of their daily encounters. The world is thus defined by city streets where technology, in its widest sense, counts its triumphs and victims; they are learned in suburban malls where affluence breeds consumerism; in mountains and plains where nature offers tranquillity and turmoil.

Children are also tacitly taught to interpret and address the world through lessons at school where they often assimilate the belief that knowing demands detachment — a separation of the self from all else. Rarely are they given opportunity to consider the possibility that the doors of perception can be opened through imaginative engagement; rarely do they learn to see "the pattern which connects," as Gregory Bateson would say, and their place within it. In schools, children often are taught that knowledge is power rather than loving embrace, that "school" knowledge is empty and without reference to their experience rather than a rich source of insight and understanding. The point is not to suggest that schools must choose between diametrically opposed alternatives (balance, indeed, has unique virtue), but rather that they do foster certain modes of relation, certain types of relationships.

As children mature, the way they experience themselves and the world changes; their modes of relation and their relationships undergo transformation. Throughout this process, they redefine themselves, they discover and express new dimensions of themselves. As children approach

and enter their early teens, their physical, intellectual, and social capacities undergo such rapid and profound growth that they are forced to dramatically reconfigure the way they approach the world, their relationships with others, and, ultimately, their own sense of self. It is a time of extraordinary discovery and vulnerability, a time of previously unimagined opportunities and obstacles.

With newfound passions, intellectual skills, and physical abilities, the complexity of their relationships with others expands geometrically as do the consequences of action. Previous modes of interaction often prove inadequate to respond to or satisfy these new dimensions of self. New and more sophisticated forms of relation are necessary.

Historically, children at this stage of life have often been given some structure, some form through which they could develop themselves. The form may have been provided by traditional rites of initiation or parental authority, supported by the cohesion of a community, or established by the practical demands of family life, i.e., caring for siblings or providing financial support.

However, the past decades have witnessed an increasing irrelevance of traditional rites of passage, a profound decline of parental authority, a near complete erosion of community, and a basic dislocation of the adolescent as a responsible, productive member of a family. Paradoxically, the contemporary adolescent is left to develop his or her new capacities in an environment where he or she is not needed and where his or her actions are viewed as less than substantial. Often the actions of the adolescent are judged relative to his or her growth rather than the actual needs of a family or community. The central problem is that the contemporary adolescent dwells in a socially constructed vacuum. For many, there is virtually no meaningful context for relation — for a sense of connection, inclusion, or identification — except, perhaps, for the possibilities presented by association with other adolescents similarly adrift. The "I" in the "I am" is left alone, without mooring, as a stranger in a strange land.

Given these desolate circumstances, some adolescents attempt to create environments within which they can exercise their newfound intellectual abilities, passions, and physical powers. In many cases, adolescents gravitate toward gangs. Gangs can provide a comprehensive social context within which adolescents develop unique modes of relation and strong associations. They possess their own language, customs, and interpretative frameworks, as well as an immediate sense of territory, power, and security against the very real perils of a violent culture. As members of gangs, adolescents have pressing responsibilities to the group to protect itself and maintain its internal structure. Ironically, gangs as misperceived havens of physical and social security serve to escalate the very violence and isolation they are meant to combat.

In some cases, adolescents (in the solitary confines of a house or apartment dulled by television) assume responsibilities for siblings and have the opportunity to develop relationships that call upon them to develop newfound dimensions of self. Others, desirous of the potential richness of such ties have children themselves. Some adolescent girls see motherhood as a meaningful context within which to establish their identity. However, the actual needs of a child are often far more demanding and sustained than an adolescent can understand, and the actual responsibilities of parenthood overmatch the need for meaning and identity.

Whatever the specifics of the social environment adolescents create, their motivations arise from the vacuous social circumstances that define their stage of life in contemporary culture. Adolescents often respond by creating for themselves places where they can unfold meaningfully. Without such places, exhortations like "Just say no," or lessons in critical thinking, or training in vocational skills will resound in the adolescent like a voice in a vacuum; they will have no effect.

As adolescents seek clear identity and purpose, they often attempt to create *lasting and definitive* patterns of relation and relationships. They seek identification with others in a way that enables them to explore and express themselves in real and immediate terms. Their newfound aspects of self are a source of insecurity and, conversely, idealism — conviction unrestrained by doubt or "the odds." At no time in their lives will they be

more confident in their ability to know truth (whatever truth might be), to know what must be done, and to have the power to do it. Such idealism can be expressed, as in the examples above, by forming a gang or having a child. In their desire to unconditionally express themselves and seek their goals, many adolescents misperceive relationships of this sort as *lifelong bonds* of uncompromised *brotherhood, sisterhood, or motherhood* — as *indivisible communities* in which all members receive nothing less than *unconditional love.*

Perhaps, we as educators could effectively address our educational efforts to creating contexts for learning where adolescents can find connections between their emerging selves and the world around them. Perhaps, we, with the wisdom that comes with age, can help adolescents address the world and develop themselves in ways that will enable them to realize their ideals and nourish their soul over the course of a lifetime.

Perhaps, we could extend our efforts to include adolescents in environmental reclamation and urban "greening" projects where they learn to approach the world with reverence, wonder, and a sense of stewardship. Perhaps, we could extend our efforts to bring education out of the classroom and into the community to aid the homeless, the aged, the infirmed, and the young. In such cases, adolescents may learn something of the sanctity and dignity of the human spirit. Educational initiatives of this sort could open adolescents to modes of relation and to relationships that nourish them inwardly and inspire their idealism.

If Martin Buber is indeed correct that the "I" is never isolated but always bound in relation, then our educational task may be to create conditions and places where adolescents can address the world and others with a heightened sense of unity and purpose.

— Jeffrey Kane, Editor

psychoeducation

under the mats where the footprints tattooed me,
playing with my broken dolls:
a comic book world where the pain can not follow me;
brother go down on my (no don't you ask —

i trained my adoption to run for my couldn't
while i got nailed up for report cards and crime —
the finger bones smashed for (i did not i could not
but mommy still loves me and i need her back —

my friend is a box that can never desert me
Faster Faster — (i can't run —
i will not have you (don't) come over
birthdays die and sag, alone

the chair exploded when it hit the tv; screaming,
they murdered my memories, never to mourn —
leave me alone! (but they still never leave me —
my wins got forgotten in outfield and pound

"This is our special child — "
and this is how special really felt —

A howl from the middle class ghetto —
A whirlwind betrayed by neglect —
A shatter that left me no windows protection
(and don't you when daddy gets home —

you're ugly and recess goes on for forever
but books can be someone i love and can close;
they watched as i died (pick the spit off his forehead)
the gods i adored on the fields were false idols —

my only friend kicked out my legs,
but here i am, alive!

"But someday I'll be big and strong
and someday get them back — "

and what better words
could one shovel with dirt
on a child who can never grow up

—Jason LaConte
Age 16
North Merrick, NY

Dr. David Elkind

An Interview with Jeffrey Kane

In December of 1994, Jeffrey Kane, the editor of *Holistic Education Review* interviewed Dr. David Elkind, Professor of Child Study at Tufts University. Professor Elkind is an internationally recognized psychologist in the areas of perceptual, cognitive and social development, in which he has attempted to build upon the theories of Jean Piaget. Among his many academic distinctions, he serves as a member of the Editorial Board of *Holistic Education Review* and has been a frequent contributor to these pages. Professor Elkind has published over 400 articles, chapters, and books, including *The Hurried Child, All Grown Up and No Place to Go*, and *Miseducation*. In November 1994 he published his most recent book, *The Ties that Stress: The New Family Imbalance*. This interview focuses on some of the central themes of this book, particularly as they relate to understanding and working with adolescents.

Kane: In your new book, *The Ties That Stress* (Harvard University Press, 1994), you argue that patterns of child development vary in accordance with cultural shifts that redefine family and childhood itself. I was wondering if you might familiarize our readers with some of the trends in culture that you think are important in understanding child development in postmodern times — particularly with reference to adolescence.

Elkind: To fully understand adolescence today we have to appreciate how it was conceptualized in the past. Certainly, we have recognized adolescence as a natural physiological and anatomical transformation has been recognized from the beginning of recorded history. Aristotle wrote about it and it is described in the Bible. But adolescence as a stage of life having a unique social and cultural definition is relatively new. It was only in the last century that adolescents were given a unique role, namely, that of student. This in turn was a result of the introduction of universal public education and the necessity to have a more educated and trained work force. Not surprisingly this new definition of adolescents as students was reflected in our literature, in books like *Tom Sawyer, Huckleberry Finn* and *A Catcher in the Rye*.

The conception of adolescence as a period devoted to study and preparation for adult life was thus a construction of the later modern era which ended roughly at about mid-century. More recently we have begun to reconceptualize adolescence. Today we are more likely to view adolescence as a period of sophistication rather than as one of immaturity as was true in the modern era. Increasingly we see young people being treated as adults and expected to perform as adults. For many different reasons adolescents today are not given the adult mantle of guidance, protection and supervision so common when they were viewed as immature. And in some ways today's adolescents are more sophisticated than they were in the past. Some young people are dating at the age of ten, and many are experimenting with drugs and alcohol before they enter high school. They also have their own culture with their own music, language, and idols.

It is a whole different world for adolescents today than it was before mid-century. Over all there is much less adult involvement in adolescent life. High schools no longer provide the teacher-run clubs in debating, stamp collecting, gardening, and so on that were once the rule. Increasingly, the legal system is treating adolescents as adults. To illustrate, in some states the age for statutory rape has been reduced. In other states young people as young as sixteen may be tried as adults. Our society as a whole is moving away from the idea of adolescence as a period of immaturity requiring adult overseeing. Rather, we have begun to treat adolescence as almost co-extensive with adulthood.

Kane: There are two key concepts in this regard that you point to in your book. One is "competence," and

the other is "sophistication." Are children today, because of cultural changes, and attendant changes in the family, more sophisticated and competent? Are these attributes a function of our perception or actual changes in human development?

Elkind: Human development changes much less rapidly than social perceptions. To be sure, children are more competent and adolescents are more sophisticated today than they were in the past when children were regarded as innocent and adolescents as immature. Nonetheless the ascriptions of competence to children and of sophistication to adolescents is more a result of changes in the larger society than it is the result of changes in young people themselves. At any time in history how we see children and adolescents is more a function of society than it is the nature of young people.

To illustrate. In the early decades of this century Maria Montessori demonstrated that young children were quite capable of spending hours away from home and of teaching themselves to read and do math when the school environment was properly prepared. We did not accept her educational ideas because we needed to believe that children were innocent and were best nurtured by being with their mothers during the early years. In the 1960's, with the changes society and with women moving into the workforce in large numbers, we rediscovered Montessori. We came to recognize that young children can benefit from early childhood programs and can be separated from their parents for extended periods of time without undue harm. So social change forced us to appreciate that young children were, in some ways, more competent than we had given them credit for being in the past. At the same time, this new recognition of child competence was carried to extremes. Programs that profess to teach infants to read and do math abuse the notion of child competence. On the other hand, young children can benefit from high quality early childhood programs.

The contemporary conception of adolescence as sophisticated also credits young people with abilities that were probably underestimated in the past. For example, older adolescents are capable of dealing with a junior college type of education during the last two years of high school. Keeping this age group in the same sort of educational setting as younger adolescents underestimates their sophistication about courses, decision making, and ability to work independently. On the other hand, we also expect adolescents to be more sophisticated than is reasonable.

Sexual activity is a case in point. Although many more young people are sexually active than was true in the past, their knowledge about sexuality and their ability to handle this activity in a responsible way is limited. Only a third of sexually active teens use contraceptives and then irregularly. As a consequence there has been an explosion of STDs among adolescents.

Kane: When we say that children seem to be more "adult-like," are there differences between their "adult likeness" and the actual experiences and knowledge of adults?

Elkind: Yes, I believe there is. One of the ideas that developmental psychology teaches us is that when people at different age levels use the same terms, they can nonetheless mean quite different things. For example, one of my graduate students argued that his 19-month-old daughter had shown the feeling of embarrassment. He had walked into the room while she was engaged in playing infant, and when she saw him, she colored and gave up the activity — sucking the bottle. Although there were similarities to adult embarrassment, a 19-month-old does not yet have the elaborated sense of self that is true for older children and adults. Her embarrassment was that of an object self, and not yet of a symbolic or conceptual self. An older child, for example, might have tried to explain away her behavior.

Similar behaviors can have very different cognitive underpinnings. A physicist friend used to walk down the halls of the physics building at the University of Iowa with his four-year-old daughter. As they walked they would trade mathematical formulae. She had simply memorized the formulae but it appeared that she understood them. Similarly, children may use words and grammatical forms that are far beyond their intellectual level. Many young children can count correctly before they can correctly count things. We have to be careful not to confuse surface behavior with underlying competencies.

Kane: Regarding this notion of intellectual differentiation, I recently had a conversation with a few 16-year-old boys who were quite intelligent — capable of running intellectual circles around many adults. They saw themselves as competent, as having the kind of knowledge and experience they needed to make major life choices. They saw adults as incom-

petent in comparison because they believed that adults didn't possess their level of intellectual ability.

Elkind: They may indeed be more intelligent than some of their teachers. Nonetheless, they still lack the kind of knowledge and wisdom that comes from practical experience. Despite their intellectual brightness, they haven't had the social experience that would contribute to their social maturity.

We should not be misled because they are bright and can run rings around adults. In many cases, for example, adolescents who have been accelerated and graduate from college while still in their teens, take a few years off or spend a few more years in school until they are with peers of the same social maturity. We are social beings and not just brains. We have to appreciate that sixteen-year-olds, for example, are still sixteen-year-olds in many respects even if their IQs are in the stratosphere. They can still benefit from adult guidance and direction.

Kane: It seems like there's no substitute for time. One thing the adult has is a sense of life over time so that consequences play out over decades rather than over minutes or hours.

Elkind: Some things can't be rushed. Social experience is one of them. Very bright young people can master a tremendous amount of intellectual material very rapidly. As far as I know, however, you can't do that in the social and emotional domains. Social and emotional sophistication require both physiological maturation and a great deal of social experience and tutelage that cannot be hurried. People who mature very early intellectually and who don't make efforts to mature socially and emotionally are in for a difficult time. There are too many examples of people who are brilliant intellectually but whose emotional immaturity prevents them from reaching their full potential and a certain degree of happiness.

Kane: Well, it seems that we're putting adolescence under a new set of stresses because we're assuming they're more competent and sophisticated than they are. Why do you think this is happening in the 1990s? Is this a result of larger changes in culture or is it a change in the way families interact or is it both?

Elkind: I think it is both. Our society and our culture have undergone a real sea change. We are now in a global economy that has altered the way we think about ourselves in relation to the rest of the world. Instead of being superior to all other economies we are now competing to stay equal to Asian and European industrial powerhouses. Years ago, a blue collar worker in America could earn enough to comfortably support his family without his wife having to work. Today, even white collar workers are often unable to do that.

The family has changed as it mirrors the changes in the larger society. Since mid-century the sentiments, values, and perceptions of the nuclear family have, in many instances, been transformed into the sentiments, values, and perceptions of the post-modern permeable family. The permeable family includes not only the traditional nuclear family, but also two parent working families, single parent families, remarried families, adoptive families, gay parent families, and still other kinship forms. As the number of non-nuclear families has outgrown the number of nuclear families, our patterns of childrearing have changed. In the nuclear family, to illustrate, the mother was usually home when the children returned from school. We saw children as innocent and mothers as imbued with a maternal instinct and both perceptions reinforced the patterns of women not entering the workforce.

With the new family forms we appreciate that childrearing has to be shared not only between father and mother but also with non-parental caregivers. In turn we have to regard children as competent to deal with the many new demands the permeable family makes upon them for independence — say coming home to an empty house. Certainly, children are

Untitled

dearest balloon,
I do not know how to address you
gasbag sounds vaguely uncomplimentary
and not at all in accordance with my
feelings
airbubble my love sounds
rather undignified
a balloon beneath your fibrous elastic
body there lies a *Soul* yes
a heart of truth beats within you and lifts you
Your weightlessness comes not from
a feat of science
but
from a feat of the soul —
Apeace with yourself
O Christ balloon how did you do it?

—Karen Stork
Age 15
Lancaster, Pennsylvania

more competent than we gave them credit for being in the modern era, but they are often not as competent as we would like them to be. Unfortunately, it is not just the family that is making new demands upon children, but the schools and the media as well. While children might be able to cope with some of these demands, their totality is often overwhelming.

Kane: You mention the economy as one central factor. But there are others, for example, the impacts of technology and the women's movement, both of which for purposes of our current discussion have their origins in the 1960s.

Elkind: With respect to technology, one of the most significant changes is our inability, thanks to television, to control the information flow to our children. For example, after a mother in South Carolina killed her two children, parents began asking me what to say to their children when they asked "Mommy are you going to kill me?" At an earlier time children would not have had access to that kind of information. While children of all times have been witnesses to violence, they can now see how it is perpetrated all over the world.

Kane: Have computers similarly affected the dimensions of children's experience?

Elkind: Yes, I don't think we have begun to fully utilize the potential of computers in education. With any new technology we usually spend years using it to do what we did before — only more efficiently. But at a certain point we come to appreciate that the technology allows us to do things in an entirely different way than we did them before. In education we are still using computers primarily as word processors and number crunchers. We are just beginning to appreciate the computers' information accessing potential as, say, through the Internet and E-mail.

Kane: Do you look forward to that with any sense of skepticism or optimism?

Elkind: In some ways it is very positive. Unlike other technologies such as microscopes that extend our vision, telephones that extend our hearing, and machines that extend our muscles, the computer is the first technology to extend our minds, at least the memory part of them. Access to unlimited memory has great positive and negative potential. It means that, for example, a student sitting at a desk can have access to the greatest libraries and museums in the world. With this kind of information accessibility we can give every student the opportunity to gather information about particular subject matters on his or her own.

On the other hand we are human and the new technologies can also be used to serve our baser instincts. It is troubling to see how much pornography is available on computer disks and CD-ROMs and how much unnecessarily foul and violent language appears on the Internet. And there are the hackers who abuse their computer skills to take out their hostility on users whom they do not even know. Computers have great potential but they are not an unmixed blessing.

Kane: We have hand-held calculators that can be used in first grade classrooms through graduate schools to do basic addition through multiple regression analyses.

Elkind: As I suggested earlier, once we get beyond using computers to do better than what we did in the past, we will be confronted with a whole new set of educational questions: What do we present and when do we present it? What should we teach and what should we allow young people to gather on their own? We will need to learn how to teach information-gathering and information-sorting and information-discrimination skills. With so much information so readily available, the whole focus and thrust of education will move away from the simple transmittal of skills, knowledge, and values to the accessing and ordering of knowledge.

Kane: There's a whole new meaning to the words, "put on your thinking cap"! With the virtual reality of technology you literally could put on a multisensory thinking cap.

Elkind: Yes, particularly right now when we are in a period of transition. The young men you were talking about illustrate this problem. Many educators have not grown up with computers and are still wary of them (although many teachers including older ones have become exceedingly computer literate and even addicts). To adolescents who are skilled with the new technologies, some teachers and the often dated computer facilities of schools, seem quite ancient. They are disdainful because what is available at school is so limited compared to what they could be doing on their machines at home. Where many adolescents have progressed to the stage of

using computers for information access, many schools are still using them as a new way to do what they always did, namely did, namely writing and arithmetic.

Kane: Do you see this as having any particular impact on adolescents?

Elkind: Well, yes, I think so. What you were talking about with those young men, I see that all the time. What they're really saying to me is the educational system is outmoded. They say, "I know so much more than what is presented. This is really out of touch with me." Many of these kids have well developed computer skills; they know they can access all kinds of things, and the school seems to be antediluvian. It really seems to be a dinosaur to these kids, because it's so far removed from what they could be doing. They know they can go home to their computers and call up all this kind of information. They can do all this kind of stuff while the school is still operating in a way that is almost pre-computer. What these kids are saying is quite right. Their view of the world, their view of information, their view of education and learning is very different than what the schools are providing. The schools are still steeped in an educational system founded on a very different educational philosophy — one that has to grow out of an emphasis on so much information, so much memory.

Kane: Have you seen education primarily as an attempt to place into memory the knowledge of the culture? Could it be that education has also attempted to instill certain kinds of values, belief structures? If so, would the kind of information that can be transmitted or delivered through technology have distinctive qualities in terms of psychological dynamics?

Elkind: You cannot teach without teaching values. A teacher conveys values in the ways in which he or she deals with students. A teacher who is compassionate, fair, competent, and responsible provides a living example and model of those values. Obviously a teacher who manifests the opposite of those traits, models less admirable values. My guess is that the transmission of values in the age of computer education will remain the same. Indeed, in the computer age, the importance of the values the teacher examples as a person may well become more important as a counterpoise to the large amount of time young people will be expending working on computers.

I always have difficulty with those who want to teach values. Such an approach seems ignorant of the fact that values are learned through imitation and modeling, not through verbal activities. It is who and what we are as teachers that communicates values, not some verbal exercises.

Kane: As I'm listening to you I'm thinking back to Marshall McLuhan's notion, "the medium is the message." You seem to be saying that values come through the medium of instruction.

Elkind: Yes.

Kane: Would you say there's any particular message in technology generally, or computers or CD-ROMs in particular, as instructional media?

Elkind: The technology you mention uses exceedingly logical kinds of systems. Everything is very precise. You have to have the period in the right place, the comma in the right place. The message in technology is that you know you have to do everything just the way it's supposed to be done. There's no leeway; no room. Maybe some of the newer technologies in writing have some room, but I think one message is certainly that you have to be very precise. If anything, computers teach that message of precision, that you must do things exactly, that there are certain steps that you have to go through, that you have to follow the required order. Some kids who are like me, not particularly orderly, will have become very much more organized.

Kane: I wonder if the ambiguities and vagaries of life that give things context and meaning are inherent in our condition as human beings. Do you think some of that may be lost?

Elkind: Certainly, there are precise options where you can make clear, specific choices but they pertain to fairly constrained sorts of things. If someone views the world as a computer, a computer program, or something like that, then they're in for trouble because people don't operate that way in the real world. People don't operate in a very logical or overly orderly way. That's the way we pay a price for the memory that we have.

Kane: Maybe I'm putting things together here that I shouldn't, but I'm going back to an earlier part of our discussion when you talked about the intelligence that an adolescent might have as opposed to an adult — the difference being a certain kind of maturity.

You noted that such maturity comes from experience. If the lessons of experience are not reducible to precise maxims or axioms, I wonder if adolescents empowered by computers might expect that they don't have to deal with the ambiguities and the conditions in life that are not so easily represented in words or in logical principles.

Elkind: Some adolescents might acquire them that way. They might extrapolate from their limited experience and try to deal with the world in a very precise way. We have seen something similar before computers. Adolescents, thanks to their new mental abilities, are able to conceive ideals and contrary to fact conditions. And they believe, naively, that if they can conceive them they are immediately realizable. "If we can imagine a world without war, or poverty, or disease, why can we not achieve such a world." Only with time and experience do they come to appreciate the difference between ideals and the barriers to realizing them. With computers too, they might first insist that everything should be as clear and straightforward as computer programs and have to learn that the world doesn't work that way.

Accordingly, although computers give us access to vast amounts of information at speeds that are truly unbelievable, we still have the need for direct experience with people, places, and things. Even when we see pictures of foreign places on the video screen, this is not substitute for being there. When we are actually in a foreign place, we are surrounded by the sights, sounds, smells, feel of the place. We can't get that from a computer. This is a much more total kind of experience and a much more holistic form of learning. Computers cannot provide it.

We have to appreciate as well that much of our learning is, in part at least, unconscious. In contrast, all computer learning is necessarily conscious. It is very difficult to get at this kind of learning even when we try to do so by reflection. A gifted pianist, writer, or inventor will often have great difficulty in articulating how they accomplish what they do. The mind is like an iceberg, where the bulk is unseen. We are aware of only a fraction of our own mental processing and that of our students. Language is a case in point. There is a tremendous amount of mental processing that goes into our verbal productions and into our comprehension of the verbal productions of others but we are aware only of the results, not the process. Computers still don't help us get at this complex cognitive unconscious and we still need to explore and understand it.

Kane: I wonder if we can turn to the women's movement. Can we focus on the changing roles of women over the last several decades and how that has affected family and adolescence.

Elkind: Certainly, the women's movement was a reaction to what in the book I call the "old imbalance." In the nuclear family the needs of parents, particularly those of mothers, were subordinated to those of their children and often their husbands. Whenever there is a sustained need imbalance, there is some kind of reaction. Women, frustrated in being unable to realize their abilities and talents, began to abuse tranquilizers and alcohol. The women's movement was a much needed reaction to the old imbalance. Betty Friedan's book, *The Feminine Mystique*, dealt with this need imbalance which she called "the problem without a name." Friedan gave voice to the frustration many women felt at having to always put the needs of their children and husband ahead of their own.

Unfortunately, the women's movement among other things (the ease of divorce, the civil rights movement, the media, the shift in the legal system from protecting children to protecting children's rights) has contributed to what I call the new imbalance, the fact that in today's society the needs of parents and of the adult society are weighted more heavily than the needs of children and adolescents. This is not the fault of the women's movement, but rather the failure of the society-at-large to provide the affordable, accessible, and high quality childcare that is required when large numbers of mothers enter the workforce.

Childcare was, and remains, a major problem. It is not that children are going to be harmed by out of home childcare. We have many examples from around the world of children who are in quality daycare and who nonetheless flourish. In France some 90% of preschool children are in state supported daycare. In Israel, on the Kibbutzim, children spent only an hour a day with their parents and did not fare poorly. In China almost all young children are in out of home care without dire consequences. In all of these societies, it is the state that provides the quality daycare. That is something we do not do.

Kane: You seem to be focusing less on changes in the role of women per se, and more on the kinds of

coordinated responses we have — or haven't — created to deal with those changing roles.

Elkind: Exactly. Society is a complex system of interacting forces. You cannot change one part of the system without changing the system as a whole. If you are going to encourage mothers to join the workforce and pursue careers, then you must also make provisions for others to take over the childcare jobs mothers were performing. Perhaps it is because we accord the childcare role so little importance, that we failed to make adequate allowances for looking after them. But the answer is not to go back to mothers staying home. The fact is that we are in a post-industrial economy where brains are more in demand than brawn. Since women have as much or more brain than men, they will continue to be in demand.

Hopefully we will finally accept the fact that women work both within the home and outside of it. My cousin, Cliff Adelman, who works for the Department of Education recently published a report to the effect that women are the greatest unused resource in this country. Yet much of that resource continues to be underused because of gender bias, and unequal pay and job opportunities. We are changing, but all too slowly. Nonetheless, we not only need to appreciate the importance of women in the labor force but also the importance of accessible, affordable, and quality childcare for many different age levels.

Kane: Do you think that men have a changing role as a result of the women's movement in terms of childrearing?

Elkind: Yes there has been a change in our perception of men along with the change in our perception of women. We no longer subscribe to the John Wayne image of a tall, dark, emotionally blank hero whose words of endearment are "Aw shucks, mam." The model for the postmodern male is one of sensitivity and caring, as portrayed, for example, in the film Kramer vs. Kramer. It is now acceptable for men to take care of infants including the changing of their diapers. I believe that this is a very positive development for couples and for their children. On the other hand, the old image is not given up easily and we are currently witnessing a backlash against women. Many films now portray the psycho-bitch or the sexually harassing female executive. So the battle for gender equality is not over and we have to expect some rear guard action as some men who feel threatened by women in the workplace, fight back.

Kane: Do you see the changing roles of women and men as having any particular effect on adolescent development?

Elkind: Oh yes, we already seeing it. Today some young women feel comfortable asking young men out for dates and even paying the bill. In a less positive vein, young women are now committing the same types of crimes, armed robbery and burglary, that were once exclusively the province of young men. In the past, young women were most often picked up for running away or for vagrancy. That is a negative reflection of the new equality. More generally, I think young people of both sexes have a very different attitude towards relationships and marriage than was true in the past. Before there was enormous social pressure on young women to get married. And if they did not, it reflected on their attractiveness and femininity. Now young women are much more interested in their career options than in getting married right away. The marriage age has increased for both young men and young women; the average age of marriage is now 25 for young women and 27 for young men. Many couples now live together before marriage, something that would have been unheard of several decades ago. Changing gender roles, sexual mores, and available job opportunities have changed the pattern of male–female relationships within the society.

Kane: As a change of pace, I've jotted down a few words here and I wonder if you can respond to some of them.... Violence

Elkind: The subtitle of *Ties That Stress* is the new family imbalance. My argument is that in the postmodern permeable family, the needs of children and adolescents are weighted less heavily than are those of parents and adults. This is the reverse of the old imbalance that held during the reign of the nuclear family. In the nuclear family parents, particularly mothers, had to subordinate their needs to those of their children and husbands. Whenever there is sustained need imbalance there is inevitably an eruption. During the modern era women overdosed on tranquilizers and abused alcohol. The women's movement came about, in part at least, to redress this imbalance. Now children and adolescents are experiencing an imbalance and erupting as well. But children and adolescents take it out on

others as well as themselves. Teachers all over the country tell me that they are seeing more aggressive behavior on the playground than was true in the past. And I do not need to repeat the crime statistics on youth to illustrate how teenagers are reacting to the imbalance. When there is a sustained need imbalance, the victims either become self-destructive or destructive of society and we see both reactions among contemporary young people. For example, someone asked me the other day, about two girls who committed suicide in New Jersey. I don't know the exact details but apparently they both laid down on the railroad tracks and let the train run over them. At the risk of an egregious oversimplication, I would guess that some of the unhappiness that led them to take their own lives came from the feeling that their needs were not being met. Whomever they looked to for love, care, and protection were not there for them and they perhaps saw the suicide as one way of drawing attention to their situation. I believe that a great deal of self-destructive and violent behavior of young people from all social classes, races, and ethnic groups derives, at least in part, from a deep-seated feeling that the adult world is looking after itself at the expense of the needs of youth. This need imbalance does not hold only at the family, school, and community levels, but at the national level as well. We have built up a huge budget deficit that will continue to grow and be a huge burden on the next generation. Yet politicians of both parties are promising tax cuts that will only make the deficit worse. Young people could not be blamed for seeing this shortsighted fiscal largess as but another example of adults putting their needs ahead of those the succeeding generation. Certainly we need to look after the needs of the elderly but just because children and adolescents don't vote, their needs should not be ignored.

Kane: Love.

Elkind: To some extent our conceptions of love are socially defined. In the modern era, for example, we believed in the conception of maternal love. But that idea, that mothers had an instinctual attachment to infants and a biological urge to care for them, was also a social construction. It grew out of advances in medical technology that reduced infant mortality and removed some of the barriers to attachment (e.g., swaddling) that were erected when infant mortality was high. It was also, in part, a derivative of Darwinian theory. Now, in the postmodern era, the conception of maternal love is being replaced, or at least conjoined, with the conception of shared parenting. According to this new sentiment, the mother no longer has sole responsibility for childrearing, and this is shared with fathers, and other relatives as well as non-parental caregivers. Even the love between men and women is, in part at least, a social construction. In the modern era, the idea of romantic love was the most prevalent. According to this conception, echoed in our literature and music lyrics, marriages were made in heaven and there was only one person on earth you were destined to share your life with. Once you met this person, you would know it immediately and then you would spend the rest of your life happily foreverafter. Today, while the notion of romantic lover lingers on, the operational conception of amour is that of consensual love, a relationship that is mutually agreed upon and that is subject to termination by either party. Certainly there are abiding forms of love, such as that of parents for their children — despite egregious exceptions — but love is also partly a product of the social forces in play at any particular time in history.

Kane: There was recently a documentary that focused on gangs. One of the most fascinating questions was posed to a group of very tough looking young men and women. The interviewer asked, "What holds you together?" They responded "Love." They said that no one else loved them. Their response seems to resonate with what you said earlier about their needs not being met.

Elkind: This is a good example of the point I just made as well, namely, that forms of love are partly social constructions. At a time in history when the needs of so many young people — and this includes the need to be loved — are being subordinated to the needs of adults, new forms of love are likely to emerge. When young people do not get the love they need and deserve from the adults in their society, they turn to peers. It is, however, a different kind of love and will never entirely substitute for the kind of love gang members really want. That is why gang love is not enough to keep them from killing one another and acting out against society.

Kane: Existential aloneness. Being alone.

Elkind: There are several kinds of aloneness. One type arises naturally in development when young adolescents, for the first time, realize that their thoughts are private and that no one else is privy to

them. This is a heady discovery but also a scary one because they are, really and truly, alone with their thoughts. This is one sense of existential aloneness. There is another kind of aloneness experienced by young people at all age levels but which is more pragmatic. It is the kind of aloneness that was portrayed in a somewhat trivial way in the movie, *Home Alone*. In the postmodern permeable family, children and adolescents are simply on their own much more than they were the past. This is inevitable as our economy demands two-parent-working families and social sentiments and policies are conducive to the formation of single-parent families. To be sure, some children handle loneliness better than others, but generally today's young people are more alone and on their own than in the past and this is stressful.

Kane: As we move toward closure here, I wonder if you have any thoughts on educational issues such as middle schools and the way they are responding to needs of adolescents.

Elkind: The middle school concept was an excellent one, and it spoke to the fact that young people in early adolescence are different: They're growing very rapidly; they're all over the place emotionally and socially and need a very special educational program that's more suited to them. The idea was to use team teaching, longer time periods, and projects in which they could get involved — all of which made excellent sense. The problem is that too many schools are middle schools in name only. They've moved down from sixth grade to the fifth (with 5–7 or 5–8 configurations) and called themselves a middle school, but did the same things that junior high school did, which doesn't solve any problems. I think that we need somehow in the educational system to recognize that schooling has to change over the years. It can't always be the same; different models can be useful at different times. The middle school movement is really a very healthy one to the extent that genuine middle schools develop. I think such schools are great for kids because they speak to young people's need to be involved in something over longer periods of time, to have team programs and teachers, and to use different kinds of grading schemes.

Kane: You mentioned earlier that you'd like to see the last two years of high schools move more into a junior college format. Could you speak to that a bit?

Elkind: Well, I think that young people today are more mature in many ways. They're more knowledgeable about a lot of things. They're more sophisticated and they feel sophisticated. Many are sexually active. Many are knowledgeable about computers and information technology. They've been working in fast food places and they have that kind of experience, and they've been exposed to everything and anything on television. They feel in many ways more mature and in some ways they *are* more mature than the protected kids in an earlier period. I think that schools need to acknowledge that.

Schools are still run as though older adolescents are no different in their knowledge and sophistication than younger children. Yet they are more mature and better decision makers. I believe that students would feel that their new levels of knowledge and maturity are recognized in a more open educational setting comparable to that of the junior college. This would prevent, it seems to me, older adolescents from feeling that they are still being treated like children. In the modern era, when the high school as we know it, was first introduced society was different and we had a different conception of adolescence, namely as immature and in need of adult guidance and direction. The schools mirrored this perception. Today, although our perception of adolescence has changed and adolescents see themselves differently than they did in the past, we still maintain the same model of schooling. The contemporary high school is simply out of date and has to be restructured so that it is more in keeping with our contemporary perception of adolescence and the reality of their postmodern sophistication.

Kane: Do you think that schools should move towards a more socially integrated curriculum that includes such components as work service and community service?

Elkind: Well, many are offering these opportunities, and I think that's certainly a healthy thing. The problem with it is how you orchestrate it within the community. Community service makes excellent sense, but it needs to be done well. People out in the community have to want to do the mentoring, to do the monitoring. Kids also want to get something of value from the experience. They aren't going to earn much and in monetary terms it may not have much value, but working in hospitals and that sort of thing

I think is great. But it means that somebody has to take responsibility for it.

Kane: The last question I have relates not to schools but to parents. Given the many single parent families and two-parent families in which both adults work, what can they do to work with the stresses that are so common in adolescence?

Elkind: One of the things I talk about in the book is a movement from what was primarily unilateral authority in the nuclear family in which the parents pretty much laid down the law to one more characterized by mutual authority working on a more equal basis. My sense is that young people certainly have the capacity to make choices and need much more unilateral authority than we perhaps provide. They need the loving setting and they need someone to say "no" sometimes. Parents or guardians need to be more assertive in their adultness. As kids are growing, they make more decisions on their own, but while they're living at home certain values should be instilled. I'm not saying parents or guardians should be drill sergeants but that parents have to stand for something. They have to sit down with the kids and say what the consequences are and follow through on them. We have this notion of equality that we're all on equal terms where we say you can make the decision and you can do it, you're knowledgeable and you don't need me. That's an abdication of our parental responsibility. Parents or guardians can and should be adults with younger people in a very positive sense.

Stick Figures

Sit silently.
Still.
Alone or not.
It once in a while
becomes an imperative
of sanity.
The crackle of the turntable,
C,S,N & Y:

You are living a reality
I left years ago.
It quite nearly killed me.

Slowly wet,
running down and over
ruddy mountains,
gaining speed
until the edge
where it jumps
into an airy abyss...
a tear.

I won't argue right or wrong,
but I have time to cry, my baby.
You dont' have time to cry.

Solo,
a candle
licks at memories
floating around
like chaos-filled
bubbles.
Please do burn them, please do.

And the difference between you and me...
Everything.
Eternity.
And nothing.
Deep and intoxicated,
my body rises
as I breathe,
I can almost feel you.

Don't let the past remind us
of what we are not now.

Quiet, even sounds
calling back to life
pictures from the
olden days,
when anything was the only
outside demand,
and everything
the only inside desire.
Everything unfinished.
So cliché.

Too numb to bleed tears,
I comfort myself with false people,
I take a deep breath and look at him.
We fall asleep
back to back.

— Erin Crowdes
Age 17
Contoocook, NH

The Opportunity of Adolescence

John F. Gardner

Adolescent sexual abstinence permits the natural development of human abilities fostered by the creative tension between the intellectual and the sexual.

Many young people wonder why, when the sex organs are ready sex activity should not begin. In the case of animals, sexual maturity leads soon to sexual functioning. In the case of man today, however, biological readiness occurs 10 to 15 or more years before marriage. Has this gap a purpose? How should it be used?

My belief is that true readiness is achieved years later than the indications of physical development would suggest. Sexual activity before this time will prove to be exploitation, with the consequence of diminished vitality and longevity of function. Observation of life convinces me further that young people who achieve sexual continence and sublimation are far happier and more active, healthier and creative than those who take the allegedly natural path of yielding to sexual desires. There is also a most important further consideration. What youth does with its sexual powers has a direct bearing on the social future — the future to which all people, but especially young people, should be looking forward.

If we are to have any hope of restoring freshness, beauty, and strength to man and nature, an altogether new degree of insight and power will be needed. I believe that the required forces will be available only to those young people who make better use than their elders have done of the deteriorating civilization, but the power of renewal that alone can do the job has not been recognized. Unrecognized, it is being squandered, and with it mankind's best hope for the future.

The decline of culture is a matter of eyes being closed, hearts hardened, and wills paralyzed. This decline begins with the materialism that follows from intellectualism. Only intuition or vision, and not mere braininess, can discover the ideals for which all human beings yearn. Awakened intuition overcomes materialism and opens the eyes of spirit.

Much of what we call sex in mankind today is not biological in origin but is disappointed intuition. To strengthen and safeguard the intuitive nature that in modern youth seeks expression as never before

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should be the purpose of education. But what is happening in most schools is typical of both materialism and the fight against materialism. On one hand, great hopes exist for what could come from a better understanding of the mystery of sex. These goodhearted hopes lie behind the strong movement for sex education. On the other hand, materialism keeps jealous watch over its own. It has its own purposes for sex education. Precisely through the rationales of modern biology, psychology, and sociology as applied to sex, materialism expects to win the decisive battle against the only adversary able to overthrow it. By treating sex as a "perfectly natural" force and by teaching how it may be "reasonably used within a social context for maximum gratification" (thus diverting attention from the more than reasonable, more than natural power of development that sex actually conceals), materialistic sex education works in effect to sabotage the very hope it pretends to be serving.

Is sex education a good thing or a bad? There can be no unqualified answer. Who is the teacher? What is his philosophy of life? Perhaps it is not too much to say that many of the parents and teachers who are reticent about discussing sex with their children hold back not out of ignorance of the facts of life, nor from prudery, but because they sense that almost any word on the subject that is spoken only from ordinary conceptions, no matter how helpfully it is intended, falls short and can badly mislead.

Young people today are being taught to regard sex as something perfectly natural, when actually it is the most unnatural thing in all of human experience. True, it does make its appearance as a phenomenon of nature's biological process, a physical fact. But, like the iceberg, its greater part by far is unseen. Most of it is not to be found in nature at all. The full reality of what in human life is called sex is grounded in the supernatural.

If we may say that there is a supernatural aspect to all natural phenomena, not only sex, it remains true that in sex, the metaphysical reality most preponderates over the physical. In no field will the sin be so great as in the field of sex if the teacher's interpretation should fail to base itself upon the spiritual secrets lying behind the physical facts. To materialize sex by sex education, as we are systematically materializing the other phenomena of nature by our other courses of study, is the worst possible mistake and will surely be followed by disastrous consequences, both individual and social. Many feel it better to remain silent when, though they sense the holy mystery of sex, they cannot set a shining example in the mastery of it nor find adequate concepts in the repertoire of natural science to explain it.

Experience tells us that one who can speak illuminatingly of sex must be a wise man indeed. One who can speak confidently of it must be a hero. One who can speak of it purely is already a saint. Who thinks himself wise? Who can boast sainthood? Fools rush in where angels fear to tread, and when the blind are led by the blind, both fall into the ditch. Yet one cannot give up the attempt to remind young people of the transcendental possibilities of a force that is being squandered today precisely because it is undervalued. First steps can be taken only on the basis of a spiritual concept of the world that begins with moral self-development, for sex is an occult force in the most immediate sense. So-called sex conceals the highest forces of the human soul: those of vision, of love, and of creative power. Were those forces recognized in education, youth would be set on the path to overcome materialism. If they continue to go unrecognized, youth will destroy both itself and the future that could and should be.

The *ideal* of a long tradition among Western civilizations has been continence throughout the period before marriage. Recent theory tends to discount this ideal as unworkable and probably harmful. If nature is ready, the modern reasoning goes, it should have an acceptable, prompt outlet. Either masturbation or premarital intercourse, or both, should be regarded as wholesome. The arguments for early sexual activity are well known. They pretend to be science-based and their logic has the persuasiveness of simplicity. But they contradict the much older, religiously based traditions of Western culture. Where does the reality lie?

It seems to me that the older traditions of sound human development through sexual continence were realistic and deeply wise, but we obviously need reminding in modern terms of why this is so.

In the period between about 12 and 24 years of age, two powers are released in the human being: those of intellect and those of sexuality. These powers are mysteriously related, yet they stand opposed to each other. They confront one another as the higher and lower poles of human nature. Out of the tension between them develops everything that is best in man, indeed, everything that is characteristically human. This tension can and should be creative

in the highest degree: it should transform both sexuality and intellectuality and establish thereby the central core of man from which the mastery of both poles proceeds.

To understand the tension between intellect and sex, we must gain an idea of what each of these faculties represents psychologically. Sex is the will to combine; intellect is the will to distinguish and pull apart. Sex is warm attraction; intellect is what youth today calls "cool" — it puts distance between people. What should counterbalance sexual attraction, if this is to contribute to love, is the power of rejection that comes from the mind. Because sex is immeasurably deep and strong to attract and combine, so must the idealistic mind be strong to discriminate, individualize, and hold apart. Two main possibilities exist. The two forces can lay siege to one another so that both are entangled, and both are crippled. In this case, the robust warmth of life is quenched by intellectualism, while the intellectual mind is, in turn, invaded by eroticism. The better possibility, however, would be for the poles of human nature to approach each other not aggressively nor submissively but lovingly. In this case, each pole will sacrifice itself to experience the other. Each will deny itself for the other's sake, expecting to have its life returned to it in a higher form.

In such an act of love, thought-life waits until its abstractness has been transformed into pictorial concreteness, its coldness into warmth, its aloofness into intimacy, its desire to split parts out of wholes into the will to comprehend wholes in their indivisible unity. The corresponding act of love at the opposite pole induces sexuality to restrain its urge toward physical embrace in order to advance spiritual comprehension and to curb its imperious physical ardor, its immediacy of appetite, for the sake of considered judgment and enduring insight. Sex that allows itself so to be mastered, so to die into its opposite, rediscovers itself as intuitive love. What happens is that both mind and will are transformed by the pure power of feeling, which since time immemorial men have located halfway between the upper man and the lower — in the heart.

There is a most favorable moment for the kind of confrontation, interaction, and mysterious transformation we have described to take place. That is the moment with which we began our present inquiry: namely, the interval between early adolescence and the middle twenties. Sexual continence is one requirement for this transformation of faculties. A religious attitude of mind is the other. Best of all during adolescence can sexual vitality be drawn upward to enrich the heart with pure feelings of every kind. Then, although physical desire may be strong, idealism can also normally be stronger than at any other time of life. When, however, desire is allowed physical expression before it has been transmuted into pure feeling, a precious possibility is foreclosed: namely, the heart's possibility of growing larger and freer, gladder, and more creative. The heart loses the hope of that to which it most aspires: the chance to achieve a full measure of love.

Those who speak of a life according to nature and of the naturalness of sex should remind themselves that human nature at its best is by no means natural. Heretical though it be in these times to say so, truly human capacities are in a real sense anti-nature. They are won by triumphs over natural instinct and impulse. Clear thinking, for example, requires the stilling of natural movement, being in this sense more closely allied to death — than to life processes! Courage is a willingness to sacrifice one's natural

ME

Some people want to go to the moon,
me, I want to get out of the house.
Some people want to write a novel,
me, I don't want to write at all.
Some people want to read *Gone With The Wind*,
me, I want to read *Curious George*.
Some people want to learn to sing,
me, I want to sing off key.
Some people want to be in style,
me, I want to be comfortable.
Some people want a real cute "friend,"
me, I want someone who's nice.
Some people want to watch the fight,
me, I want to be in it.
Some people want to listen to what's being said,
me, I want to say it.
Some people want a nice, fast car,
me, I want something that runs.
Some people want to stay awake all night,
me, I want to go to sleep.
Some people want to frown all the time,
me, I want to smile some too.
Some people want to go through life,
me, I want to live it.
Some people want to take their time,
me, I want to get where I'm going.
Some people want to be something they're not,
me, I just want to be ME

— Angie Phelps
Age 15
Montpelier, ID

clinging to life; endurance is contempt for natural fatigue; altruism ignores natural self-interest; objectivity checks natural bias. By the same token, love is born when natural sexuality sacrifices itself to become a heroic idealism; and love is born again when natural, stand-offish intellectuality sacrifices itself to become a participatory consciousness.

Love is the marriage of body and mind, of will and thought. As much of the will as lapses into materiality and condenses to demand bodily outlet will be lost for love. The bodily will holds sway as a dark element below consciousness, a crude element below refinement, a self-seeking element below compassion. And this lower element that has failed of humanization and that represents an abiding counterforce against truly human nature will also create difficulties at the upper pole. There, above, it will leave stranded, short of life, short of warmth, short of power of realization, the abstract mind. Such a mind is in its own way as great a threat to human welfare as is unredeemed sex. As Schiller pointed out, the latter makes the savage; the former, the barbarian. Between savagery and barbarism the cause of humanity is lost.

The best possible preparation for young human beings to make the most of their adolescence and early maturity is a family life and a school where, during the elementary school period, all instruction is directed to the heart. In these years, an appropriate, articulate, vivid life of feeling — not sentimentality or any kind of sensualism of the soul — should be cultivated. This instruction calls for thinking done with love, for deeds of all kinds done with love. Such a warm-hearted, artistic, active approach to life will hold the powers of intellectuality and sexuality together long enough and closely enough to allow them to transform each other. Thus the youth can mature as a human being. If the young have been permitted long before adolescence to develop their capacity for feeling, when adolescence begins they will experience not a tormenting attack of sexuality but a mighty influx of interest and caring, of insight and creativeness. For such, the bodily aspect of sex will be born gently, gradually, and modestly. Intellectual power, on the other hand, will be born caring, imaginative, and intuitive. The two poles will remain in league rather than at war with one another. Both will serve the heart, where humanity has its throne.

The main problem for young people today is that they have no conception of what is possible in the way of human development. They imagine that the purpose of life is to use their inherited or acquired powers to accomplish something in the outer world, not in themselves. It never occurs to them that their greatest task is to conceive and bring themselves to birth as creative, self-directing human beings. They hardly imagine that, long after physical conception and birth have brought them *externally* into existence, their continuing effort must be to evoke in freedom and to construct with patience a whole being, their own, who will simply not exist if they proceed merely according to the *natural* maturation of their given forces in the given environment.

Man is not given his humanity. He must fight for it. His fight is against nature: to impose his will on nature, to take hold of nature and reshape it according to his own idea. When he feels lazy, he makes himself work. When he feels resentful, he tries to forgive. When he wants to run away, he elects to hold his ground. And when his body selfishly desires, he transmutes this desire to objective interest, outgoing affection, and creative helpfulness.

If only the young boy could imagine what it means ideally to be a man: the high daring, the humble service; the instant decision, the patient endurance; the fell attack, the gentle succor — the fearless championing, the compassionate shielding! If only the young girl could imagine what it means to be a woman: the eternal feminine that draws mankind ever forward toward beauty and romance, toward enlightenment and love, toward creativeness and salvation! Yet neither the truly masculine nor the truly feminine is an attribute of birth — neither is given, both must be attained, and that is what the years between 12 and 24 or so are primarily for.

Sexual appetite is the dragon confronting those who seek the treasure of full humanity. This dragon intervenes between the boy and his manhood, the girl and her womanhood. The dragon of sexuality can be disguised, embellished, romanticized, and allegedly tamed in many ways. He remains a dragon, the fatal enemy of all higher human development. It is, of course, not sex itself — not masculinity, nor femininity, nor the power of procreation, nor sex as the *pure* expression of love — that must be slain, but eroticism, amoral desire, impersonal lust, self-serving passion. The phoenix that arises when the beast has been slain without mercy is a transcendent force like no other, a force that unlocks all doors, lifts burdens, lightens darkness, warms what is lonely and cold, gives strength to the weak, heals the sick,

transforms ugliness to beauty. Under any disguise, the dragon is a man-eater; but sacrificed, he becomes the phoenix that brings peace, health, and joy into human life and into all the kingdoms of being for which man is responsible.

In a lecture on Wagner's opera *Siegfried*, Franz Winkler (1966) said that when the young hero slew the dragon, he gained three rewards. He acquired the ability to experience and understand the inner life of nature; he discovered his own task, his life's goal; and he could find and recognize his true life's companion, Brunnhilde.

Dr. Winkler's thesis was that by overcoming the dragon of erotic desire, Siegfried gained the power of intuition. First of all, intuition opened the secrets of nature to him, the language of beast and bird. Then, intuition showed him his own deepest nature and how it should relate itself to the needs of the world. And finally, intuition led him through illusory attractions to the loving soul of the woman meant for him.

Now a young person hearing all this might say: "I am but mildly impressed. After all, what is being said? Siegfried becomes a nature-lover! He finds work! He discovers his woman! With any kind of luck, I hope to do the same. I feel myself already capable of so doing. And there need be no dragon-slaying." But such a young person would have missed the point. Unable to break through the banality of ordinary conceptions, he would have missed the extraordinary drama of the idea Wagner meant to convey.

What is the significance, first of all, of the intuitive experience of nature as symbolized by Siegfried's sudden understanding of the language of the birds? Something is meant that goes far beyond the appreciation of most nature-lovers. For the victor in the battle with the dragon, creatures that had been merely observed come to be felt and understood. He finds himself related to all of nature's beings and events by ties of deepest sympathy and insight. The secrets that may be read in nature's living book bring him a gladdening, healing wisdom. As the "I" awakens to the "Thou" of nature, the experience of nature becomes participation in a divine drama. This brings to the soul catharsis and illumination.

To speak in terms of the needs and possibilities of the day now dawning, we can understand that those for whom opaque fact becomes luminous experience will be on the road to transform science. When science can apprehend value and quality, life and soul, as it now does weight and measure, the way will open for mankind to a wholly new culture. We shall witness the renewal of agriculture, of medicine, of education, of economic life generally, and of social relationships.

From imaginative, inspired, intuitive forms of science, a new art, too, will inevitably flow. The creative powers of cosmic nature will begin to work their wonders with original and unabated force in and through men, sweeping aside all that is presently trivial or perverse. Finally, in the culture where a new science, a new economy, and a new art begin to appear, religious experience will be renewed. Not only will men who perceive the world in God live creative lives of wonder and praise; not only will each such man learn the secret of human dignity as he finds the divine in his brother; but every deed done by men will be ritual and every material handled will be sacrament.

Nothing slight is indicated by Siegfried's intuitive experience of nature! And the same must be said for his other two rewards for subduing the dragon.

What does it mean to discover one's work? Certainly it does not mean to come simply to the idea that one will be a banker, a lawyer, a professor, or a businessman. For one thing, no individual who has the initiative, courage, and burning idealism to conquer much of the dragon of lower instincts will find

V. B.

For what purpose was I born? I don't see.
To speak words that no one will listen to
No matter how loud I shout them.
To throw up dates, and events
just as I recorded them and be pronounced
a genius? To sit through school day after
day and be referred to as a "good child"?
To hear things that I shouldn't and then be
instructed to forget?

For what reason am I living? To see
man destroy each other, and we listen
to them preach godlyness and good-will?
To take things as they are and never question?
To live a clean life, only to rot away in your
grave? To have things your soul desires, prohibited?
To be told God is good, but disregard the fact
that the world — his so called "creation"
is bad.

But these are thoughts I must
not think if I am to survive.

From The Me Nobody Knows *edited by Stephen M. Joseph. Copyright 1969 by Stephen M. Joseph. By permission of Avon Books.*

himself quite content to settle into any of the usual slots of contemporary life. He will find he has the *ability* for many callings, but none of them will at first seem either inevitable or fully satisfying. His problem, therefore, will be not that of casting about to see where he fits comfortably into the existing state of affairs but rather of coming to an awareness of his own deep-seated, creative intention — the dream that makes existence worthwhile for him, giving purpose to his life. And he will discover his work as a *calling* only when the intuitive knowledge of what he himself profoundly hopes is complemented by an equally vivid awareness of what external events require. Then, an earthly endeavor that is also a spiritual task will begin to develop, and his life will be on the way to shape itself as a work of art. What reality demands from moment to moment and in the long run will be, at the same time, his heart's desire. How great this fulfillment, and how few achieve it! How productive, happy, and peaceful the world would be, could men only work so!

To find the mate one can love for a lifetime and in eternity requires intuition too. There must be self-knowledge and self-activity of the deepest kind if the individual is to discover the soul that matches his own. Until he can sound his own clear note, the individual is unable to develop an effective sonar for locating those who belong to him and to whom he belongs. The same ability that discerns the spiritual in nature is needed to distinguish the lasting and true from the illusory and passing desires in the soul. It is this intuition that sees the essential being of another and binds us to that being in enduring love.

We are all powerfully drawn by sex, no doubt. But something lies still deeper. Our true longing is not for sex but for happiness of soul. Sex in us powerfully seeks to fulfill itself. But we ourselves seek for joy and delight. Sex is not our joy, though under certain conditions it can contribute greatly to it. It is when sex has been perfectly absorbed into what is higher that it makes its contribution to happiness. It then becomes, as it were, invisible. It is eclipsed and effaced in the heart's experience of joy. When the heart awakens in love, the body is taken up chastely into a holy mystery for true sexual love is as chaste as abstinence. To the degree, however, that high thought and feeling leave any physical detail physical, is happiness clouded and fulfillment still postponed. The fact that the ideal relationship of romantic love is achieved by few makes it no less self-evident, desirable, and effective as an ideal.

Nowadays, of course, chastity has the sound to many people of "pure" but "pale and cold" — perhaps good, but anemic and unproductive. Materialistic thought habits make chastity seem the deathlike impalement of a living being upon an abstract ideal. At best, chastity is regarded as a kind of suspended animation. But let us remember that vegetative nature is chaste, and she brings forth so fruitfully as to be the very symbol of abundance. The growing, flowering, fruiting kingdom of the plants is truly chaste yet so creative and dynamic that all other living things find in it their sustenance and their enjoyment. From it we human beings draw our food, shelter, medicine, and hearth-fire.

Praise of chastity must, of course, make youth look at its parents and teachers and wonder. The young people must wonder, for example, what there is about marriage that allegedly sanctifies sexual activity. And they must wonder why, if parents have been chaste in youth and are now sanctified in the matter of sex, they yet remain as human beings so often uninspired and uninspiring.

Youth's thinking will be sabotaged right from the start by one mistaken assumption: the belief, namely, that the adults who are in charge of morality actually represent the path they profess to believe in. Youth inclines to be idealistic about any matter on which it is not informed, and it therefore generously imagines and hopefully supposes that most respected adults have kept pretty close to the straight and narrow in regard to sex. How, then, can these grownups be so uncaring toward nature and generally uncreative and undiscerning toward their children? How can they be so unresourceful in dealing with the great problems facing mankind, so often petty and mean to each other?

It is, of course, not true that marriage sanctifies sex. Impurity remains impure, and impurity has consequences, in marriage just as outside it. Sexual activity is impure to the extent that it is not transformed, quite transfigured, by love. Love is a high name for affection that is contrite, trusting, worshipful, courageous, magnanimous, rejoicing — and whatever else is needed to purge it of selfishness.

Most marriages are not so fortunate as to be built on an adequate foundation of love. Most children are not conceived out of well-developed love, and they carry for life the resultant physical and psychological deficiencies and distortions. They will likely confront

temptations, too, that they could have been saved. A happy marriage means sunshine in the home. Sunshine is sweetness, clear light, and cheerful warmth. The reason so many marriages are not sunny is that green love never had the chance to mature before its further development was checked by physical expression through premature sexual activity. Love never established its full power. It remained too tentative and weak to draw selfish desire into the orbit of innocent happiness.

In most marriages, something is always left unredeemed, and it is this dark, unhappy element that accounts for the qualities children object to in their parents: the dull-clod syndrome as well as the anger and cruelty. Most simply stated, innocent love is true love and it guarantees sunshine in the home; but the aftermath of desire, in marriages as out, is darkness of mind and coldness of heart.

One may risk the generalization that marriages will be unhappy when the 12 or 14 years before marriage failed fully to serve the purpose for which they were meant. Such a failure is very general in our time. It can be traced, if one wishes to pin blame, back through the generations of any particular family. Or it can be seen as the result of impersonal factors in present-day culture. Certainly the many aspects of modern civilization that militate against love are at their worst just now. From the very midst of this worst, however, something quite new and most hopeful is springing up. This new hope appears in the form of a redoubled idealism among young people — a will to change and be changed. The new purpose will bear fruit in the kind of love that makes either marriage or celibacy happy and that fills life with blessing, *if* it does all it can during young manhood and womanhood to safeguard the magical power concealed in sex.

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Childhood Into Adolescence

Furnishing the Adult Mind

Jane M. Healy

Through an understanding of the development of the human mind, teachers and parents can learn how to help guide a child into adulthood.

The growth of a child's mind toward the capacity for adult thinking is one of the most intriguing and important puzzles of brain development. Nature builds the framework; it is up to the child, parents, and school to complete the walls and do the interior decorating. Throughout childhood, development moves upward from the basement of reflex response toward the highest levels where the frontal lobes take over. At least 20 years are needed to finish this process, and for adults with active minds, the job may never be finished!

Children need time to practice with fancier mental furnishings at each stage of development. The more they use the equipment, the more comfortable they become with it — and the better their base for the next level. The middle elementary years are an important time for consolidating early foundations, because sometime after age 11, the mind's top floors become available for occupancy. New types of thinking are suddenly possible, but the view from the penthouse is often scary and confusing. Let's explore some of the perils — and the wonders — of the fascinating years that mark this transition.

Mental Growth in Action

One bonus of my job, working with students at all grade levels, is the opportunity to see mental growth in action. For a bird's-eye view of children's thinking, consider these responses from different ages to the question "Why do we have laws?"

Age 6:

Suzie: "Because some people eat bubble gum and it's not fair if some people have it and others don't!"

Peter: "If you're driving too fast they might give you a ticket."

Ricardo: "Because you might get hurt."

These children are all delightfully concrete thinkers, but there are some interesting differences in their answers. Suzie's answer is typical of a younger child

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— caught by a personal, very concrete experience. Peter has moved on a bit, pushing out beyond his playground to one particular law. Ricardo manages a rudimentary generalization. Such different levels of abstraction are common at age six and seven — an important transition point in children's ability to grasp generalizations that go beyond concrete physical experience.

Age 10:

George: "If we didn't have laws people would go out and steal things. Car crashes would be to often because people wouldn't stop for red lights. Other people would shoot each other."

Naomi: "We have laws because if we didn't then the world would go biserk. If we didn't have laws like 'Don't Litter' or 'Don't Fish Here or 'No Hunting' then people won't know if their supposed to do this or that."

Ann: "Laws were made to protect us and to keep the world or our country safe."

These typical ten-year-olds wrote their answers — and their spelling is, as always, just as interesting as their ideas. Notice how this age level loves rules, law, and order — one of the hallmarks of late elementary years. Having absorbed a lot of information about the way the world works, they are still inclined to relate ideas back to concrete personal experiences. Ann is one of the few in the class who managed a more abstract statement. At this age, there is usually less variability than at others. Let's see what happens in three years.

Age 13:

Tyrone: "We have laws to keep control of people. Laws help us to be safe. They teach us to follow directions and obey them. If you do not, you may be severely punished just as in school."

Kate: "The main reason is to keep this world under control. For example: an eleven year old boy could go into a bar and ask for a vodka, but since there are laws they prevent 11 year olds to be able to do that."

Bianca: "Laws are very important to have in any form of group. They protect people from others. No one or group could or would survive without them. If we had no laws we would have no rights."

Franklin: "We have to run by some sort of guidelines to live by and to run our society in an efficient way. If we did not have laws, we would probably be the only animals that would not have some sort of system."

Welcome to adolescence! Notice the striking contrast between two students' personal, concrete thinking (Tyrone, Kate) and near-adult perspectives on society's needs and universal principles (Bianca, Franklin). The rigid law-and-order emphasis of middle childhood (rules should be followed so you won't be punished) eventually gives way, for most teenagers, to larger perspectives (laws are necessary for the survival of a society), but timetables for this change vary dramatically. How would you like to be a teacher trying to plan a lesson to interest every student in this class? Something exciting is taking place, but it hasn't fully happened to everyone. Can brain development be the key?

Everyone knows that the physical changes of adolescence are important. Neurological changes may be just as critical, but researchers are only now getting interested in the brain's transition from concrete to abstract reasoning. This article will summarize the most current information, give you a look inside some schools, and suggest ways parents and schools can collaborate on helping with the job.

Finishing Childhood: The Years from Nine to Eleven

"School's OK, I'm OK."

Ages nine and ten are a relatively calm period for many children. As academic skills from previous years are practiced and refined, most students feel capable and in control. The brain strengthens its abilities for learning, as myelination of fibers speeds associations between senses and ideas. Late elementary grades are an ideal time to apply skills already learned. Reading to learn replaces learning to read; math becomes useful in the shopping mall or on the computer. Repeating skills and rituals lays a solid base for moving on to new challenges.

Many children at this age love to soak up information and memorize facts, but they may not reflect very deeply about them unless an adult guides them. They painstakingly copy paragraphs for reports but have difficulty paraphrasing them. Lots of practice is needed — and probably some help with organization and understanding. Above all, older children need plenty of time for their own brands of play. They still learn best by starting with concrete experiences. The most helpful parents and the most successful teachers capture their wide-ranging curiosity in active, project-oriented learning.

Hands-on justice

Parents can encourage teachers to exploit this delicious moment between childhood and adult learning abilities. One creative teacher got wonderful results when she departed from the regular curriculum. Noticing that all her "sophisticated" nine-year-old girls were bringing their dolls to recess, she wisely figured they were expressing a need to be children for a little while longer. As she eavesdropped on the doll society, it was rocked by an argument over playground territory (remember the reptilian brain?). The girls set up a "court" to mediate the dispute, and soon the boys began to take sides, although no one was too clear on the judicial process. Sensing a golden opportunity to blend "play" with learning, the teacher rewrote her unit plans and suggested the class investigate how courts work. In the following weeks they searched out books and newspaper articles to discuss in class. Each child worked on an independent project. A lawyer-father came to discuss his experiences in court and answer questions. Parent volunteers organized a visit to a real courtroom, where the judge was so impressed with these young scholars' knowledge that she let them sit in on a trial and took them on an unscheduled tour of the justice center. Finally, the dolls' own court was held, and the classroom newspaper proclaimed the result — a hung jury.

Stretching the brains of preteens

Not all teachers are this imaginative or hard-working, but all need parents' support if they try to flee now and then from the tyranny of workbooks and from artificial standards of "competence" that put limits on intellectual curiosity. Learning prompted by personal interest works best at any age. Such "real" experiences are particularly important in late elementary years because students need help with abstract concepts such as "justice" or "law." At home, parents have an important role in seeking out opportunities to supplement the school's efforts, capitalizing on children's ready curiosity for mind-stretching conversations, family trips, and activities. The following list may give you some ideas. My book, *Is Your Bed Still There When You Close the Door?*, will give you even more.

- Help youngsters begin challenging literal fact by asking questions such as: "Why do we go to school only on weekdays? Why five days a week?," and "Why shouldn't people steal?"
- Let them see that there are many points of view on issues and probably no one right answer.
- Play games with open-ended questions. Ask what would happen if every day were Monday? if automobiles were declared illegal? if computers needed to be fed three times a day? Or ask, "What would you do if we won the lottery? we lost all our money? you woke up one morning seven feet tall?"
- Help them articulate their feelings and don't be afraid to talk about yours. ("I really felt scared when I thought Grandma was seriously ill. I bet you did too.")
- Play games of strategy that require weighing alternatives, planning moves ahead, or viewing a situation from the opponent's perspective ("Stratego," "Battleship," chess, checkers, gin rummy, hearts).
- Play "Twenty Questions." Show how to ask categorical questions. ("Is it an animal?" rather than "Is it a dog?")
- Practice allowing the child to make some reasonable choices and to experience the natural consequences. ("If you use your allowance on the album, you won't have enough to go to the movies on Saturday.") Don't weaken and bail them out of minor consequences.
- If your child has trouble understanding a school assignment, look for a way to present it with pictures, timelines, maps, or objects that can be manipulated. Have fun acting out ideas or situations. Your child still learns best from concrete experience.
- Get a book of simple science experiments and try some at home. Talk about possibilities of what might happen. Make guesses together, without worrying about who's right or wrong.
- Have dinner together and talk with your child. Watch TV news together and talk about what happened. Listen to what your child is saying. Teachers are convinced that good family conversation times produce good students, and psychologists know that parents who are good listeners tend to have better-adjusted teenagers.
- Don't stop reading aloud. Encourage memorization of fine poetry or prose. Try round-robin family reading.
- Appreciate those childlike qualities even while you help preteens stretch. Remember, they still reason differently from you.

Stumbling Blocks to Learning

Although brains work quite smoothly for most children of this age, two common and baffling quirks may show up.

A problem of output

Some children are fine until required to write something down presentably. They understand and reason as well as anyone else but can't "get it together" for homework or written assignments, which may resemble a childish-looking mess even after hours of effort. One young friend of mine, Jules, had trouble from early grades, when he couldn't organize his fingers around a pencil. He always found writing slow and frustrating — even though he was one of the brightest children in the class. Jules was clever enough to "con" every teacher out of assignments until he arrived in the middle school unable to write a sentence. By now he had a double problem: slow development in specific motor skills plus avoidance of normal amounts of practice. His parents became really worried and altered their busy schedules to help him every evening. Pitched battles ensued as they pushed and Jules dug in his heels.

Luckily, Jules attended a school where special help was available. At his parents' request, he was tested by a psychologist who confirmed a high IQ and a specific learning problem that affected organizing and writing down ideas. The psychologist leveled with Jules and they developed a plan together. His teachers were asked to shorten some written assignments for a while but to insist that Jules keep up his end of the bargain and complete them. He was encouraged to shine in oral reports and class discussions. His parents were counseled in understanding his difficulty and helping him plan homework time and proofread assignments without taking over his share of the responsibility.

As the tension eased, Jules began to try harder. He began using a word processor for long assignments, and neurological maturation gradually closed some of the gaps. He still writes the bare minimum, but when I saw him in the hall recently, he confided that he had decided it was "worth it" to keep trying.

It is not too late for such early difficulties to be overcome in the middle grades if parents and teachers work together. Like Jules, many students suffer from what Dr. Melvin Levine calls "developmental output failure." Particularly with bright children, it may go unnoticed until emphasis on "decoding" — reading words — changes to a need for "encoding," which requires organizing, remembering, and restating information. Neural systems for input are working just fine, but immaturity in another part of the nervous system causes trouble at the output level. Such youngsters also have trouble organizing themselves, their possessions, and their thoughts. Pulling together information from many sources, managing time and materials, and handling heavy demands on memory may be too much for them.

Calling such a child "lazy" makes the problem worse. Having seen many boys and girls like Jules, I believe that this problem is one of the most pervasive — and difficult — of the middle childhood years and may also be a hidden cause of so-called underachievement, attention deficits, and problem behavior later on. Not all schools are as enlightened as the one Jules attends. Many teachers, and even some psychologists, are not informed about this type of learning problem, so parents must become the first line of defense. Help from a specialist may be required — and it may be necessary to search around to find someone who understands the neuropsychological aspects of learning. Meanwhile, don't let a child like this develop habits of "lost" homework and deception ("The dog ate it." "It blew out of the school bus."). Understanding children's problems does not mean we stop expecting anything from them. Here are some points to keep in mind:

- Some neurological differences, particularly in later-developing parts of the brain, may not show up until those areas are called upon for new kinds of school learning; when children run into trouble in middle years, do not rush to blame the teacher or the child.
- Be alert for a negative change in attitude toward school or avoidance of homework or classroom assignments.
- Make yourself available to help with assignments that are genuinely difficult for your child.
- Keep in close contact with the school and ask for the teacher's advice about helping at home. You may need to help organize study times, assignment books, and long-range projects.
- If problems persist, get an evaluation from the school psychologist or a learning disability specialist.
- Ask the school to provide special support services or modify demands for written output. Keep the child's ego intact so that he can compensate for his difficulty.

- Your hardest job will be to let the child suffer the natural consequences if he falls down on his end of the bargain. Refuse to own his school responsibilities if they are reasonable.
- Be patient! If a task is genuinely hard, your child suffers enough from feelings of "stupidity" when he yearns to be competent. Remind him and yourself that, even in very smart people, all parts of the brain do not grow equally fast, and some need time and extra practice to do their job.
- If you cannot work with your child without damaging self-esteem (even the best parents get into "scenes"), find someone who can. Look for a tutor who understands this type of problem.
- Remind yourself that children are not by nature lazy!

The homework issue

Supervising schoolwork at home puts parents on a tightrope over two fearsome chasms. On one side lies the danger of making a child overly dependent, negative, or downright defiant; on the other lies school failure. What a choice! While perfect solutions are, as always, only dreams, here are some suggestions that have helped other parents.

Rule No. 1: Wait to be asked. If neither your child nor his teachers ask for your help, it probably is not needed. Trying to force a child to work with you may short-circuit his desire to come to you in the future. If you sense trouble, make an appointment with the school for advice. Remember that schoolwork is the territory of the child, who needs to feel responsible and in control.

Rule No. 2: Be available and supportive when help is requested. Your attitude toward the importance of homework will shape your child's. If a TV program is more important to you than his need to practice multiplication tables, don't be surprised if he agrees.

Rule No. 3: Focus on process, not product. Often the ultimate product (the answer, the perfect paragraph, one day's assignment) is secondary to the process of learning. Think about the learning you are encouraging:

a. "If I whine enough, I can get someone else to do my work for me."

b. "Every time I ask for help, we wind up in a fight because the whole thing isn't perfect enough."

c. "It was sort of fun figuring out the answers, even though neither Dad nor I really understood the questions at first."

Rule No. 4: The final product must represent the pupil's work. Don't deprive your child of valuable learning because you're afraid of a bad grade. You won't get invited to go along to college or a job.

Rule No. 5: Children are often hardier than they would like us to believe. If assignments seem unreasonably long, check the following: Can she organize time effectively? Are study times at school used productively? Are telephone conversations interfering? If the child is truly overloaded, a conference at school should be scheduled with you, your child, and the teacher present to discuss the problem.

Rule No. 6: Let him fight his own battles whenever possible. Your moral support is essential, but it is the student's job to learn to get along with people in the world — including teachers!

Rule No. 7: Provide the tools necessary for success. Your child needs a quiet, well-lit place to study, a regular routine, and a moratorium on weeknight TV and video games until homework is satisfactorily completed. Be tough; this is important. Older students also may need a tape recorder, typewriter or word processor with a spell-checker, a good dictionary and thesaurus, and transportation to libraries if they give you advance notice.

Rule No. 8: You don't have to know everything. Parents feel uncomfortable when they don't know everything, but admitting your confusion and working problems through with your child may be the best teaching you can do. Even if you don't get the answer, you have both experienced "cognitive dissonance" — the basis for the most lasting learning.

The enigma of automaticity

Another sticky wicket for some children during these middle years is getting "automatic" on basic learning skills. Automaticity is at the heart of most daily behavior, helping us tend to routine matters so our brain's working memory can deal with more challenging problems. For example, most people can wash dishes or pull weeds at the same time they carry on a conversation. When driving a car along an uncrowded freeway, they may plan a dinner menu or listen to a talk show. If a truck roars into view, however, neural control of driving instantly moves up from automatic to the "thinking brain," and everything else is pushed aside.

Most adults can listen to a lecture and take notes without using much of their brains to spell words or form letters, but if they must write an unfamiliar word with several syllables, they may temporarily

lose the speaker's message. When talking, most people give their conscious effort to the ideas they want to get across. Some children have difficulty forming or using well-worn neural pathways for such "easy" tasks.

No one really understands how automaticity develops. Infant brains are busy starting a base of automatic connections as they absorb knowledge about the frequency of normal events and what can be expected in everyday situations. With practice, most learning probably becomes condensed or reallocated to different areas, leaving the cortex free to work on more complicated problems. If you had to devote conscious awareness to how a book feels in your hands, you would miss a lot of the content!

Automaticity is essential in school. Instant recall of phonics and a basic core of "sight words" underlie rapid reading and good comprehension; if higher thinking centers are cluttered up sounding out words, fluency and understanding suffer. A youngster who stops to worry about spelling or letter formation when writing a word will have trouble writing originally or taking notes in class. In math, addition must be automatic before multiplication becomes easy. Middle childhood and early adolescence are the most critical times to firm up automatic skills before the child is besieged with higher-level processing demands.

Making learning automatic

- Children differ in the ease with which they master routine skills.
- Different types of automaticity are learned at different ages. Babies and young children must get an automatic feel for their bodies and space and for taking in and understanding sensory information. School years are the time to practice academic skills, and even adults must work hard to get new learning effortlessly embedded (e.g., your golf swing, a new foreign language).
- Remember that a child who is using cortical energy on poorly automatized "basics" will have little left for reasoning or comprehension of the task.
- Repeated practice seems to be the key to automaticity; children learn to read by reading, to write by writing.
- Drill and practice are more effective if they are varied, however, because the brain responds to novelty. Sensitivity to the child's response helps balance these competing needs.
- Synapses may get "tired" with repeated use over a long period of time. They need a short rest before becoming effective again. Changing activities for a while unblocks the pathways.
- If movement, emotional content, or personal interest is combined with practice, memory should improve. Long periods of boring repetition may cause daydreaming as higher centers seek stimulation.
- Positive feelings improve the chemical environment for efficient learning. Middle grade children love any concrete evidence of their own progress (e.g., keeping individual progress charts or portfolios of a year's work).
- Physical exercise increases chemical connections in the brain. One teacher published a study reporting students' improved word-reading speed and accuracy after a daily jog on the playground. Adequate sleep is also essential for formation of memory traces in the brain, and good nutrition is important for all learning.
- Computer drill and practice promote automaticity. This type of learning should not replace original problem solving, however, because there is a difference between automatic and conceptual responses. All children should be encouraged to develop proficiency with original thinking and reasoning as well as with memorized skills.
- Some people are better than others at "incidental learning." Even when concentrating on one task, they pick up and remember extraneous details. A child who is encouraged to be actively curious, investigate, and notice details may get in the habit of picking up more information than a frightened, passive child who is stifled by fears of being "wrong."

Beyond automaticity: Parents at school

Children who achieve automaticity easily are not necessarily smarter, but it is ridiculous for them to spend time drilling on material they have already mastered. Late elementary years are a prime time for everyone to enlarge vocabulary, investigate scientific and mathematical challenges, and participate in creative activities. Because of myelination that links different cortical areas, activities connecting language with the arts may be especially appropriate here. If your child is stuck in a classroom where drill and boredom replace intellectual stimulation, you should consider carefully whether you ought to become involved — tactfully, of course.

Children older than age nine are mortified if their parents hang around school, and you should beware of fighting their battles for them. Nevertheless, a teacher with a large class will sometimes welcome specific offers of help. In one school, volunteer parents developed a reading club and led small book discussion groups. Field trips and theater and museum visits can be initiated by parents, as can career talks by adults in different vocations. You might explore possibilities of creative drama, puppetry, debate, or a videotaped production.

The issue of parent involvement in schools is a sensitive one; the child's need for autonomy is just as important as his need for intellectual stimulation. Some families prefer to concentrate on developing a home environment that encourages intellectual excitement and creativity. These years are a good time for refining artistic skills, and lessons in music, dance, or sports provide a base for future achievements. There's another trap, though — the insidious danger of overprogramming and getting hung up on "child as product."

Perfecting the product

Several years ago, I was leaving school one afternoon when I saw a forlorn little nine-year-old shape hunched on the curb near my car. "What's the matter, Celia?" I asked, wondering what had reduced one of our most promising students to such a pile of misery.

"I missed my ride, and no one's home, and I'm going to be late for ballet," she snuffled. Naturally, I drove her home so that she could change clothes in time for her next carpool. "You must like ballet," I ventured.

"No, I really hate it, but my mom wants me to be good."

Deciding to change the subject, I asked, "What do you like to do best?"

"I don't know. I have ballet on Monday, French on Tuesday, gymnastics on Wednesday, art on Thursday, and piano on Friday. Sometimes I wish I could just not do anything."

Celia's parents had fallen into the trap. Like many couples, they were both successful in business, accustomed to setting goals and measuring achievements. Trying to give their daughter the best chance, the most competitive edge, they arranged an "enriched" environment that ultimately convinced her that she was loved mainly for her measurable accomplishments.

These attitudes carried over into schoolwork. Celia's teachers worried about her compulsive concern over grades and her lack of time for relaxation. One of them said, "What that child needs most is to forget about her schedule and go sit under a tree for a while. I don't think she has any idea what a wonderful little kid she is — she thinks her parents love her only because she's good at adult sorts of things. I keep telling her it's okay to be a child, but she doesn't know how!"

Celia is now a straight-A student in high school, but she recently wrote a theme about the price of perfection — her obsessive inner pressure to perform "not well but brilliantly." She feels "special" only because of her academic success and will "stay up all night studying if it means the difference between an A minus and an A." Her worst fear is that one day she will lose "whatever I have that makes me special and capable of achieving that which others cannot." She confides, "I am not sure I will ever be satisfied, and that is, perhaps, the most terrifying thought I have ever had. The panic caused by the idea of failure is overwhelming. I only hope that one day I will be free of it."

Externally, Celia is a perfect product. What a tragedy that she has never learned to feel "special" inside herself. Her story is a good reminder that the most central — and most elusive — element of finishing childhood may be simply for parents to appreciate it while it lasts.

Understanding the Adolescent Brain

Furnishing the frontal lobes

Somewhere around age eleven, dramatic mental events start to take place. Having mastered the world of objects, the early teenager must move on to manipulating abstract ideas — a transition from the security of concrete rules to a world of infinite possibilities and points of view. As with adolescent physical development, the timing of these changes varies widely among individuals and can be troublesome and confusing. Some believe that only about two-thirds of adults ever reach the stage of abstract thinking that Piaget labeled formal operational thought. Probably very few reach the ultimate stage, termed "problem finding," which requires generating creative solutions for abstract issues. Most agree that our society needs more people with these capabilities. How can they be developed?

Intellectual growth during adolescence seems to depend on several factors: (a) inherited potential and

timetable; (b) the quality of previous brain development in reception and association areas; (c) cultural expectations; (d) the amount and type of stimulation given by school and home; (e) a balance of support and challenge at home; and (f) the child's own emotional strength and motivation to make sense out of new information and practice skills. Do these sound familiar? The principles remain the same, whether we're building the foundation or furnishing the penthouse.

The "brain's brain"

From age 11 to adulthood, the prefrontal cortex of the frontal lobes, often called the "brain's brain," is a major focus of growth. While the earlier-maturing areas in the back of the brain are a vast storehouse of information, the front is a control center for selecting and acting on accumulated knowledge. Adult patients with frontal lobe disease act a lot like impulsive children. They have trouble with initiative, analyzing the steps of a problem, thinking ahead, and planning actions; they act unrestrained and socially tactless and have a childish sense of humor. They get some kinds of memory all mixed up and lose the ability to guide actions with words. Doctors observe frontal lobe patients who talk about what they want to do but are unable to do it.

If you look at a diagram of a cortex, you can see the prefrontal cortex is right next door to the frontal motor strip, which gets a growth spurt right after birth and develops quickly during the early months. No wonder many believe that adult learning is based on early physical experiences!

In the normally developing brain, prefrontal areas probably become active soon after birth but aren't truly operational until sometime around ages four to seven, with a spurt of myelination near puberty that may continue into adulthood. Unlike the other cortical lobes, they do not have a direct "window onto the world" for sensory reception, so their development builds on sensory connections formed in earlier years and on the child's inner thoughts, language, and attempts to make mental connections.

Climbing into grown-up thought

Early adolescent thinking reminds me of a little child parading around in grown-up clothes, stumbling a bit but acting very grandiose. Unlike the child, however, the teenager experiences unrelenting self-consciousness. Brain development enables him to glimpse all kinds of new possibilities in any situation, but it also makes him step outside and view himself for the first time. How embarrassing! One of our sons fussed for two hours about which shirt he would wear to a concert with 3,000 spectators because he was sure "everyone" would notice him. Yet, even as the young teen is mortified by his own imperfection, he finds himself so special that normal rules may not apply, and a cavalier attitude toward homework or school rules sometimes follows. Parents get buffeted by sudden outbursts and inconsistencies. Remember that teenagers' confusion is greater than yours, even if they don't admit it.

Enlarged mental perspectives create a sudden awareness of "ideals," and the adolescent may ruthlessly criticize his own family. David Elkind says, "In early adolescence not only is the grass greener in the other person's yard, but the house is bigger and more comfortable and the parents are nicer." Yet difficult as they are, these youngsters are covering necessary ground, learning to build with abstract ideas just as they once manipulated their blocks.

Parents and the adolescent brain

- Understand that your child needs more rest than any time since infancy and that it is normal for boundless energy suddenly to give way to lassitude.
- Good nutrition, while difficult to enforce at this age, is important for optimal brain functioning. Present your adolescent with breakfast and dinner, and hope for the best. "Fast food" is not complete brain food, either nutritionally or intellectually.
- Have dinner, watch TV, and read newspapers or magazines together. Talk about what is happening. It is important to deal with abstract concepts, values, and moral issues. If your child disagrees with you, remain calm. Say, "That's interesting (or original or what many believe). Tell me about your reasons." If she shares her thoughts with you, respect them! You don't have to agree.
- New neural circuitry may slow down normal patterns of conversation and make it hard for a teenager to communicate ideas; give her time to respond in conversation.
- Expect your child to have rapidly changing perceptions of himself. It is normal to try different selves; it takes practice to integrate varying personality traits into a cohesive self-image.
- Your child needs more privacy than ever before; he also needs to have you available.

- One school administrator begs parents to value their children for their "decency or personality," not for their grades or competitiveness.
- Keep up with what your child is reading in school. Read it yourself. You may be able to get a conversation going.
- Encourage deductive reasoning: "If x is true, what are the implications in situation y?"
- Expose your child to adult views of the real world — work, politics, social issues. Encourage thinking about real problems, but be ready to listen to some idealistic solutions.
- Encourage constructive involvement in the community, such as with volunteer work.
- Help your youngster verbally express anger and encourage talking through problems.
- Expect criticism of school, of teachers, and of you. Don't undermine the school by criticizing teachers in front of your child.
- Take courage from studies that have found that moderate parent–child conflict promotes mental growth and moral development and that only 5% to 10% of families experience a major deterioration of relationships during these years.
- Remember that adolescents need to exercise their frontal lobes by playing tug-of-war with authority. Don't be afraid to set standards and stick to them. One adolescent girl admitted, "The best excuse is still, 'My mother won't let me.'"

Juggling the abstract

With mental juggling of abstract alternatives, scientific reasoning becomes possible. Whereas younger children can form rudimentary hypotheses, they tend to get caught on the first possible solution to a problem. The classic game of "Twenty Questions" is a good example. When asked, "What am I thinking of?" the young child quickly gives a specific association ("Is it a dog?"). Older children learn to deal with categories ("Is it an animal?"), whereas an adult can evaluate and plan a strategy of broad to narrow categories ("Is it alive? Is it an animal?").

Tools of abstract thought

This section that follows illustrates some examples of learning situations that require adult-style reasoning and often cause trouble for students who haven't quite gotten there yet.

Deductive reasoning. The human brain is programmed to look for rules and order in experience. Young children learn to look at many different pieces of information and put them together into a broad rule or category (all of these insects seem to have eight legs; therefore, a rule for being an insect must be having eight legs); this is inductive reasoning. Only later does deductive reasoning develop — taking a general principle and applying it to unfamiliar instances, for example:

a. "The square of a right triangle's hypotenuse is equal to the sum of the squares of the other two sides." Is this drawing a right triangle? (If this seems confusing, you know how the student feels!)

b. "All Latin adjectives agree with the noun in both gender and case. Add the appropriate endings to these words."

Hypothesis testing. Generating possible solutions to a problem and testing them systematically until finding one that works is the basis of scientific reasoning. For example, Piaget used a chemistry problem with five bottles of colorless liquid that could be combined in only one special way to produce a yellow color. Young children made combinations randomly and couldn't identify the important relationships. Older adolescents were able to make systematic combinations, holding different alternatives in mind until they solved the problem. Middle schoolers need help from adults who can show them how to go about considering a number of possible solutions instead of getting one idea and trying to force the facts to fit it. Open-minded approaches to everyday problems are one obvious channel toward this important growth.

Propositional logic. "If Mary is taller than Sally and Sally is taller than Marge, who is the tallest?" A child who has mastered concrete operations may be able to figure this one out. It is harder, though, to understand other kinds of propositions, such as "If it is raining, it must be summer. It is summer. Is it raining?" or "If A or B, then C." A good example is a direction that gives preadolescents trouble: "If it is on your assignment sheet or I write it on the board, you must do it for homework."

Proportion. "For every six students there are two teachers. There are 54 students. How many teachers?" Problems like this require concrete materials (counters, pictures, diagrams) or a formula until students can mentally juggle the relationships.

Second-order symbol systems. Algebra and grammar are both examples of symbol systems that stand for other symbol systems. In algebra, numerals stand for ideas of number; algebraic terms (e.g., x) are arbi-

trarily chosen to stand for the numerals. Grammatical terms (e.g., a pronoun) represent classes of words which, in turn, stand for things or ideas. This is pretty complicated stuff if you aren't too clear on the original symbol system! Younger children can learn specific principles of grammar (noun, verb) from their own language experience but should not be expected to apply rules abstractly.

The "abstract attitude." This is the name given to the ability to stand outside a situation and connect ideas that don't go together in any kind of literal way. Examples are metaphor, drawing inferences that are not directly stated in a text, some forms of humor, analogies, nonliteral opposites, and a realistic appraisal of oneself. A sensitive adult can pull children toward this type of reasoning by asking the right questions.

These abilities don't develop overnight. Youngsters poised on the brink of adult logic still need the safety of something concrete to fall back on when confronted with new ideas. George, a 12-year-old studying the novel *To Kill a Mockingbird,* was enthralled by the plot but couldn't understand the metaphor in the title. When he came to his father for help, Dad suggested they work up a literal word-by-word translation: "To Destroy Innocence." "Now I get it!" George cried.

Even adults often learn better from concrete demonstrations, and teenagers particularly need this kind of support. Another type of help they need is learning to use their frontal lobe systems to control and plan behavior.

The importance of inhibition

One of the most important functions of the prefrontal cortex is that of being a wet blanket — an inhibitor of excitement. Although we admire an active brain, one that is overly aroused can be a problem as it responds to too many stimuli at once and jumps from idea to idea. As the frontal lobes mature, they team up with the reticular activating system — the "gatekeeper" at the back of the brain that directs arousal and alertness — and with the limbic system, forming a loop that works as a "gating system" to select and direct attention.

An important function of this loop is regulating the ability to use "feedback," which simply means an ongoing check on one's own behavior. Feedback systems help us catch our own errors and remember what we're supposed to be doing and how — and they should become more automatic during late childhood and adolescence. Students with poor feedback systems don't seem to notice when they've made a mistake; they may habitually forget to bring the right materials to class or get distracted while doing a job at home such as setting the table. They often get labeled as "attention-deficit-disordered." This is a frustrating situation, but there are a few positive steps that seem to help.

Helping the brain regulate behavior

Verbal feedback. Studies of the developing frontal lobes stress the importance of language, particularly "inner language" — a mental dialogue with oneself. Students who are able to talk through a problem mentally before springing into impulsive action do better in school and gain higher-level thinking skills sooner. By the way, parents are the child's most important models for regulating behavior. If you act before you think, your child may adopt the same tactics. If you discipline physically instead of talking problems through, if you tend to express emotion bodily instead of with words, be aware of the pattern you are demonstrating.

Natural consequences. A parent who continually picks up the pieces becomes a feedback system that prevents a youngster from developing one of her own. Unfortunately, it is sometimes necessary to tie yourself to the sofa and let a child feel the effects of her own carelessness. If the expectations were reasonable, and she messed up, she needs at least minor consequences. This is, without a doubt, the hardest task of parenthood. Have courage. We all learn best from our errors, not from our successes. Try saying, "I'm proud of you. You made a mistake and you learned something from it!"

Structure. Particularly during the early years of adolescence when these control systems are being refined, the youngster may need help organizing his life, his responsibilities, and his possessions. Without taking over, you can firmly insist on certain parameters of neatness, schedule, health routines, such as brushing teeth, and performance of household tasks. Reasonable expectations, consistently enforced, can help a child get a comfortable "feel" for internal control. Young teens tend to experiment with their new mental powers by pushing and testing the limits. It is your job to give them something to push against. I know it isn't easy; my psyche is still bruised from angry adolescent outbursts — but now our three young men admit that the rules were really very reassuring.

Motivation. This "attention loop" depends on motivational centers of the limbic system.

Decisions — Good and bad

New mental perspectives give youngsters a whole new framework for personal decision making. As they practice using it, they alternate between wanting to be dependent and wanting to argue. Incidentally, because they can now see some of your point of view, they become better arguers!

One logical way to practice decision making is in making summer plans. A high school student came to his parents last spring for "advice." He knew that he should take a summer-school reading course recommended by his English teacher, but he really wanted a job as a lifeguard. His parents started to talk him into the reading course, but soon realized they would accomplish more by asking questions instead of giving opinions. Their son argued himself in and out of all possible situations while they tried to be interested but neutral. He finally decided to take the course, and he worked hard because he "owned" his decision. A friend whose parents "made" him take the course acted up in class and was dismissed after the first week.

Allowing kids to take responsibility is agonizing for everyone, but this is one more mountain they must learn to climb. What if this boy had made the "wrong" choice? He would still have learned a lot — including the fact that inadequate reading skills make English class a drag and that the course might be a good idea next summer. Let teenagers make choices you can live with, but be ready to take a hard line on dangerous alternatives.

Avoiding dangerous decisions: Drugs and alcohol

Teenage abuse of drugs can alter, perhaps permanently, brain centers for higher level thinking, attention, and motivation. Any substance abuse during these critical years has the potential to affect long-term intellectual and personal growth. Effects appear to vary among individuals, so the safest course is to avoid them.

Parents should be aware that their attitudes help shape teenagers' choices regarding both drugs and alcohol. Many studies have shown that parents whose children avoid drugs tend to be:

- Described as "warm" — available to help without being overly judgmental
- "Close to children"
- "Traditional in orientation" — not afraid to set limits or discuss their own values but also willing to listen to the youngster's point of view and bend on less important issues
- Non-drug users themselves
- Negative about the use of medications to "make you feel better"
- Able to help keep the child's ego strength firm; teens with poor self-concepts, anxiety, or difficulty with social relationships are more likely to engage in antisocial behavior of all types.
- Those who pay attention and are interested in their child's activities without being intrusive
- Those who have expected the child to take responsibility for the consequences of his own behavior

Working with Your Teenager's School

The middle school muddle

New research suggests that many schools are not very healthy places for young adolescent brains. In fact, an important recent report concluded that the negative psychological changes we tend to associate with adolescent development result in great part from a mismatch between teenagers' needs and the opportunities offered by homes and schools. Young people want to learn and to feel competent, and they need environments in which they are carefully guided in assuming more responsibility and control over their own lives. They also need a setting small enough to offer close and supportive relationships with respected adult mentors: teachers or other community members. Unfortunately, these needs have not generally been considered in planning either school buildings, curriculum, or class groupings.

Middle schools and junior highs have too often been regarded as the trenches of academia where teachers complain about students' lack of motivation and await a "promotion" to high school teaching. Programs that keep early adolescents even more powerless than elementary school children yet expect them to learn by teaching methods used in high school can turn off capable minds. Innovative schools are addressing these newly recognized essentials, but they need support.

If you visit your child's school and find students acting out history lessons, drawing diagrams of reading assignments, or "playing" with math games, don't dismiss the curriculum as "frivolous." It may be based on the latest and best research about adoles-

cent brains. Since it has been estimated that only about 12% of 12- and 13-year-olds have achieved the ability to reason abstractly, most still need to "do" in addition to sitting in lecture-style classes. This does not mean we need to water down the curriculum — rather that we need to present it by methods that can tie abstract concepts to something in students' real experiences. In fact, many high school teachers find these methods work for them too.

The power of parents

It is the school's job to understand teaching methods and curriculum, but administrators listen to parents, whether they admit it or not. Parents should certainly hold schools accountable for both imparting skills and keeping intellectual curiosity alive, but some inadvertently encourage inappropriate policies. With the best of intentions, they worry that a school which doesn't appear to have their child on the "fast track" may impair her future chances. One typical issue illustrates this point.

It has become fashionable to take algebra at age 13, or even age 12, and schools feel strong parental pressure to offer this option. While a few children are conceptually ready for traditional algebra courses at this age, many more are not. Experienced teachers find that, even for good math students, they must overly simplify the course in order to get middle schoolers through. Moreover, in one school district where high-achieving 13-year-olds were encouraged to take algebra, 70% of these potentially gifted mathematicians did not go on to study higher math in high school. Why? Because they were "turned off" by algebra.

Dr. Mark Tierno, who reported on this study, believes that brain development provides the explanation. Most of the students had not yet developed the abstract reasoning ability for the concepts presented, so they coped by memorizing. Any subject can be memorized up to a point, but without underlying comprehension of the ideas and relationships involved, learning eventually bogs down.

Tests may be the first evidence of trouble. "I studied and studied, but when I got in there I just couldn't answer the questions," wails the student. What happened? Despite hours of work, a child who lacks the underlying cognitive development never quite gets the idea. Test-taking becomes a desperate attempt to plug in isolated facts from memory, but if problems are stated differently or information must be applied, watch out! Teachers may be unaware that the basic problem is a mismatch between the levels of the pupil and the material. They blame the student for lack of effort or decide that he "isn't really that smart after all." The student is clear on only one thing: math is not for him. Yet another year or two of development — or a different teaching method — might have produced a love match instead of a divorce.

New instructional approaches have demonstrated that even elementary-aged students can master complex mathematical concepts if they are taught in a manner appropriate for their developing brains, with real-life concrete examples coming before abstract rules. Contrary to what many believe, the young adolescent does love to learn, but only if we accept and accommodate those special needs.

What to Look for in a Middle School

Brain-building middle schools:

- Have a clear sense of purpose in meeting the needs of this age group
- Have teachers who understand the cognitive development of adolescents and enjoy working with them
- Encourage high academic standards that are age-appropriate, not falsely accelerated classes
- Realize that few middle schoolers are conceptually ready for traditional high school subjects taught in lecture-style classes
- Resist parental efforts to push students into inappropriate courses
- Use sophisticated manipulative (hands-on) materials to teach math concepts (rods, geoboards, puzzles, etc.), in addition to written exercises
- Provide individual support for students having difficulty
- Encourage mastery rather than a large volume of material inadequately covered
- Take time to review material from earlier levels
- Try to meet social, emotional, and physical development needs
- Teach science through challenging hands-on experiences rather than by relying on lectures and worksheets
- Emphasize study skills and learning about how to learn
- Allow students physical movement during the school day

- Demonstrate the use of both inductive and deductive reasoning
- Insist on original writing and speaking before a group rather than simply absorbing material
- Capitalize on the real interests and concerns of students and allow individuals or groups of students to pursue well-planned projects of their own
- Encourage structured collaborative learning in small peer groups
- Use computers and other interactive video technology for exciting conceptual learning, not just "skill and drill"
- Allow for interaction with nature and the larger community outside the school
- Challenge each child to move into more abstract levels of understanding by integrating courses in different subject areas
- Have a well-planned program for prevention of drug and alcohol use
- Give equal classroom attention to boys and girls
- Regard music and visual and performing arts as important parts of the curriculum
- Downplay highly competitive sports and encourage individual challenge for each student

Remarks from the Trenches

The more I am around adolescents, the more fascinating I find them. Every day my students amuse and delight me — and at the same time they irritate, challenge, and exhaust me. I must continually remind myself that these young adult bodies contain brains far from "finished" by adult standards. Teachers are perpetually amazed at the way kids "get it together" sometime around age 16, when their prefrontal lobes are more fully myelinated. Many late-maturing thinkers are extremely bright children, but parents and schools must hold on to their patience and good humor to refrain from pushing such youngsters into defeat or alienation. The late bloomers can make it — unless adults have convinced them they are failures by age 16. Many psychologists believe that the alarming increase in teenage suicide is partially attributable to adults' urging teens to make choices too soon, coupled with unreasonable expectations and pressure into adults' ideas of the right decisions.

High academic standards are an important national priority, but they must be brain-appropriate for each child's level of development. As one who teaches the same students at several points during their school years, I know that for months I can beat my head (and theirs) against the wall of an inappropriate objective, only to find that, two years later, they learn it in an hour. This latter way is a lot more efficient and fun for everyone.

As at earlier ages, emotion may be the ultimate catalyst for mental growth. While you are trying to understand your teenagers' brains, don't forget to love, respect, and honestly compliment them. Their struggle for individuality is worth admiring. Become a partner in the furnishing of a new adult mind and you are guaranteed a front-row seat for nature's most exciting developmental drama.

Adult-Wary and Angry

Restoring Social Bonds

Larry Brendtro, Steve Van Bockern, and John Clementson

Courageous, caring teachers in a supportive school setting can help restore the fractured social bonds of many adolescents.

> The very tenuousness of our times has contributed not only to a loss of meaning but to a crisis of value and purpose as well, perhaps most apparent in the alienation and anomie of our youth. (Kesson 1994, 2)

Writing of the changes in postmodern times, Kesson describes a massive, worldwide breakdown in societal systems, including the deterioration of traditional structures of family and culture. Schools and communities are encountering a growing population of youth who are casualties of this alienation. It is a truism that the estrangement between adults and children is greater now than at any point in history. Stated in other terms, the social bond has been broken and large numbers of adult-detached youth are largely beyond the influence of adults who might be significant in their lives.

Theologian Martin Marty contends that Western society's narrow definition of "family" — one or two biological parents and offspring — is the core problem. Throughout the span of human history, family was usually defined as a tribal or kinship system with redundant child-rearing roles. From earliest history, many parents have always been too young or too irresponsible, but the tribe was always there to pass on the values. "Every child needs many mothers" say the Cree Indians of Alberta, and "It takes a village to rear a child" is the oft-cited African proverb. Now our tribes and extended families are gone, and schools are being asked to become new tribes.

A school, we are told, should be a "culture" that transmits prosocial values to the young. Not surprisingly, many educators resist this additional task. "It's hard enough to teach these students," said a nationally prominent educator, "now we are expected to create caring communities." The task of building positive school cultures is, indeed, formidable. While anthropologists study cultures and tribes, even they have never been asked to create them. But even if our schools become islands of security, how can we pre-

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pare children to survive in the tempestuous ecology of childhood in postmodern times.

The psychological orphan

The bonds that transmit basic human values from elders to the young are unraveling and rending. Even in relatively stable families, there is an erosion in the quantity of time that hurried and stressed parents can spend in genuine interaction with their children. For millions of growing children at risk, life in this technologically rich, spiritually impoverished society is a daily struggle for survival in a child-hostile ecology. The hazards are myriad and compounding, including the decay of shared community, the decline of extended families, the proliferation of single-parent households and parents who are troubled or self-absorbed, and the scourge of alcohol, drugs, violent crime, discrimination, and poverty. This plague of stressors is spawning a generation of adult-detached children who are virtual "psychological orphans."

Early in this century, behavioral scientists identified a population of children reared in sterile orphanages who suffered from what was termed "affect hunger" or "affectionless" personality. The research of psychiatrists such as David Levy and Lauretta Bender showed that if the social bond between adult and child is absent, conscience fails to develop properly and the transmission of values is distorted or aborted. The most seriously damaged of such children were given labels of antisocial, primitive, unsocialized, and even sociopathic. Now, at century's end, the orphanages are gone, but we are mass-producing hordes of adult-detached children.

All around we see exemplars of the psychological orphan. We are shocked by televised images of police removing a brood of starving children left for days in a ghetto flat, as if such intermittent abandonment were unusual. We are outraged at suburban parents arrested for flying out of the country and leaving their children to fend for themselves, as if self-care were not a dominant mode of child rearing in postmodern society. We are growing accustomed to bands of unsupervised children roaming our city streets at all hours — and we call their counterparts in the suburbs mall-orphans. Perhaps the smashing success of the "Home Alone" movies is because we can laugh at the terror of abandonment that has become commonplace among millions of tentatively attached children. But, in the real world, children left alone rarely vanquish burglars and bogey men.

The wounds of being an unclaimed child are deep and disfiguring. Children with "affect hunger" at home often enter school with a great distrust of adults. While understanding teachers could offer a second chance, too many youths get the clear message, "You don't belong here!" Still, most children do not give up their quest for human closeness. Instead, they desperately pursue what Karl Menninger called "artificial belongings." Discarded by adults, these youths gravitate to worlds beyond adult influence, seeking out the counterfeit connections offered by youth gangs, drug subcultures, or sexually promiscuous relationships. And thousands of lonely girls seek the ultimate cure for their own affect hunger: in generations only 15 years long they reproduce themselves in the hope that the babies they bear will love them.

When even artificial belongings seem unavailable, the most seriously rejected may resign from human relationships. In extreme discouragement, some children become deeply depressed and self-destructive. Some commit suicide; others kill themselves on the installment plan with drugs and high-risk behaviors.

Adult-wary and angry

"All I want is some kind of noticement!" declares an angry voice of a troubled teen writing in our journal on behavioral problems of youth (Way 1993). Children who feel unloved and unattached are often children of rage and rebellion. They easily become locked in defiant opposition to adults who reciprocate their anger. Since counter-aggression is bad manners for professionals, we use labels. In illness jargon, one could say these youth manifest "attachment and oppositional disorders." However, this is recasting the sins of adults as diseases of children; the term "adult-wary" more accurately explains the basis of their distress.

Instead of being preoccupied with the deviance and pathology of difficult children, it is more profitable to see even the most troubled behaviors as normal responses of children struggling to cope with abnormal ecologies. Bronfenbrenner says that each child needs at least one adult who is irrationally crazy about him or her. But even this minimum dosage of attachment is missing in the lives of affect-hungry children. Unbonded with their elders, they are unlikely to learn from adults, to model traditional values, to seek guidance, or to respect adult authority.

While the psychological orphan may seem on the surface to relish this seeming freedom from adult control, life devoid of attachment is the opposite of true independence. As attachment researchers John Bowlby and Mary Ainsworth have shown, secure autonomy is only built upon a solid base of ongoing human attachment. Unclaimed and unattached, such youths desperately fend off feelings of helpless abandonment. They noisily proclaim their pseudo-independence: "Nobody tells me what to do!" This masks the reality that nobody really cares. This is far beyond the normal adolescent drive for independence, for the depth of their anger at being unloved permeates their opposition to adults and their institutions. They are forever biting the hand that didn't feed them.

Children who reject adult models bond with peers who are also adult-antagonistic. Research shows that when students with behavior disorders are integrated into regular classrooms, they affiliate with peers who have "lower levels of prosocial characteristics and higher levels of problematic behavior" (Farmer and Hollowell 1994, 152). The adult-wary youngster has a radarlike ability to search out and latch onto other anti-authority peers. By adolescence, nobody needs instruments to identify them. Whether in Berlin or Boston, they look strangely alike: ganging together in subcultures of the outcast, dressed in their outrageous symbols of bonding and defiance, they turn the tables on passing adults who now become the outsider. Old and young scrutinize one another, but our eyes seldom meet; we clutch our purses and possessions and hurry away.

Highly antisocial youth have a longitudinal stability in deviant behavior that rivals the reliability of intelligence scores. Troublemakers at six are typically still troublemakers at sixteen. This has led some social scientists to infer that serious antisocial behavior is intractable. But the danger in such pessimistic views is that they are used to justify coercive programs of punishment and exclusion. In the words of a prominent political leader, the mission of the federal government should no longer be prevention of delinquency as a social problem but "making the predators accountable." Reframed with this Newspeak, they are no longer our children but some defective subspecies.

To paraphrase Fritz Redl (1966), this is a society that professes love for its children but fears and hates its youth. Certainly, the public outrage at antisocial violence is understandable. However, the current "punish-and-expel" frenzy is a fear-based reaction rooted in primitive, instinctual "fight or flight" responses. Those who call the loudest for the harsh punishment and banishment of troubled youth betray a macho-masked emotionalism that seeks to destroy a threat they cannot understand. In the end, adults who fear youth or get caught in cycles of conflict with them are impotent to transmit positive values to young persons. Needed but too seldom seen are adults reaching out to reclaim alienated youth, to restore broken social bonds.

There is plausible evidence for a more optimistic view that patterns of antisocial behavior can be reversed, but this will require organizing schools and youth agencies around different values and strategies. The obedience–punishment model of education works poorly with antisocial youth, but so does permissiveness. While a lack of affection or parental control might have caused the problem, the solution requires more than a dose of love or tough discipline. Antisocial children often enter school with years of experience in combat with adults and are expert at drawing adults into coercive power struggles. The frustrated adult who responds with angry punishment is inadvertently modeling bullying behavior. Likewise, if the adult yields to their coercive attempts or ignores antisocial behavior, aggression is also reinforced.

The traditional discipline systems of schools are rooted in punishment or exclusion, thereby hindering restoration of the social bond. Even specialized programs designed for alienated youth are typically preoccupied with what Knitzer and colleagues (1990) call the "curriculum of control." Only adults who see the positive potentials of youth — who see in every flaw the germ of virtue, as Goethe put it — can create corrective attachments that will give them influence with these psychological orphans.

Reframing rebellion as courage

Developmental research has shown that extreme rebellion is often a strong signal that adults have not met the child's basic needs for secure attachment and autonomy (Newman and Newman 1986). Overt, hostile acts of rejection are not the child's preferred strategy. Fighting against others is an extreme form of coping only used when all other means of legitimately meeting needs are blocked (Balswick and Macrides 1975). From this perspective, rebellious, antisocial behavior of our youth should be seen as a

valiant attempt to meet normal human needs, albeit with ineffective strategies.

Certainly some youth seem to thrive even in spite of great family instability. They may even display precocious responsibility and altruism as they care for self and younger siblings. We call these youth "resilient" or "invulnerable" but, of course, absolute invulnerability is a myth (Guetzloe 1994; Werner and Smith 1982). Even the survivors often carry with them the dark shadows of unsatisfied early relationships that hamper their performance in intimate adult roles of spouse and parent.

Research on resilience shows that high-risk youth who succeed against the odds usually have had a powerful positive relationship with a teacher or other adult mentor outside of their families. These adults also communicated high expectations to the young person, believing in them when others might have given up. A potent example is former youth-at-risk Bill Clinton who grew up in the shadow of an abusive stepfather. What would have become of him if he attended a depersonalized school with indifferent teachers? Instead, he bonded to a surrogate parent in the person of a caring high school band teacher.

A growing literature on "oppositional social identity" among African-American adolescents also suggests a certain resilience in this rebelliousness (Comer 1976; Clark 1991; Ogbu 1988). These youth challenge racist school practices and attempts at assimilation by the dominant culture. Angered by the prejudice in schools, they often perform poorly and refuse to conform to school expectations. These oppositional students join together in a contest to "get over" on teachers by defying or undermining their authority. In effect, these students decide to sacrifice school success in order to preserve self-esteem. Whether or not one considers them vulnerable or resilient depends on whether the desired outcome is academic or social competence.

Anderson (1994) describes how certain inner-city youths adopt an "oppositional culture" that enables them to survive on the streets in highly violent neighborhoods. At the heart of this street code is the issue of "respect" or being treated with deference by others. Anderson notes that most urban youths adopt a "decent" identity, but the "street" youth has a profound lack of faith in authority figures. Youth buffeted by forces beyond their control believe they will only be safe by proving their autonomy and competence. Desperately craving respect, these youth are thin-skinned and fight back at the slightest provocation or put-down.

> Their manner conveys the message that nothing intimidates them; whatever turn the encounter takes, they maintain their attack — rather like a pit bull, whose spirit many such boys admire. The demonstration of such tenacity "shows heart" and earns their respect. (Anderson 1994, 94)

When respect is in such short supply, street youth will do almost anything to secure or preserve it. In the logic of the oppositional street culture, a hostile demeanor is an essential weapon in the campaign for respect. Anderson notes that teenage girls are now mimicking oppositional boys in pursuit of their own version of "manhood." They seek this end in similar ways as boys, including posturing, abusive language, and resorting to violence to resolve disputes. Winning some semblance of respect is immensely important when so little respect is to be had. Tragically, these youth seldom gain respect from important adults in their lives.

To be respected, to have some power over one's life, to find attachment, autonomy, and achievement — all are honorable goals. The fact that youths are pursuing worthy ends with the wrong means is an encouraging sign. These youths haven't given up but are still struggling to redress untenable situations. Instead of fighting them, a more powerful strategy is to tap the strengths of oppositional youth (Brendtro and Banbury 1994). Adults who hope to reach and teach these adult-wary students must be able to disengage from conflict and empower youth with successful coping strategies. We now describe how schools are abandoning the traditional curriculum-of-control paradigm in order to reclaim alienated youth.

Reclaiming alienated students

Schools are powerful places that transmit adult values to young people. Those values, in turn, shape everything that happens in the school. Curriculum, methodology, and human relationships all mirror these values. Yet it is rare to find a school where core values are shared and acknowledged by teachers, administrators, parents, and students. More often, a dust-covered policy book enshrouds some well-intentioned but unclaimed virtue such as "helping students become all they can be."

Few would disagree that the core value of any school should be to meet the needs of youth. Yet school is often the last place where the real needs of young people are addressed. It is estimated that pub-

lic schools fail to work for more than 25% of our nation's young people. Without a transformation of the existing school culture into one that seeks to meet the needs of children, little headway is likely to be made in creating schools that claim all of our youth.

Arriving at a consensus of shared needs is no easy task. At a staff meeting where teachers were encouraged to identify the needs of students, a high school teacher quipped that if he met the needs of these "messed-up" kids, he would be thrown in jail. In our "do-your-own-thing" society, serious discussion about values in public schools has been discouraged and at times forbidden. Mortimer Adler (1990) indicts the "philosophical mistake" of assuming that all values are culturally relative. He contends that since our basic human needs are universal, absolute human values are those tied to our human needs.

A myriad of needs — physical, social, emotional, and intellectual — have been identified in research literature (Erikson 1968; Havighurst 1953; James 1974; Piaget 1973). Educators have difficulty making sense of this complexity, and our great cultural diversity has made it difficult to see where we might find a common base of values.

The Circle of Courage paradigm developed by Brendtro, Brokenleg, and Van Bockern (1990) seeks to distill the core values underlying universal adolescent needs. This model provides an understandable and embraceable "unifying theme" for schools and youth agencies. It is rooted in the heritage of Native American philosophies of child rearing, the wisdom of early pioneers in education and youth work, and the knowledge emerging from contemporary developmental research.

The Circle of Courage is displayed in a medicine wheel drawn by the Lakota Sioux artist George Bluebird (see figure to right). The model proposes the four core values to be belonging, mastery, independence, and generosity. These social values have applicability to all cultures because they are rooted in powerful, universal, biologically based human needs. These needs (attachment, achievement, autonomy, and altruism) are both distinct yet interrelated. For example, in a normal developmental progression, the child bonds to a significant adult (attachment), uses the adult as a model and mentor for developing competence (achievement), employs greater competence to become increasingly self-controlled (autonomy) and is empowered to help and care for others (altruism). On any continent, in any cultural group, when these needs are not met, the human animal is at high risk for a host of psychosocial problems. These relationships are summarized below:

Value	Human Need	If Need is Not Met
Belonging	Attachment	Alienation
Mastery	Achievement	Failure
Independence	Autonomy	Irresponsibility
Generosity	Altruism	Selfishness

When the circle is intact and in balance, children develop both individual and prosocial skills and values. In earlier times, tribal, neighborhood, and family structures worked to instill these values in the young as a matter of course. Now, we must work deliberately to counter forces of anomie and teach our youth skills for survival in this world of broken social bonds.

Teaching resilience

While behavioral scientists have traditionally been predisposed to focus on deficit and deviance, there is a sea-change in thinking about our children at risk. Instead of a preoccupation with the problems and weaknesses of our children, there is an effort to learn why some survive a host of family, personal, and school problems. Much to their surprise, researchers discovered that many, perhaps most, children from high-risk environments survive; they are able to "work well, play well, love well, and expect well" in spite of potentially damaging odds

Artwork by George Bluebird

(Bernard 1992). This resiliency perspective asks why young people stay healthy, what the child's total environment has to do with that health, and what can be done to insure the child's well-being. Instead of only providing an ambulance for those who have driven off the cliff, the resiliency movement is more interested in putting up roadblocks.

What is it that contributes to resilience in youth? In a study of 47,000 students in grades 6–12, Peter Benson (1993) identified 30 internal strengths (e.g., achievement motivation) and external supports (e.g., a mentor) that help stress-proof children in a high-risk society. Benson found that as the number of assets increased, risk indicators (e.g. alcohol use, antisocial behavior, and school failure) decreased. For example, he found that students who did one week of volunteer service for the community had reduced risk indicators. Not surprisingly, most of these protective factors contribute to the development of belonging, mastery, independence, and generosity.

Bonnie Bernard (1992) suggests resilient youth have social competence, problem-solving skills, autonomy, and a sense of purpose and future. The community can protect its children by giving care and support through affordable housing and employment, by expecting its youth to be somebody, or by engaging youth in socially and economically useful tasks. The family needs to express affection, provide order, and set clear expectations. Giving their children a sense of future is another protective gift. Finally, Bernard affirms the important role schools play in fostering relationships with teachers and peers, cooperating with family, insuring success for all, and eliminating negative labels.

Dropout researchers (Newmann 1992; Wehlage et al. 1989) have moved away from searching for fixed characteristics of students — poverty, retention, family background, truancy, substance abuse — toward school practices that encourage students to persist until graduation. Damico and Roth (1994) analyzed this research and concluded that resilient or "persistent" students had caring teachers who liked them and liked teaching, structured successful learning experiences, conveyed a message the students could learn, varied instructional strategies, involved students, had small classes, and helped the students become test-smart.

Research makes it abundantly clear that developmental needs should drive interventions. Belonging is vital for young people, while suspension and expulsion continue to be the normal modes of discipline. Mastery is a key to resiliency, yet course failure and grade retention continue. Allowing students a voice in determining their education is essential; however, schools persist in regimenting everything from bathroom breaks to classroom discussion. Finally, research echoes our human need to be positively involved in our world, but still we squash the vitality of our students by choking them with useless worksheets and words.

Expelled to friendlier places

Traditional schools are unfriendly habitats for adult-wary youth. The fact that such students leave in droves may signal that they are struggling to better an impossible situation. Michelle Fine (1991) found that many urban dropouts were actually taking charge of their lives by deciding to leave an unproductive school experience.

In his book, *Expelled to a Friendlier Place*, Martin Gold (1978) describes how some students develop "school-induced" problems when self-esteem is threatened by school failure. When school is a hostile place and teachers are enemies, two outcomes are possible. Gold posits that the more vulnerable or "beset" youths are, the more they are at risk for emotional disturbance. In contrast, the more resilient or "buoyant" youths are more socially attached and autonomous; they compensate for the effects of school failure by affiliating with delinquent peers who help them maintain a substitute sense of competence and self-esteem. Gold reports research showing that effective alternative schools for this population had teachers who were skilled at relating to adult-wary youth and who refused to accept failure as an outcome.

Many who call for school reform conclude that total, systemic change is necessary. However, until that goal is reached, alternative interventions are necessary. Some alternative programs are holding ponds — a way for school officials to wash their hands of the real problems. Others challenge the status quo by pushing the boundaries and exploring innovations. Whatever the perspective, alternative approaches to education provide additional insight on how to build reclaiming schools. Amidst the remarkable diversity of forms, alternative schools seem to share a common feature: they are designed for the human being.

In many ways, the one-room school suggests certain standards for today. The small, community-

based school had no classroom periods or real grades. Students tutored students. Groups formed and dissolved as needs dictated. The teacher had to view students as individuals. Students shared responsibility for sweeping the floors, scooping the walk, and stoking the fire. The one-room school also creates images of a place where children were given the freedom to let their imaginations roam through stories, dramatizations, play, and art — a place where students were not only readers or spectators, but producers and participants.

While few are interested in duplicating the poorly equipped and drafty classrooms of yesteryear, it is possible to find successful schools today that operate with the needs of children in mind. At Sudbury Valley School in Framingham, Massachusetts, the promotional literature proudly declares it "a place where people decide for themselves how to spend their days." The fundamental premises of the school are simple: people are curious, consequently the most efficient, lasting, and profound learning takes place when started and pursued by the learner; all are creative; age-mixing promotes growth; and freedom is essential to the development of personal responsibility. The physical plant, staff, and equipment are there for the students to use as needs arise.

Creativity abounds in alternative education. The Anasazi program, the Navajo word for the "ancient ones," invites parents and their child, through a wilderness experience, to effect a change of heart that leads to a change in behavior. Likewise, the Path-Finder School in North San Juan, California, is committed to a holistic learning environment. It makes use of adventure and experiential education by including rope courses, wilderness programs, rock climbing, canoeing, and white-water rafting in its curriculum. Other schools draw on mythology and ancient rites of passage to help students better understand themselves and find their cultural roots.

In contrast to "open-system" curricula are highly structured alternative schools that target the needs of students through direct social and academic skill instruction. At Shalom High School in Milwaukee, Wisconsin, 300 skills are listed in the areas of communication, critical thinking, problem solving, valuing, environmental responsibility, and social interaction. The school believes students must master these skills before receiving their diplomas. The "defense" for graduation includes a portfolio that provides evidence of meeting the objectives.

Research suggests successful alternative programs are small, student-centered, and supportive of individual needs and that they express a clear sense of community and mission (Wehlage et al. 1989; Young 1990). Other recurring themes include positive student–teacher relationships, student-centered curriculum, peer cooperation, teacher autonomy, and learning experiences outside the classroom. These themes of alternative education are also hallmarks of the growing popularity of middle school education.

Building responsive middle schools

While alternative schools seek to circumvent existing school structures, other efforts are under way to reform traditional systems of public education. This is perhaps best exemplified by the middle school movement that deliberately attempts to make schools responsive to the specific needs of young adolescents.

In the typical middle school, the powerful need to belong is encouraged through the organization of students and teachers into cohesive teams. The Carnegie Council on Adolescent Development (1989) recommended that middle schools encourage the creation of small communities of adolescent learners in which relationships with adults and peers can be mutually respectful. Teams offer extended tribes within which students may develop a sense of belonging. This is more than membership in a narrow group of like-minded peers, it is, rather, a laboratory for learning to work in interdependence. Teams that value the input of both teachers and students, encourage students' choices, and use constructivist approaches become microcosms of democracy.

Middle schools have also created smaller "families" of students by implementing strong mentoring relationships. One teacher (the advisor) meets regularly with about 15 students (advisees). The teacher knows the students and the students know the teacher. Understanding one another becomes the basis for a trusting and caring relationship. The advisor/advisee period is a time when students' successes are celebrated and problems are discussed and resolved. A student remains in the care of their advisor for the years they are in the school. A multi-age arrangement of students encourages older or more masterful students to help those who are younger or more novice.

The advisor/advisee groups may be as structured or unstructured as members decide. Groups may participate in a community food bank, clean a local park, serve the homeless at the soup kitchen, or share personal triumphs and travails with each other. Other group activities are designed to promote self-esteem, develop conflict resolution strategies, and develop compassion for others. Still other activities can focus on the physical well-being of the group members. Honest discussions about substance abuse, sex, and mental wellness find a place in the curriculum. While affective curricula have come under attack from some who see no place for such frivolous teaching, schools may be the only place where adult-wary students find what they hunger for: a mentor, a model, an adult who can be trusted.

A curriculum that is created by a community of learners, rather than administrative dictate, can captivate alienated youth. In their book, *The Middle School and Beyond*, George, Stevenson, Thomason, and Beane (1992) suggest that effective middle schools approach interdisciplinary teaching from three varied learning contexts: interdisciplinary projects, exploratory curricula, and independent study.

Interdisciplinary projects allow students opportunities to achieve or to master some aspect of the project. If a team approaches a topic using a multifaceted approach, it is more likely that the individual students' strengths will be discovered and used. Students who are creative and artistic will contribute to a group project in ways that a numerically talented student may not. Others may have strengths that emerge in the form of interpersonal skills; they are the group peacemakers, the problem solvers.

River Quest, a National Science Foundation-sponsored project in South Dakota, involves numerous middle schoolers in a holistic study of the Big Sioux River. This interdisciplinary project views the Big Sioux through the lenses of history, science, literature, and mathematics. Students take trips to the river to write poems, take water samples, measure water flow, and listen to old-timers tell of days gone by. Students compile their findings, writings, and drawings for a journal published at a local college. Students share their work via computer modems and fax machines. Some are moved by their findings to take social action when they find sources of pollution entering their local lake.

An exploratory curriculum encourages student skill development by offering a wide variety of student choices. In some schools, the exploratory curriculum is in addition to the "regular" academic program; in others, exploration is infused. In either case, the program must be geared toward allowing students opportunities to discover and develop their talents. Erik Erikson's (1968) classic question of "Who am I?" has a chance of being partially answered by adolescents if they are provided opportunities to discover their hidden skills. Middle schools, under attack to return to "the basics," have struggled to keep these "frivolous" curricula. Schools that offer exploratory options for students provide such choices with titles as diverse as computers, conservation, and creative writing.

Independent study can also meet the needs of some students. According to George et al. (1992), providing opportunities for independent study changes the primary role of teachers from dispensers of information to facilitators and collaborators in learning (p. 65). Students, given the freedom to design, create, explore, analyze, or discuss a topic of their choice are likely to "construct" knowledge that is not only personally meaningful but which is also more memorable. At Whittier Middle School in Sioux Falls, South Dakota, instructors Scott Hanneman and Doug Rinken have given students opportunities to develop their own HyperCard stacks on a computer. The stacks are students' creations that might drive a laser disk or provide a tutorial program for other students. Students and teachers treat each other with mutual respect. Teachers learn from students and students teach other students and teachers how to use this computer application in their learning. A HyperCard tribe forms — a tribe whose members care about each other and who share what is learned with one another. Everyone is nourished and everyone contributes to the whole community of learners.

Conclusion

As we move from a modern to a postmodern culture, adolescents hunger for their place. Unlike earlier times, most youth do not get a sense of being a contributing member through work at home or on the farm. Adrift and unattached, they are increasingly outside the social bond of family and community. Today schools are being challenged to become the new tribes that take care of their members.

One of our exchange students, Andrew, will soon return to his tribe in a remote location in New Guinea, a tribe where each individual fills a role to benefit the whole. Andrew's father is the peace keeper/counselor/problem solver of the tribe, his

mother is a gardener, and his brother a fisherman. When asked what he will miss about living in America, Andrew responded, "I won't miss trying to figure out where my next meal will come from. In my tribe everyone shares food with each other. If you are hungry, the tribe will feed you." Like traditional tribes, schools need to nourish the young, to invite them to serve as contributing members of the tribe, to include them in the circle of relatives.

It is no longer a mystery how to educate our children well. Together we have the information, skills, and methods to transform our schools into engaging, critical, and creative sites of personal development and intellectual growth that meet our children's most basic needs. We know what can be done, what has to be done. What remains is to find the political and personal courage to restore the social bonds.

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The Petrolia School

Teaching and Learning in Place

Gregory A. Smith

Petrolia, a small school where the whole educational community lives close to the earth, enables students to focus on their relationship to the natural environment and one another.

I had heard about the Petrolia School from Peter Berg, one of the founders of the bioregional movement and a longtime community activist in the San Francisco Bay area. His daughter had once attended the school, and he believed it was creating an educational process that seemed likely to alert young people to their relationship to a particular place and the responsibilities associated with coinhabiting a region with other species. Long concerned about the way cultural and political issues have been neglected by most forms of environmental education, I was interested in learning more about how educators at one small school were attempting to encourage students to construct an understanding of their relationship to the earth premised on a recognition of interdependence and the need to adopt a sustainable way of life. What I found at the Petrolia School has encouraged me about the possibility of developing a comprehensive educational experience capable of directing young peoples' attention to their relationship to the natural environment and one another.

Discovering Petrolia School

Driving to the small town of Petrolia from Eureka in northern California, or Alta California, as it is called by the bioregionalists, I was struck by the degree to which this area has remained marginal to the growth and development we associate with California and the Pacific Northwest. Known as the Lost Coast, this stretch of land inland from Cape Mendocino is transected by a tiny macadam road that winds through the hills past Ferndale to Petrolia and on to Honeydew. Only a few ranches and homes punctuate the 30-mile drive beyond Ferndale, and the major inhabitants seem to be cattle, sheep, and peregrine falcons.

Petrolia School can be found about a mile past the small cluster of houses, stores, and public buildings that carry the same name. The road to the school follows the Mattole River, muddy brown and roiled

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by a winter storm on the day I arrived. Past the school's parking lot, a small path leads through a stand of Douglas fir that opens onto a large meadow dominated by a two-story barn. The barn is home to most of the school's activities. Its cavernous central room functions as pantry, textbook library, basketball court, and gallery. A kitchen and sitting room occupy the south wing of the barn — the only section of the building that is heated. Three mostly finished cabins on the hill behind provide housing for some of the staff and boarding students. Everything at the school seems spare and basic, as if there is no extra money for anything other than essentials. At meals or classes, people sit at tables constructed of plywood or on sagging thrift store couches. This lack of amenities, however, doesn't affect their laughter and joking as they cluster around the wood stove and eat their meals. In the midst of what many would see as poverty, they are creating a social environment rich with warmth and support.

Although Petrolia School is a private institution, it was established to serve families who have chosen to live simply without much income. Most local parents contribute their labor to pay for the tuition of the 14 day students in attendance at the school. The eight boarding students pay more, but even their $8,500 charge for tuition, board, and room is minimal compared with other private schools. Teachers bear much of the cost of the school's restricted income. They receive room and board and a stipend of $300 a month but are rewarded with the possibility of creating courses that match their own passions and commitments. Petrolia School operates on a shoestring budget, but people there demonstrate the energy of pioneers.

Petrolia School's students reflect the lack of racial diversity in northern California. Most are white, and many are the children of people who "returned to the land" in the seventies and never left. In an effort to provide its students with a less racially homogeneous experience, the school hosts an exchange program that brings a number of students from Mexico each year. Building on these relationships, all students at the school participate in a six-week long trip to Mexico in the spring. Staff at the school also contribute to the school's diversity. One of the school's first-year teachers, Roberto, is a Latino from New York. Another teacher, Daniél, is a well-known Mexican muralist. Conversations around the room are held in Spanish and English, with many American students and their teachers speaking Spanish in their conversations with their Mexican friends. One of the Mexican students, Cristóbal, and Seth Zuckerman, the school's principal, occasionally converse in Hebrew. Tucked away in the hills of the Coast Range, this rural school has a remarkably cosmopolitan feel.

One of the distinguishing features of the Petrolia School is its nearly complete reliance on energy created on site. During the coast's long summer, solar panels collect electricity that is then stored in a bank of batteries on the second floor of the barn. In winter, the school's source of electricity is a Pelton wheel located in an open meadow beyond the cabins. The recipient of water delivered from a two-inch black plastic pipe, the small hydroelectric generator, had been installed by the Tools Class a few years earlier. Currently maintained by new members of the same class, the generator requires ongoing surveillance and repairs, but with sufficient rainfall, it provides enough electricity to power the school's energy-efficient lights, its few computers, and the occasional tape deck and sound system.

The adequacy of this system was called into question the previous fall as days grew darker and rain remained scarce. Most of the stored electricity was exhausted before the rains returned to provide an alternate source of power. The response of the school's stakeholders to this situation says much about their environmental commitments. For a number of weeks, students, staff, and community members went back and forth about accepting the donation of a gas-powered generator to alleviate the energy drought and provide a back-up system when the weather proved uncooperative. Although the generator promised a way out of an unpleasant dilemma, many were concerned about the message its use would send about a school that until then had taken pride in its self-sufficiency. With the exception of a tank of propane that fuels one of the kitchen stoves, all heat at the school is provided by firewood cut by students and staff. Much of the school's food is grown in a large garden or bought from regional food or growers' cooperatives. Hot water for showers and meal clean-ups is heated in the barrel stove that warms the kitchen. Despite the dry fall, the school community decided against accepting the generator.

This kind of environmental consciousness permeates life at the school. In addition to being the school's principal, Seth Zuckerman also teaches a class entitled Science and Society. The year before, he had sought and received funding from the Environ-

mental Protection Agency to develop a course aimed at grounding environmental study in regional issues. The class focuses on topics such as energy use in Humboldt County, the environmental and economic impact of pulp mills, a local salmon restoration project, and timber-harvesting practices. Seth plans to have the curriculum reviewed by a trio of professional educators and hopes that it will become a model for comparable courses elsewhere that deal with environmental topics from an issue-based and integrated perspective.

The materials Seth asks students to read are derived from a variety of sources. He consciously avoids textbooks because they tend to eliminate controversy from public issues. What he wants students to explore are multiple perspectives regarding the topics they deal with in class. In one of the classes I observed, students were asked to choose one article each from 15 to 20 reprints and pamphlets. These publications included technical Forest Service reports, a newsletter from the Wise Use Movement (anti-environmentalist), Action Alert (a forest industries publication), and environmental newsletters and articles. Seth's aim is to encourage students to understand the point of view of the different players in forest management decisions and at the same time ground that understanding in a recognition of unavoidable ecological principles.

Although not as focused on ecological issues as the course on Science and Society, other classes at the school touch on environmental themes. On the day I left Petrolia School, students in a science class for younger students traveled to a nearby creek to meet with Freeman House, one of the founders of the salmon restoration project. In language arts classes, students frequently write about their experience of living close to the land. A social studies class taught for the past five years by a political science professor from Humboldt State University in Arcata has also drawn on students' environmental interests. A few years ago, for example, members of this class were deeply concerned about plans to log forests at the headwaters of the Mattole, prime spawning grounds for salmon. Many of the adults in the community believed that the deal was settled and that there was little they could do to stop it. The class mobilized the school to set aside two "political action days" to participate in a demonstration to block the beginning of the logging project. The demonstration provided enough time for a court injunction to be obtained. This experience demonstrated to students their ability to affect change and exemplified the importance of drawing the young into long-term restoration activities that, in the end, must extend across generations if the environmental damage of the past century is to be reversed.

Much of the school's environmental emphasis can be linked to its history and the energy of a handful of committed environmental activists. The school was founded in 1983 by a small group of families in response to the fact that the town of Petrolia did not have its own high school. High school-aged students from the area had traditionally been transported to Eureka or Arcata, about 50 miles away, where they would board with other families during the week and then return home on weekends. After trying this for one year, these families decided that the education their children were receiving in Arcata was out of sync with their values and that they wanted their kids closer to home. One of the parents, a physician, donated a 270-acre parcel of land for the school, and the families joined together to construct the large barn that still serves as the school's central building. They initially taught many classes themselves, but they eventually tapped a number of recent graduates from the University of California at Santa Cruz who had migrated to the area for other reasons to work as full-time teachers at the school.

Underlying the school's activities was a set of goals that reflected the concerns of the school's founding families: academic excellence, environmentalism, and conflict resolution. Although from year to year one goal may receive more attention than another, these focuses have continued to inform the curriculum and learning activities at the school. In an effort to help me understand the evolution of the school's program, Zuckerman sent me to David Simpson, perhaps more than anyone else the force behind the school's persistent concern about bioregional issues.

Simpson, with Freeman House, is the other founder of the Mattole Salmon Restoration Project. Because his work with this project is so intimately tied to the school, it is important to understand both domains of activity. The day I visited Simpson followed an early-winter storm that had raised stream levels, and members of the restoration project were getting ready for the beginning of spawning season. Our conversation throughout the morning was punctuated with calls updating Simpson about salmon sightings or stream flow. There is a limited time during which traps can be set up to catch and

milk the local king salmon for their eggs and sperm, which are subsequently placed in protected hatch boxes. These extraordinary measures are being taken in an attempt to ensure that a higher proportion of salmon fry survive stream conditions seriously degraded as a result of bank erosion and silt from logging, ranching, and road-building operations. Working on the restoration project requires a fine-tuned sensitivity to local conditions, and Simpson depends on reports from people farther upstream to let him know when to pull together a team to construct one of the temporary traps. Scores of individuals are involved in the restoration project — an enterprise that has drawn diverse citizens in the region together to reclaim the health of a once rich but now damaged ecosystem.

Simpson's concerns about environmental and bioregional issues were stimulated by his longtime association with Peter Berg and the Planet Drum Foundation in San Francisco. Planet Drum has been one of the primary house organs of the bioregional movement. In the process of researching articles for Planet Drum publications, Simpson had investigated the resource-based decline of earlier civilizations. He realized that we were similarly impoverishing our own future, and he saw this happening specifically in the salmon fishery in the Mattole drainage. He decided to devote himself to the restoration of the watershed, thinking that if he and others could have some positive impact on a 64-mile-long river, they might learn lessons that would be useful to people working to restore more extensive watersheds. In 1978, a meeting was held to explore this issue, and in 1980, a group of "backwoods dropouts," "conscious" fishermen, natural scientists, and people involved in resource use began the program.

The participants in the restoration project understood early on that only by restoring the quality of the entire watershed would salmon be able to thrive again in the Mattole region. Moving in this direction has involved a major citizen education effort. It was not uncommon, for example, for residents of the upper reaches of the Mattole to engage in salmon poaching. People would simply spear salmon in their spawning grounds, giving no thought to the impact of their activities on the ability of the fish to reproduce. These practices have gradually become more rare. Simpson referred to the son of a rancher/salmon poacher who had taken on the responsibility of protecting spawning grounds close to his home. It has been this transformation of consciousness that has been central to the efforts of people involved in the restoration project.

Petrolia School has provided one of the sites where these broader educational goals have been played out. For a number of years, Simpson taught what was called the core class at the school. It dealt with issues related to natural systems and agriculture, beginning with a study of world and North American geography and eventually focusing on the local region. In the course of investigating the Mattole watershed, students would be drawn into a study of biology, geology, meteorology, and chemistry. Simpson would also direct students' attention to cultural factors that have accompanied the transformation of local economic practices across time, beginning with the subsistence activities of the indigenous residents of the Mattole valley and then moving on to the logging and ranching that have accompanied settlement by EuroAmericans. Central to the course was student participation in restoration work. The year the school opened, students helped plant 20,000 trees in a fire-damaged area. The work was wet and miserable but fulfilling. A large mural in the kitchen of the school depicts a group of tree planters on a steep slope and serves as a testament to the value people at the school continue to place on linking ideals with practical action.

Although Simpson is no longer as immediately involved in the teaching of courses at the school, his work as a playwright and theater producer has engaged some Petrolia School faculty and students. During the spring of 1993 and the fall of 1994, members of the Petrolia School and community came together to produce *Queen Salmon*, a combination musical comedy, serious drama, and ecology lesson aimed at helping humans become more aware of the way their behavior is contributing to the destruction of other species. Its spirit is well represented in a scene where a human therapist consults a dysfunctional spotted owl family. She tells them that they will simply have to transcend their need for old-growth forests. A companion scene includes the same therapist, now consulting a dysfunctional logging family and sharing the same message with them. The play has been staged up and down the West Coast in an effort to broadly educate the public about environmental issues. At one of the productions, a fifth-generation logger was among the first people in the audience to join in a standing ovation. By mixing a strong political message with song and dance and laughter, the play has served to bridge

differences among people and to help them see their shared responsibility for the health of the watersheds in which they live.

Simpson's vision and energy continue to inform much of what happens at the school. What seems most important about what he has contributed is his example of engaged and thoughtful environmental activism. His work at the restoration project and as a dramatist provide opportunities for students to observe and interact with community members who are addressing environmental issues at many levels: the practical, the political, and the artistic. It is perhaps in this regard that the Petrolia School has most to teach us. Living as environmentally conscious citizens may require us to move beyond the forms of specialization that now characterize so much of contemporary life. We need to see how environmental concerns could infuse all activities and thinking and become part of our definition of ourselves as cultural beings. Students at the Petrolia School live in a setting where the impact of the land and the weather and other species is unavoidable and where they are in constant contact with adults who have taken as their calling the restoration of natural systems. By bringing students closer to the reality of the natural world, the teachers and supporters of this school are doing much to induct the young into a perspective about place and purpose very different from what is encountered in most contemporary educational institutions. It is this perspective and some of the cultural practices derived from it that may have important lessons for other educators concerned with nurturing an environmental ethic capable of altering the assumptions and expectations that govern so much of life in modern industrial societies.

Petrolia School and educating for sustainability

In earlier works, I have discussed the need for educators to challenge four fundamental premises associated with our current civilization if they are to contribute to the development of a culture that is less damaging to the natural and human communities in which we live (see Smith 1992, 1993a,b). In what follows, I will lay out these premises and then discuss how the educational process at the Petrolia School is related to them. The first assumption is that individuals rather than communities are the fundamental social unit. Modernity, especially as it has been played out in Western Europe and North America, has been predicated on the belief that social ties to family and community are less important than the pursuit of individual development and economic mobility. The power of this assumption becomes clearly evident in the conflicts experienced by children who grow up in indigenous or rural communities and are encouraged by their teachers to set aside their loyalty and attachment to the people closest to them in preference for a college degree and the possibilities that then become open to them. It is not uncommon for these young people to drop out of college and return to their home communities before attaining a degree. Their sense of relatedness is more powerful than their desire to make it on their own. For students who do remain in college, returning home becomes increasingly difficult. Few jobs exist in their home communities for people with their training, and their experiences in a different environment increasingly set them apart from their former peers. It is not surprising that the early intentions of Bureau of Indian Affairs educators in the U.S. were aimed primarily at diminishing the influence of communal ties and turning American Indians into independent farmers rather than members of highly interactive hunting and gathering societies (Adams 1988). Education continues to play this role with most students, especially those with talents that are seen as desirable by the modern workplace.

Centralization is the second assumption that undergirds what can be called the modern industrial worldview. The creation of the nation state and gigantic national and international economic institutions has facilitated the dramatic increase in productive efficiency and the enhanced standard of living experienced by people in the industrialized world. This centralization, however, has diminished the influence of local institutions and appears to be contributing to the withdrawal of increasing numbers of people from the political process. It has also left local communities vulnerable to decisions over which they have little control. In the past, human welfare was contingent on the ability of people to respond collectively to immediate conditions. Now, decisions that can either make or break communities are often made by individuals with few local ties or commitments.

The promise of progress, the third of the premises that underlie modernity, has made this relinquishment of local control and authority more tolerable. Spurred on by the power of advertising, human beings have sought increasing comfort and material security at the expense of communal ties and involvement. We have come to believe that we as a

species have the capacity to engineer our own salvation. The ideology of progress has replaced spiritual systems that in earlier eras prepared people to live with one another in ways that facilitated communal responses to common problems. Now, individuals are encouraged to seek out individual solutions (e.g., departure or self-protection) rather than work with their neighbors to construct ways of living that maintain civility and the health of the local environment. The dramatic increase in immigration to the U.S. over the previous decade is indicative of the degree to which this ideology has now become global in nature as people from many countries seek to fulfill individual dreams rather than pursue social change and justice within their communities of origin.

Progress, itself, has been closely tied to the fourth central premise of the modern industrial worldview — the belief that the natural world is essentially a mine of resources available for human exploitation rather than a field of living beings and systems closely linked to our own bodies and consciousness. Max Weber characterized the process by which human beings came to disassociate themselves from the matrix of their lives as the disenchantment of the world. Schooled in the reductionist and objective approaches of modern science, many residents of industrialized nations have come to believe that human beings stand above and apart from the rest of nature, somehow capable of making our species immune from its processes. It has led many in the West to view the world separate from themselves and has contributed to a societal unwillingness or inability to see the way our own actions can rebound in unexpected ways on our well-being. Earlier social groups were not afforded the luxury of this belief for long and, in response, developed cultural practices aimed at reducing the negative impact of human activity on the natural environment. Indigenous tribes across the globe evolved rituals that emphasized human interdependence and the need for thoughtfulness in the use of what the earth provided. We now neglect this form of awareness at our peril.

If educators concerned about the environment hope to have an impact on the social and economic practices that are currently contributing to the ecological crisis growing around us, it will be imperative to address these beliefs. The technical and scientific understandings born from courses in environmental education can help to address some of these issues, but at base, the source of these problems is cultural. Only if that culture is addressed and modified will we and our children be able to chart a course through the difficulties we are currently encountering. Educational practices at the Petrolia School suggest ways in which we might begin to move in that direction.

Overcoming the individualistic tendencies of contemporary society will require giving more students the experience of working and living in smaller and more intimate social and educational environments. In such settings, students are more likely to become aware of the consequences of their own actions for others. One of the rules in the kitchen at Petrolia is that if someone is caught leaving an unwashed plate or bowl on a counter or table, he or she must wash up everything that is still in the kitchen sink. Similarly, if the people responsible for making dinner or breakfast don't show, the entire community suffers. The amount of hot water a person uses to shower with or the amount of electricity they tap to play a stereo will affect the amount available for the next person. In all of these instances, students are forced to recognize the interdependent nature of their lives and needs. Over time, many students at Petrolia School mature to the point of adjusting their own desires to those of others. Such learning does not always occur quickly or easily, nor is there any guarantee that all people will become more sensitized to the needs of others.

Crazy People

There are crazy people in this world
I know because it's true
Come inside my twisted mind
And you can meet a few
There are crazy people in this world
That's what my mother told me
I wouldn't be the way I am
If someone would just hold me
There are crazy people in this world
And sometimes I could scream
Because God is in my sleep
And even in my dreams
And he says: there are crazy people in this world
And nothing seems to stop them
So I say: Jesus, Don't you understand?
No one came to love them
There are crazy people in this world
Yes I understand this
But we wouldn't be this way
If someone were to love us

— Jennifer Blackman
Age 16
Bellmore, NY

In an environment such as the one created at the Petrolia School, however, it becomes difficult to ignore this reality. The balancing of individual and community needs becomes something that is lived out on a day-to-day basis rather than an abstract concept. This is not to say that people at Petrolia have worked out all of the problems tied into this learning. Staff members occasionally feel stymied about their need for sleep at night and yet remain unwilling to impose a light's out time for the students with whom they share their homes. It is around such issues, however, that young people can begin to crystallize their own understanding about the way their lives touch the lives of others.

Students at Petrolia School are furthermore given many opportunities to experience and witness the support that comes with living closely to others. Especially striking at the school is the informal aid that students and faculty give to one another as they go about their daily lives. It is not uncommon to see students tutoring students in math, Spanish, or other assignments. And teachers are available to provide the same support. What is clear in this situation is that students are not left to go it alone. Their learning occurs within a social context where mutual aid is common. Overcoming the alluring freedom associated with individualism will require counterbalancing its attractiveness with the genuine benefits that come from working and living in small groups.

It is important to note, however, that the experience of social interdependence at Petrolia School does not result in a diminished emphasis on individual thinking or concerns. Generally, teachers at the school are not interested in converting students to their own perspective. They are, however, committed to demonstrating the way their own passions, concerns, and thoughts have taken hold of their lives. Their hope is that students will see the importance of taking stands and acting on them. In this sense, the educational process at Petrolia School is not aimed at turning its students into environmental activists who will follow in the footsteps of some of the school's teachers. It is aimed, instead, at showing students people who are not afraid to think their own thoughts and do something about it. Students at the school may well discover that their own passions take them in different directions, but in the process of wholeheartedly pursuing whatever those directions may be, they will hopefully act in ways that contribute to the welfare of others. From this perspective, teachers at Petrolia School have not deemphasized the importance of allowing children to develop in directions that make most sense for them as individuals; such development, however, is situated within a social context where the responsibility of individuals to others is made inescapable.

In addition to providing students with an environment where individualism must be tempered with communal obligations, the Petrolia School also offers young people an opportunity to learn what it means to participate in decisions and activities that influence the well-being of both the school community and the broader social and natural communities that surround it. As was indicated earlier, students are viewed as central stakeholders in the life of the school and are given the chance to express their points of view regarding issues that concern or interest them. All students participate in regular Town Meetings during which central elements of the life of the school are aired. Two students also sit on the school's board. The meetings regarding the purchase of a generator during the previous fall are a case in point. Unlike many schools where such a decision would simply be handled administratively or by a board of trustees with a limited relationship to the school, students' voices were incorporated in the decision-making process.

Students at Petrolia School also play a significant role in maintaining the institution's financial viability. They plan an annual Trash-a-thon during which school members collect trash along 50 miles of highway around Eureka after collecting pledges of support from area residents and businesses. They sponsor food stands at local music festivals and community events. They host dance parties and skit-and-song nights called "cabarets" at the Petrolia Community Center. They earn money through their participation in state- and non-government organization-funded restoration work. The school's willow- or fir-planting projects are often tied to these funds. Such activities make students active contributors to the school's well-being as well as recipients of its services; these activities also contribute to the ecological and eventually economic health of the region where they live. Students' previously mentioned involvement in efforts to block plans to log timber at the headwaters of the Mattole River exemplify another way that young people can be brought into activities that affect the welfare of entire communities.

David Simpson observed that the way to encourage young people to begin participating in the life of

their communities is to make them responsible for something. Stories abound at Petrolia School about ways in which students over the years have accepted such responsibility with vigor, idealism, and skill. It would be incorrect, however, to say that the presentation of these opportunities is systematic rather than serendipitous. Some observers of the school expressed concern regarding the degree to which current students seem isolated and uninvolved with the life of the larger community. They feel that the school's academic and social demands have led students to turn inward in ways that inhibit their responsiveness to broader social and environmental issues. All of this points to the fact that Petrolia School is an evolving institution, dependent in many ways on the energies and concerns of its staff and the students who find their way to its classrooms. Visitors to Petrolia will not find a perfect institution but rather a group of people attempting to act on their deepest commitments, sometimes successfully and sometimes not.

One thing that everyone at Petrolia School must grapple with, however, is living without the surfeit of creature comforts that accompany life in most middle-class homes in the U.S. Limited electricity and hot water, no indoor toilets, firewood heat, and the need to live within the constraints of a very tight budget are translated into being cold, taking fewer showers, making fires, and eating simply. For adolescents used to Nintendo, TV, and video arcades, a few days at Petrolia School could well lead to withdrawal. The quiet on the school's 270 acres is pervasive. And in December, so is the cold. One incoming ninth-grader said that she hadn't been warm since she started attending classes there.

Surprisingly, the minor discomforts don't matter much. More important are the relationships that students grow into with one another, their teachers, and the land. A student whose room I shared when I stayed at the school wrote an essay about his own first visit to Petrolia School and what led him to become a student. In it, he talks of spending his freshman year at "Factory High" and his frequent visits to the principal's office. His parents had threatened him with a military academy, but then he heard about Petrolia School. In his own words:

> At first I had doubts about going to a "private" school: I thought the people would be stuck-up, rich snobs. I was scared about going to a place I'd never heard of, and worried about the social scene at a school where the total number of students hovers between 20 and 25.
>
> One afternoon there was nothing good on TV, so I went to visit. I sat in on a math class that had only six students in it. The students weren't understanding, so the teacher put on a thick Boston accent and used colorful street language to give the students a different take on the lesson — and they got it. I spent the night in one of the cabin dormitories and was awakened by a student who was on wake-up duty the next morning gently shaking my shoulder and calling my name.
>
> I helped some students and staff work together to prepare meals; I stumbled around in the dark coming back from the outhouse; I built a fire to heat the water for my shower. I hung out in the barn, the main school building that includes the kitchen, dining room, art room, classroom, office, computer room, and a spacious central hall. On the sunny grass in front of the barn, I took part in a circle of students and staff (held a few times a week) where the business of the school is decided: everything from when to schedule field trips and fundraising events to resolving conflicts and meeting prospective students like me.

This student goes on to describe what he has most appreciated about the school during the two years he has been there. The points he highlights are teachers who all love to teach, small classes, living close to the land, living in a community of teenagers and teachers, trips around the state and the continent, and "getting together the money to do all this stuff." His comments reflect an appreciation of experiences that have little to do with consumption or creature comforts. He focuses on relationships to people and places, demonstrating his growing awareness of what have been the fundamental sources of human security and meaning in most human societies. In *The Poverty of Affluence*, Paul Wachtel (1988) has suggested that it is through their collective disregard for such experiences that the residents of affluent nations have impoverished themselves. At the Petrolia School, the appurtenances of technological progress are present but not dominant. Solar panels, a Pelton wheel, and E-mail reflect a high level of technological sophistication, but they are used in a manner that is intentional rather than automatic. The choice of students and faculty to put up with the hardship of small quantities of electricity during certain seasons of the year reveals their recognition of the primacy of values other than their own convenience and comfort. The ideology of progress does not pervade the thinking of people at the school. They are able to pick and choose in much the same way that the Amish have carefully chosen to adopt some modern technologies and to reject others they believed would undercut the forms of mutual support required to sustain their communities.

Although most of the students who spend a year or two at the Petrolia School may well create homes for themselves that are less energy-conserving than what they knew at the school, their experience will have given them a perspective on what is and is not necessary to be happy that few other children growing up in our society will possess. This point impressed itself on me as I crawled into my sleeping bag my first night at the school. The night had grown clear and cold after the afternoon storm. Walking to a cabin after an evening of conversation and warmth next to the wood stove in the kitchen, I saw more stars than I'd seen in months. The cabin, lit with candles and energy-conserving fluorescent lights, was still chilly but filled with the quiet conversations of its teenage residents. The walls inside were unfinished, the wiring exposed, and the furniture simple. It struck me that the conditions at the school embody what may become a much more common reality for increasing numbers of people in the U.S. as the declining availability of resources and growing impoverishment affect all of our lives. What was clear, however, was that these constraints need not impoverish our attitudes about the quality of our experience or the pleasure and comfort we take from our interactions with one another.

Conclusion

Much of what students learn at the Petrolia School operates on this more visceral level. By altering the conditions of learning, the messages shared by the school also change. The process of knowing becomes immediate and personal rather than detached and abstract. Students become genuine participants in rather than spectators of their own education. Science, for example, becomes a subject not restricted to textbooks and apparently meaningless experiments or formulas. It is instead a tool for understanding processes intimately tied to the health of the surrounding forest, its water systems, and the animals that live in them. And human beings, furthermore, are seen as intimately connected to these ecosystems and as central players in the maintenance or restoration of that health. By contextualizing learning, learning becomes personal and significant, another vehicle by which students can begin to fulfill their responsibilities to one another and the world. From this perspective, knowledge becomes not a means for establishing dominance but a means for entering into a long-term and complicated dance with one's place and one's fellows. Students at the Petrolia School see adults, both in their classrooms and the community, who use their intelligence to enter into that dance

with a growing sensitivity to their own power and the impact of their actions. Perhaps one of the most significant aspects of education at the school is tied to the way learning there is linked to praxis, the physical enactment of intellectual concepts and values. As Seth Zuckerman noted, the meaning of watershed becomes much more vivid when you realize that the spring on the hill above where you live is the source of your drinking water and that its protection and maintenance are intimately tied to your own well-being. The transformation of consciousness in the broader society will almost certainly require conceiving of education in this manner as well. By helping young people adopt lifestyles that are simple and sustainable yet attractive and full of purpose, we may be able to instill in coming generations a vision of what it means to live with other people and beings in ways that preserve rather than threaten the future. I came away from the Petrolia School heartened that doing so is not outside the realm of possibility.

Postscript

In the fall of 1994, a public high school was opened in the community of Petrolia. Enrollment at Petrolia School has subsequently dropped to only 12 students, precipitating a funding crisis. The curriculum at the public high school, however, will incorporate a focus on bioregional issues and service learning as well as opportunities for students to participate in extensive school trips similar to those incorporated in the Petrolia School calendar.

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Will Wisdom

Josette and Sambhava Luvmour

Many of the problems that aolescents have could be alleviated if the adults closest to them responded with an understanding of the natural stages of child development.

Eternity is in love with the productions of time.
— William Blake

Each child brings a great gift to this world in each and every moment of his or her life. That gift is natural; it is inherent in the child's being. Many of the problems we face with children and with our society arise when this gift is ignored, or worse, when it is seen as a liability. Children experience this consistently. To cite just a few instances, enormous social pressures force children to compete against their peers when their gift is cooperation, to individuate when their gift is community building, to conform when their gift is to express uniqueness. Cut off from their natural expression of self, the children turn to conflict and dysfunction. Parents and teachers become managers of children's behaviors, rather than co-creators in an evolutionary process.

The first step toward undoing this terrible situation is to bring awareness of the natural gifts each child brings. Our ability to relate healthily to children increases dramatically when we become conscious of the wisdom inherent in the natural development of the child. Thus, we turn our attention to wisdom-based development in the first third of this article. On that basis, we can appreciate the gifts of the early teen years. Specifically, we can make an in-depth exploration of what the teen needs, how to provide it, and how our own self-knowledge grows in the process. That is the heart of this essay. Then, to address some of the real issues facing our society, we conclude by applying our insights to healing the wounds that occur when the child's natural rhythms have been violated.

Natural development

Human development, like the development of any other living organism, is a natural process. Sadly, this humble observation is almost universally ignored when considering the human condition.[1] The sadness comes because awareness of the natural development of a human being is a key to genuine empowerment for teens, children of all ages, families, and communities. It allows a deeper connection to

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self and to others. In a very real way, appreciation of the nature of development helps to eliminate unnecessary suffering. It puts us in tune with how children grow and learn and how we can best support their inherent wisdom. This is a powerful claim for a simple insight, but one we've verified many times in the past 20 years.

As a natural process, human development shares in the qualities of Nature itself. This intimate relationship between the manifestations of nature and Nature has been recognized by philosophers, poets, and sages of many different cultures. Archie Bahm's rather unusual translation of the ancient book of Chinese wisdom, the *Tao Teh King*, puts it this way:

> Intelligence consists in acting according to Nature.
> Nature is something which can be neither seen nor touched.
> Yet all of the forms which can possibly be seen or touched are latent in it.
> And all of the things that will actually be seen or touched are embedded as potentialities within it. (Bahm 1958, verse 21)

This idea of a hidden wholeness that is greater than the sum of its parts yet continually expressed as those parts is the essence of all holistic understandings from The Vedas of ancient India and many Native American traditions through the philosophies of Plato, Nobel Prize winning physicist David Bohm, the Psalms of the Old Testament and the spirituality of Thomas Merton. In every single instance, Nature is the benchmark — the reference by which we gain the insight, the case that proves the point.[2]

Blake talks of love as the link between eternity and the productions of time. Bohm believes that as a "need" arises, Nature answers with a new form. The Sufis say: "The relative is the channel to the absolute" (Shah 1978, 57).

The *Tao Teh King* expresses the dynamic, intimate relationship between Nature and its manifestations this way:

> Nature produces things, and intelligence guides them.
> Although different in kind, each thing has its own self-sufficient intelligence to direct it. (Bahm 1958, verse 51)

In other words, the inherent interconnectedness between the form and the source of form points to a wisdom implicit in the process. In Buddhism, "emptiness" refers to an awakened mind, unrestricted by the hindrances of desire and time and thus able to see truth and essence. In the highly revered Heart Sutra we hear: "Emptiness is form, form is emptiness." That is, form and emptiness (which is the unmanifest source of form) share the same nature and partake of the same wisdom. Even Darwin, who saw the source of natural form as only the blind, random acts of the environment, acknowledged the wisdom of the forms in their responses to those acts. Thus, whether one views Nature through the lens of teleology or natural selection, the same conclusion arises: Each form has an intrinsic wisdom, derived from its source, to guide it in fulfilling its own destiny.

Therefore, as a natural process, human development is wisdom-based. Like all Nature, it is elegant and precise, self-renewing, simple in pattern yet it leads to ever greater complexities and is rhythmically attuned to the most complete fulfillment of the individual, the species, and the Earth. In short, human development shines with meaning, beauty, and the opportunity to gain insight into who we are and how we can live in harmony.

In our examination of the early teen years, we shall see how these great qualities express themselves again and again. Hopefully, as our awareness of nature-as-early-teen grows, we will, as the ancient Chinese sage advises, act intelligently — in accordance with Nature.

Natural developmental rhythms

Human development is no more a hidden course of Nature than the metamorphoses of the order lepidoptera. To actualize the natural rhythm of lepidoptera's growth, each stage of its development — larvae, caterpillar, cocoon, and butterfly — must successfully meet the requirements for its growth. Each stage has different needs; the butterfly, for instance, drinks nectar while the caterpillar eats leaves. To feed the caterpillar nectar would be a violation of its natural rhythms. Further, each stage has its own ecological functions, independent of the other stages. The caterpillar, for example, plays an important role in forest ecology: it makes mulch, redistributes microorganisms, and is prey to many species of birds. To treat it like a butterfly, even though butterflies seem more beautiful, is an affront to natural law.

Human life stages have evolved over millions of years. This sequential unfolding, universally called human development, allows the manifestation of human consciousness. Our extensive childhood is the time during which consciousness — physical, psychological, and spiritual — expands. Each life stage is an aspect of consciousness come to dominance. Within each stage, the child has the chance to play with the inherent wisdom of that stage, to access

its deepest truths, and to bring them to consciousness. All life stages are necessary for consciousness to reach full maturity and full complexity. As with lepidoptera, the playing out of the measured cadences of our natural rhythms allows the child to harmoniously integrate himself into our world.

To honor the wholeness of each life stage, we have appended the suffix "Being" — which means nothing essential is missing — to each of the names we have given the stages. Thus, we have identified four major life stages of childhood and have named them BodyBeing, EmotionalBeing, WillBeing and ReasoningBeing. Our book, *Natural Learning Rhythms*, goes into the explicit details of the stages as well as numerous ways to apply that knowledge. In this article, we are concerned mostly with WillBeing, a life stage that reigns from the ages of approximately 13 to 17. To truly appreciate WillBeing, we have to understand its relationship with the child's prior development.

BodyBeing

In the first eight years of life, under the guidance of BodyBeing, the child experiences the world primarily through the medium of sensations. Highly egotistical, her perception is: "I am the center of the world, the world is an extension of my body." Profoundly creative lessons around boundaries, belongingness, and strength are learned in these years. Body wisdom guides her to develop a working relationship with her body and the world around her. In order to access the depths of this wisdom, she needs loving touch, warmth, security, flexibility, nourishment, and highly textured sensorial-based experiences on both physical and psychological levels.

EmotionalBeing

Between the ages of approximately eight and nine, she becomes aware of her mortality. The indubitable knowledge that she dies takes root in her. With it, her egotistical projections are shattered and she is left open and vulnerable. In one stroke, by sundering her belief in the immortality of her body, Nature prepares her for the next great teaching. Now, the child relates to the world through feelings and becomes extremely interested in her own feelings and those of the people around her. Her perception of her world centers on "I and Other." Emotional wisdom guides her to connect to community as well as family and to seek transcendent feeling experiences that could match the overwhelming feelings associated with awareness of personal mortality. She learned about destruction as implicit in creation, about trust and the overarching importance of interconnectedness in every realm of life. To fully learn these lessons, she needs a "diet" of healthy models — justice, honesty, fairness, adventure, caring, and adaptability.

WillBeing

Now, around the age of 13, her time has come to learn a new set of lessons critically important to a human's consciousness. These lessons have to do with freedom and individuality, with her own autonomy. It is an "inside-out" life stage, recognized as such by the Sioux when they named it "heyoehka," which means "contrary one." (See Storm's *Song of Heyoehka*.) The Sufis, using their teaching figure Mulla Nasruddin, tell this story:

> From his childhood, Nasruddin was known as "contrary." His family had become so used to this habit of his that they always told him to do the opposite of what they wanted him to.
>
> On his fourteenth birthday, Nasruddin and his father were taking a donkey-load of flour to market. As dawn broke they were crossing a rickety rope-bridge, and the load began to slip.
>
> "Quick, Nasruddin," his father shouted, "heave up the load on the left, otherwise the flour will be lost."
>
> Nasruddin immediately raised the left-hand sack on the donkey. The whole lot of flour was unbalanced as a result, and fell into the torrent below.
>
> "Ridiculous fool," said his father. "Don't you always go by contraries? Did I not specify the left-hand load, meaning the right?"
>
> "Yes, father. But I am now fourteen years old. As from dawn today, I am considered to be a rational adult, and therefore I am complying with your orders." (Shah 1971, 114)

To actualize autonomy, the child relates to her world through assertion. The other stages begin in soft, vulnerable ways; this one begins in hard-edged assertion: of self, of identity, even, inside-out though it may seem, assertion of the right to be just like her peers. Through all this, Will wisdom guides this process by prompting the child to individuate through exercising her own personal power and freedom. Individuation, personal power, and freedom are essential for human health. Nothing less than the inherent wisdom of life is being expressed. In this moment, humanity is developing creativity through the constant exploration of new niches, new awarenesses of self. If we dishonor the natural rhythm of WillBeing, then we run the risk of destroying the species, exactly as we run the risk of destroying the forest if we don't honor the caterpillar.

The development of autonomy is not easy, but it is necessary. Nature pulled the rug from under the BodyBeing child with the awareness of personal mortality. Next, she does the same to the EmotionalBeing child. This time it is the ability to procreate that dissolves the former perceptions. Procreation means that, individually, each person is a critical agent for life itself. A bolt of responsibility electrifies the child. She will take her place in life. She must make of life what she will. The WillBeing child says: "I stand alone." In each case the child plays with a wisdom until she is competent at it. Nature unleashes a new perception that radically undermines the old way of seeing. This is an example of a simple pattern leading to greater complexity. The child is then empty and available to new lessons.

By the end of BodyBeing, the child was competent in using her body in her environment — a wondrous achievement. By the end of EmotionalBeing, the child felt proficient in dealing with such issues as community, justice, and the interconnectedness of life — another marvelous natural accomplishment that simultaneously serves both survival and self-knowledge. Now she must see if she can stand alone. Nature, acting through development, once again provides both the opportunity and the capacity for actualizing full humanhood. This is what we meant earlier when we spoke of "self-renewing" as a natural quality. The renewal is of the "eternal" self of the child as she experiences the "time" of each developmental stage.

Having never stood alone before, the WillBeing child encounters tremendous insecurity. The child experiences a *tsunami* — assertion is the wave; insecurity is the undertow. She must try on different identities in order to discover who she is. And she must make this discovery by herself to actualize the wisdom of autonomy. Caught in this contradiction so typical of the inside-out character of this stage, the WillBeing child needs the help of family and community, yet cannot ask for it.

Recognizing this need, the most compassionate response elders can offer is sensitive respect. The child needs sensitive respect to support her free investigation of different identities. It is as cruel to ridicule a WillBeing child asserting new identities as it is to slap a baby who falls down while learning to walk. She also needs challenges to help hone her power, with success built in so that the insecurity does not sweep her out to sea. Ideals are supremely important for the WillBeing child. She is just beginning to accept responsibility for her place in society. Through ideals she stakes her position and thus has an expression of self with which to enter the social world. Her ideals also connect her to her peers, a necessary refuge against the insecurity. Also, each and every WillBeing child needs some type of personal space to make manifest her new individuation.

The shadow

This new, raw surge of willpower is continually drawn to freedom and individuation. Limits exist to be challenged. Established ethics and concepts have no strength simply because parents and society insist upon them. Specifically, many WillBeing children need to explore the "shadow" of both family and community. The shadow consists of those aspects of ourselves that have been repressed in order for us to survive in the world.[3] For most of us, violence is a good example. Fear of the supernatural is another. This may be why 80% of all receipts for horror movies are from children between the ages of 13 and 18.

Of course, shadow exploration by teens gets more subtle and leads to greater friction than simply going to the movies. One young friend deliberately did poorly on tests in school even though he had easily mastered the work because he "hated the high achievement trip my father laid on my sister." He was exploring his father's fear of failure.

The stakes get higher. Often, the child is not fully aware of what she is doing. A young man procrastinated about everything, which was the trait the father hated most about himself. A young woman wore sexually alluring clothes which made her Puritanical father seethe. He restricted her, she sneaked out, he hit her, she invested her ideals in "sexual freedom," he threw her out, and she's a teenage mother trying to finish high school. The family shadow, unacknowledged, has led to a great deal of unnecessary suffering.

The stakes get higher still. So many inner city teens lack the proper developmental diet that they are forced to push their assertion to rebellion — to be overtly antagonistic about society's shadow. They have to use their freedom-loving power to force recognition of the fear, lies, and loathing that are not being admitted and which so severely restrict their lives.

When elders deny their shadow — whether personal, family, or social — the individual teen feels isolated and lost, with no hope of connection. The two thoughts common to most teenage suicide

attempts are: "This is never going to end" and "I'm in this alone. No one has the feelings and urges that I have."

Both psychology and spirituality agree that true freedom requires integrating the shadow elements of our personalities.[4] Here, in WillBeing, the sparkling natural wisdom of development impels the child to make contact with the shadow. This serves her own freedom and individuation. It also serves the freedom of those around her for it invites elders to reexamine their own shadows.

In every way, providing the natural needs of WillBeing and thus allowing the child to connect to Will wisdom serves both the individual and all of humankind. Powerful statements of ideals keep a society fresh and vigorous. Practicing sensitive respect creates an air of tolerance and gentle humor. Peer contact leads to the understanding of the beliefs of others. Empowered individuals means a healthy society. And relating in a healthy manner to the shadow lets natural energy flow unobstructed by secrecy, sexual repression, or dogma.

Dysfunction

To date, there has been little understanding of WillBeing or of the wisdom that guides it.[5] Consequently, aberration and dysfunction — the pollution of the psyche — are rampant. As just one example, children forced to grow up too fast often "act out" willfully at 10- and 11-years-old. Not only do they miss contacting the developmental wisdom of that age, they lack the tools to successfully carry out the individuation process. Therefore, in the early teen years, they are often cynical, overly concerned about sexuality, prone to hero worship and gangs, attracted to drugs to compensate for feelings of impotence and isolation, or victimized by the family shadow or any number of other symptoms that reflect their lack of proper developmental nutrition.

There are many other examples of the pollution, but there is no point in listing them. The question is: How do we respond to the dysfunction? Do we try to simply alleviate the symptom or is there a more profound response available?

Let's say you have an infection. If you simply bandage it, the wound will still fester and the infection will become worse. The least you must do is thoroughly clean the wound. More potent, a systemic response would be to insure that the infection will not arise elsewhere. Deeper yet, we can ask: How did you become susceptible to the infection? Are there conditions that can be put into place so that you won't be victim to that disease?

Now take a case of teenage alcoholism. The young woman is found drinking in the locker room. The school suspends her with a lecture on responsibility and threats of Juvenile Hall. This is bandaging the wound and represents the worst of the symptomatic approach. Would the girl be a drunk if she had a healthy notion of responsibility? She goes home. Mom and dad, simultaneously afraid, angry, and sympathetic, put her in counseling. (Of course, this is a privileged girl as most families cannot afford good counseling.) The counselor helps the girl connect with her anger and despair. This is like cleaning the wound. Being an exceptionally wise person, the counselor then insists that the whole family come to counseling together — a systemic response. Many parents would refuse at this point with such excuses as "It's her problem, not mine," or "I don't have time," but let's say these parents are willing. A genuine healing of this infection can then occur.

But we still haven't addressed the question of how she came to be infected in the first place. To do so, we must look at the child holistically.

Health

The words "health" and "wholeness" come from the same root. To heal is to restore wholeness. Wholeness is a preexisting condition in which we have all we need to live a healthy, harmonious life. In wholeness we experience our natural human birthright of both wisdom and health. It is for this reason that many spiritual, philosophical, and psychological teachings exhort us to remember who we already are.[6]

It isn't a question of creating health but of reestablishing connection to wholeness. The natural flow of energy that occurs when we connect to wholeness both heals and vivifies. We are then much less susceptible to disease. So, in considering the case of the teenage alcoholic, the question we ask is not what do we need to do to "fix" her, but how did she get bumped from her natural connection to health and wholeness? And, most importantly, how can we help her reconnect to her own inherent, natural wisdom?

We know how she got bumped: her natural developmental needs were not met. And we know how to help her reconnect: supply those natural needs as an everyday diet wherever possible. As graduates of our workshops will attest, many parents and educators can do this once they understand the needs of

the child. If this sounds simplistic, let us assure you that it is extraordinarily potent. We've consistently seen the great majority of "intractable" problems dissolve when families center their lifestyles on basic developmental wisdom.

Always offer the child the developmental foods of the stage he is in. If, for instance, an 11-year-old is prematurely acting out the need to assertively individuate, meet her with EmotionalBeing not WillBeing developmental foods. The natural flow of health and wisdom will then be reestablished in the most efficient way possible. The elder's energy won't be dissipated in the often fruitless task of trying to fix the symptom with little or no cooperation from the child. She'll be present for her inherent wisdom will recognize a responsive environment.

In the case of a WillBeing child, we begin by exploring her ideals. Without criticism, we gently inquire until we understand which ideals she has chosen and how she wishes to explore them. Concerning schooling, we then set up her curriculum to allow that exploration. To cite an extreme case history, Rick, a young man of 14 who had been regularly shooting crack since he was 12, could relate only to acid rock music. Often, he had on his Walkman and "jammed" on his imaginary guitar. On probation, going to a school run by Juvenile Hall, Rick said he was bored all the time. His "teacher," a moonlighting patrolman, told us that all he wanted to do was keep Rick out of trouble and improve his fourth-grade reading level. We were called in by the foster parents who believed that Rick needed help.

At an initial meeting, we elicited Rick's interests by asking many questions. When we found out his interest in music, we borrowed some tapes and listened carefully. At the next sessions, we asked him many questions about his music. Among the many interesting facts we discovered, we found out that Rick wanted to play the guitar when he was 10 years old but no one supported him. We arranged for him to have lessons. Amazingly, he showed up for every lesson and learned to both read and write music.

But we didn't stop there. Music is highly mathematical, and so we introduced math through the scales. Pythagoras talked of the "music of the spheres," and so we connected philosophy. Rick liked listening to philosophy but had never studied it on his own. We suggested he write some music and lyrics. He was shy but clearly wanted to, but didn't know what to write about. We told him to write of his own life. Soon, meaningful yet very painful lyrics started to pour forth. The door was opened to introducing psychology. After some hesitation, he agreed to play some music for peers. Peer contact was thus introduced and Rick was then able to improve his interpersonal skills.

Notice that each challenge was in the realm of success. Also, there was no ridicule. And, though it did not happen in Rick's case, if he wanted to change interests, say from music to surfing, there would have been no veto. We would certainly have inquired into his choice, but for the purpose of Rick hearing his own reasons — not to change his mind.

There are many case histories in which matching curriculum to ideals allows health and connection for teenagers. An inner city girl cares only about racism and finds herself deeply involved in the history of South Africa, South Bronx, and Alabama. A suburban boy is interested in sports and finds himself in physiology and statistics. A country boy wants to stop using animals to test products and finds himself in biology and economics. In each case, an entire curriculum is present. In each case, the child wants to participate. Critically, in each case, the child reconnects to health.

Appropriate curriculum is but one facet of supplying developmental needs. Of utmost importance is the family life. Can the family accept scrutiny of its shadow? Judy, a woman of 35 with a 14-year-old daughter, came to counseling because she felt she was "losing touch" with her daughter. We soon discovered that Judy had discovered her father's pornography stash when she was 11. Dad was a fire and brimstone Baptist minister and, of course, Judy had believed that Dad was going to hell. She was petrified. At 14 she became overtly rebellious, using food and sex to express her pain. She never confronted her father and presented him as a loving grandparent to her daughter. Now, at 14, the daughter lied continually to her mother. She didn't feel she could trust her. We suggested that Judy expose this family shadow. Wishing the world to be perfect and unwilling to admit to any personal imperfection, the daughter was enraged at Judy's revelations. She then told Judy how she was embarrassed by Judy's weight and her inability to relate to men. It was harsh, but at least it was the truth. Gradually, they became kinder to one another with no more lying.

Rites of Passage

One grave problem that WillBeing children face in our society is the lack of powerful Rites of Passage.

Graduations, confirmations, Bar Mitzvahs, and the like, fail to call forth a direct confrontation with the mystery and spirit of the unknown. Yet, it is just such a confrontation that the WillBeing child faces internally. There's mystery everywhere — sexually, interpersonally, intrapersonally, in the shadow, in relationship to the society, and ultimately, in relationship to self. To have the courage to explore that mysterious boundary, there need to be experiences that allow the teen to go the edge with support and safety. Almost every traditional society has recognized this.[7] When we provide Rites of Passage that contain the essential six components of acknowledging the old self, casting off the old self, the gap, acknowledgment of the new self, celebration, and thanking, then Will wisdom comes forth and health can be restored. Without all six components, there is no genuine Rite of Passage. See the works of Foster and Little and Huxley for more information.

Notice the third component, the gap. This is the moment in the Rite of Passage when the child faces the mystery. Gaps are powerful experiences, designed to allow exploration of limits in a safe yet thrilling way. Many of the harmful thrills that teenagers engage in are attempts to explore the mystery. If we supplied safe, intelligent ways to gain this experience so necessary for health and maturity, then, quite likely, these harmful expressions would fade away. We simply must reintroduce Rites of Passage into our culture if we are going to integrate Will wisdom into our society.

Apprenticeships

Last but also of great importance in our call to health, are apprenticeships.[8] This venerable mode of relationship was outlawed because many greedy entrepreneurs took advantage of the young teen. Certainly, no one endorses such behavior. But we lost a precious opportunity for young people to learn meaningful skills in areas of their own interests and ideals. Further, anxiety about livelihood is diminished with the acquisition of a marketable skill. This serves the young teen's awakening of himself as a responsible person — one who can survive independently from family. This trade rarely becomes the child's career. It simply gives one an enjoyable way to make money, express oneself, and thus increase one's personal power and freedom of choice. We have run apprenticeship programs for years, with no loss of academic training for the child. All we've made are friends while we've helped teens become empowered.

Skillfully done, the mentor provides that safe space teens need to try out their ideas and relate their experiences. The mentor is known, available, and trusted. Neither parent nor school teacher, the mentor can provide a respected sounding board. The teen needs all the nonjudgmental, nonthreatening feedback she can get. Mentors are the perfect choice.

Of course, in any natural process all are served. Mentors grow tremendously in this relationship. They get to examine their own ideals. They enjoy the vigor of cross-generational dialogue. Through the teens, they get fiery reflections on themselves and the world.

Conclusion

To truly respect teens, we must first let them in our hearts. We have to recognize the great wisdom and value each and every one of them brings to the world. The action we need to take begins with examining our shadows and the way we were treated during our teen years. It begins with removing whatever obstructs our ability to meet them where they are and with what they need.

Once we do this, we are on the road to holistic, wisdom-based relationships. Conflicts can be resolved and wounds can be healed. Everyone — child, parent, community, teacher, society, and the Earth itself — is served. By honoring Nature, the nature of each of us is honored.

Notes

1. We aren't neglecting our sagacious predecessors, such as Erickson, Steiner, Piaget, and Pearce, who have appreciated development as a natural process. We are greatly indebted to them and others in the field. However, there is no common agreement on what nature means. For instance, Piaget examines children in laboratories to study cognitive development. To us, there is little natural about this. The context of a laboratory, for example, influences behavior dramatically. Also, separating cognition is reductionism, not holism. It divides the child into parts, when it is the whole that is the child. Others, notably Pearce, come closer to our notion of natural, but we develop some unique points in the rest of this article.

2. For Merton, see Thomas Del Priete's *Thomas Merton and the Education of the Whole Person*. Sri Aurobindo is most eloquent on the point in his *The Upanishads*. Hyemeyohsts Storm guides us to the hidden wholeness in every one of his great Native American stories. Plato's emphasis on the Ideal does the same. Bohm's explicit description of the relationship to the "implicate" and the "explicate" is so precise that the great Tibetan Buddhist master Sogyal Rinpoche describes himself as "absorbed by it." And, last, read this part of Psalm 19, translated by Stephen Mitchell in *The Enlightened Heart*:

The heavens declare God's glory
and the magnificence of what made them.
Each new dawn is a miracle;
each new sky fills with beauty.

Their testimony speaks to the whole world
and reaches to the ends of the earth.

3. An excellent introduction is the collection of essays in *Meeting the Shadow*.

4. A good example is the religious paintings of Tibet, known as tankgas. Several that we saw, dating from the eighth century, pictured the Buddha of Compassion sitting in silent meditation. Above and behind him were replications of his head, each in a different color. The intended effect, duly noted in the museum guide, was to show that each of these aspects of the Buddha had to be integrated before true compassion could emerge. They were of varying colors in order to indicate their emotional quality: red for anger and passion, yellow for avarice and hunger, etc.

5. Though there have been some good descriptions of the stage, i.e., Nancie Atwell's *In the Middle: Writing, Reading and Learning with Adolescents*, there hasn't been an understanding of the wisdom that guides it and the food it needs.

6. Ken Wilber ends his brilliant book, *The Atman Project*, by naming the "remembrance" prescriptions of 10 different paths to higher consciousness. We've always been particularly fond of the approach of a relatively obscure modern Hindu sage, Nishragadatta Maharaj, who would greet seekers with the question: "Who were you before you were born?"

7. See the chapter entitled "Ritual Rites of Passage" in our book, *Natural Learning Rhythms*.

8. PathFinder, a holistic family learning center at P.O. Box 445, North San Juan, CA 95960, runs a local apprenticeship program. A wonderful nationwide apprenticeship program is run by the National Association of Alternative and Community Schools in Santa Fe, NM.

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Book Reviews

Look to the Mountain: An Ecology of Indigenous Education

by Gregory Cajete

Published by Kivaki Press (585 East 31st St., Durango, CO 81301), 1994; 240 pages, paperback, $16.95.

Reviewed by Ron Miller

Like the human potential movement of a few years back, the holistic education movement is primarily comprised of white, liberal professionals who are personally dissatisfied with certain aspects of modern life; it is not a movement of oppressed or systematically disenfranchised people. This does not make the holistic approach less authentic — but it does suggest that we may be more comfortably immersed in the dominant culture than we realize. Those of us who are not marginalized by racial, ethnic, class, and other social barriers need to make a deliberate effort to stand outside our cultural conditioning if we are to fully appreciate the sources of the modern crisis.

This became clear to me at a trans-Pacific conference where I met a number of Asian and aboriginal educators. Seeing Euro-American culture through their eyes, and learning how their cultures have been affected by the spread of Western modernism, truly deepened and broadened my understanding of the significance of holistic education.[1] Now, another rare opportunity to expand our perspective is provided by Gregory Cajete's *Look to the Mountain*. This is a valuable and informative presentation of Native American cultural beliefs and how these are expressed through educational practice.

Cajete — a Tewa Indian educator and artist who also happens to hold a Ph.D. — writes frankly and forcefully with two aims in mind: He encourages Native American communities to reclaim their own cultural heritage, and he appeals to the dominant Euro-American culture to wake up to the spiritual and ecological damage it has caused to indigenous peoples and to the earth itself.

Ron Miller is the founding editor of Holistic Education Review *and currently the President of the Resource Center for Redesigning Education. His most recent book,* The Renewal of Meaning in Education, *was published by Holistic Education Press in 1993.*

> While the legacy of American education is one of spectacular scientific and technological achievement resulting in abundant material prosperity, the cost has been inexorably high. American prosperity has come at the expense of the environment's degradation and has resulted in unprecedented exploitation of human and material resources worldwide.... Education must find new ways of helping Americans learn and adapt in a multicultural, twenty-first century world. It must come to terms with the conditioning inherent in its educational systems that contribute to the loss of a shared integrative metaphor of *Life*. (p. 25)

Cajete shows how modern society, rooted in competitive individualism and reductionistic materialism, has bred a "theology of money" and an amoral worship of technology. These claims are similar to criticisms that holistic thinkers such as Theodore Roszak, Jeremy Rifkin, and many others have made. But as a member of a tribal culture that has directly suffered from the hegemony of modernism, Cajete portrays the striking contrast between the moral and spiritual emptiness of modern society, and the richness, wholeness, and deep sense of connection to nature experienced by indigenous peoples. The central message of his book is that indigenous culture rests on a foundation of "spiritual ecology," which links the individual to the community, human society to the natural world, and all living (and nonliving) beings together with a universal Spirit. *We are all related.*

Education in such a culture is entirely different from the abstract, mechanical routines that define modern schooling.

> The harmonizing of natural community with human community was an ongoing process in indigenous education. It was both a formal and an informal process that evolved around the day-to-day learning of how to survive in a given environment. This learning entailed involvement with ritual and ceremony, periods of being alone in an environment, service to one's community through participation in the life making processes with others, and engendering a sense of enchantment for where the people lived. All of these processes combined toward realizing the goal of finding and honoring the spirit of place. (p. 168)

Look to the Mountain describes the mythopoetic orientation of tribal education; the world is understood, not through rational analysis, but through story and metaphor, archetypal images, sacred art, and cultivating the ability to listen, observe, and feel in response to the surrounding reality. Cajete presents several important legends and myths from var-

ious tribes and discusses their moral, psychological, and spiritual meanings; they serve to draw the individual into an enchanted universe where all phenomena have meaning, purpose, and moral significance.

An organic education nourishes the unique "personal power" of each individual by offering diverse, flexible ways of learning, but Cajete emphasizes that in the tribal context, personal individuation does not entail the detachment of the individual ego from the community and the natural world, as it does in modern society. Indigenous education is seen as a personal journey — a heroic quest — yet it is a journey that has meaning only within its cultural and natural context. The rooting of individual consciousness in an enchanted universe, and in an organic culture that gives archetypal expression to its experience of that universe, *is an entirely nonmodern way of educating,* which is not encompassed by traditional rationalist approaches, nor by most conceptions of "progressive" or "humanistic" education.[2]

This is where *holistic* education represents a radical break from modern theories of learning and teaching, by recognizing the crucial importance of archetypal, spiritual experience leading to a "re-enchanting" of the world. Cajete's work gives us a standard — an external vantage point — for evaluating whether or not a given approach claiming to be holistic truly reestablishes an organic relationship between the person and his or her cultural and natural environment. Since our own cultural conditioning leads us to view the individual as a detached ego striving above all for personal success, it is all too easy to package holistic education — like the human potential therapies from which it evolved — as a set of techniques for enhancing personal growth, happiness, or power.[3] At the very least, even when this is far from the intention of those who develop holistic programs, strong cultural pressures will certainly influence how these programs are implemented, especially in public education.

It would be a mistake, then, to read *Look to the Mountain* as a guidebook for incorporating a few Native American stories and rituals into our teaching. This would amount to "cultural strip mining" as Douglas Sloan calls the tendency to take exotic practices out of context and graft them superficially onto one's own unexamined cultural assumptions.[4] As Cajete points out, in indigenous cultures spirituality is a way that life is lived, not a set of theories or doctrines that can be assimilated intellectually. *Look to the Mountain* is a firm reminder that education is essentially a cultural expression, and that if we want to change the ways children are taught in the modern world, we will need to raise serious questions about our deepest cultural assumptions.

Notes

1. We tried to capture the essence of that event in a video production, *Maui Visions: The 1993 Trans-Pacific Conference on Educational Change.* The 80-minute video is available for $29 from the Resource Center for Redesigning Education, P.O. Box 298, Brandon, VT 05733; (800) 639-4122.

2. In *Education, Cultural Myths and the Ecological Crisis: Toward Deep Changes* (Albany: SUNY Press, 1993), C. A. Bowers distinguishes an ecologically rooted education from both conservative and liberal/humanistic approaches.

3. See Kathleen Kesson, "Critical Theory and Holistic Education: Carrying on the Conversation" in R. Miller (ed.), *The Renewal of Meaning in Education: Responses to the Cultural and Ecological Crisis of Our Times* (Brandon, VT: Holistic Education Press, 1993).

4. Douglas Sloan, *Insight-Imagination: The Emancipation of Thought and the Modern World* (Brandon, VT: Resource Center for Redesigning Education, 1994). Native American scholar/activist Ward Churchill has written a scathing critique of Euro-Americans' desire to "borrow" indigenous religious ideas and practices. See *Indians Are Us?: Culture & Genocide in Native North America* (Monroe, ME: Common Courage Press, 1994).

Democracy, Education, and Governance: A Developmental Conception

By Dale T. Snauwaert

Published by SUNY Press (Albany, NY), 1993; 133 pp.

Reviewed by David E. Purpel

This brief, informative, and clearly written book not only is an extremely helpful and stimulating examination of issues surrounding school governance, but it also serves to remind us of the centrality of these issues for education as well as our broader social and political framework. More particularly, the author grounds his research and analysis in our nation's commitment and struggle to create a democratic society and the profession's responsibility to participate in nourishing and sustaining his quest. Professor Snauwaert makes his case calmly, soberly, carefully, and systematically beginning with perhaps

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the most basic and radical political theorem of democracy, namely "the political notion of 'constitutional choice' the principle that 'human beings can exercise choice in creating systems of government'" (p. 1).

He goes on to provide a historical perspective to our current centralized and bureaucratized system of school governance in which he challenges the conventional wisdom that this system represents a concern for expertise and efficiency and was an inevitable consequence of urbanization, population growth, and industrialization. Instead, he sees the shift away from the community control and decentralization in the late nineteenth century as directed primarily at concentrating control in the hands of particular interest groups including the rising class of professional educators. In this analysis, the author accepts the revisionist theories of such historians as Joel Spring and Michael Katz. Moreover, the author points out an extraordinarily vital matter, i.e., not only are centralization and bureaucratization not inevitable but there are alternative attractive and valid approaches to governance, ones in which efficiency and elitism are not central.

The option that is most appealing to Professor Snauwaert is one grounded in what he calls human development "conceived broadly as the all-around growth of the individual, which may include the development of moral, intellectual, spiritual, and creative capacities.... The realization of this value is contingent upon active participation in the decision-making process of institutions" (5). In an era of downsizing, bottom lines, and performance testing, this affirmation of human beings as ends and not means, as subjects and not objects, as sacred and not disposable is as exhilarating as it is rare. It serves to remind and reaffirm holistic educators not only of their vision but also of how these concerns manifest themselves not only in curricular and instructional matters but in organizational and political ones as well.

There is a very useful chapter in which the author reviews the theoretical framework for his vision of human development by providing synopses of the views of the major theorists that inform this orientation. These people are Rousseau, Mill, Marx, Dewey, and Gandhi. He then goes on to discuss the design of a governance system resonant with this vision, fully aware of the complexities and dilemmas involved.

This design is one that emerges from a Deweyan emphasis on community building that relies on dialogic processes rather than on criteria independent of the participants. It is a process he calls "principled negotiation," which avoids both the problems of models involving conflicts between parties of unequal power or those that require higher truths. "From this perspective, truth is relative and therefore conflictual.... Thus, each individual brings private interests or relative truth to the policy making process. The inevitable conflict that this public deliberation entails is then transformed through dialogue. Through dialogue it is possible to recognize a nascent commonality.... It is a search for some common ground some common principle upon which all participants can agree" (79–80).

In the final chapter, the author discusses current ideas to reform school governance, which focus on school-based management and community involvement with particular attention to three case studies in Chicago, Santa Fe, and Kentucky. Although he is encouraged by the direction of these plans, he is clearly disappointed with their continued reliance on vetoes and testing to retain central control.

This is a book that should be read by educators and citizens interested in the growing debate about the control of educational policy and the role of the community and the profession in this process. It is a must for those committed to the democratic ideal and to an education that fosters the human spirit. However, I do have a few reservations to make in the spirit of responding to this provocative and challenging book. For one, I was disappointed that the author did not spend more time on the issue of involving students in the governance process, although he does make reference to it. In this regard, the book would have been strengthened with some mention of the imaginative work being done in a number of public schools such as the programs based on the democratic schools project pioneered by Ralph Mosher, which reflects much of Professor Snauwaert's vision. In addition, there are parts of the book in which the author seems to falter in his conception of governance as relating to ends rather than means. For example, in the Epilogue he says: "A participatory system of school governance is not offered as a panacea, however. This book has been premised upon the proposition that a participatory system of school governance is a necessary but not a sufficient condition for educational excellence." This may be true but it blurs the issue of the value of participation as an inherent dimension of human existence and opens up the possibility of conceiving participation as a technique of reaching "educational excellence." Participation is not good because it can produce good

products (this notion of possible effects of differential modes of governance is what leads us to elitism) but because it is an integral part of human dignity.

In responding to the imaginative and well thought out design for school governance based on human development, I was very much struck by the attractiveness of the model and the power of the argument. Indeed, I was led to confront the question of why such an intellectually and morally solid, sensible, doable model not only is not in operation now but why it seems so utopian and why it has encountered so much resistance. I believe the answer lies in our political, social, and spiritual condition. The model asks us to initially commit ourselves not to metaphysical truths but to a struggle for the common good since this is to everyone's interest. In this model, there is faith in the human capacity to forge sensible and mutually satisfying solutions to common problems provided there is an initial commitment to furthering the common good. It is the difficulty of arriving at that initial starting point of commitment that would seem to be the greatest hurdle to the implementation of this model.

The question becomes then, under what conditions can individuals and groups make such a commitment? Surely not when the context for such dialogue is one in which there is such vast political and economic inequality as presently exists. Such a situation is akin to the one in which the conquering general who having won the battle suggests it's time for peace.

Surely, there cannot be good-faith dialogue when there is enormous distrust, polarization, divisiveness, and hatred based on notions of class, gender, ethnicity, and racial superiority — and surely, not when we are in a consciousness of chaos and meaninglessness. And surely we will not be able to enter into such a process until we come to grips with that dark side of human consciousness that insists on being self-destructive. Coming to grips with these deeper issues will take more than enlightened political theory as they entail matters of the spirit and of human consciousness. We as a people and a society will need to undergo a major transformation in our being and priorities in order for us to meaningfully engage in the processes described in this book.

I very much welcome Professor Snauwaert's thoughtful and constructive book for it provides us with general direction and concrete suggestions. In addition, it invites us to consider the entire web of concerns that connect to governance and to renew our struggle to create a just and meaningful world.

Challenging the Giant, Vol. II. The Best of ΣΚΟΛΕ: The Journal of Alternative Education

Edited by Mary Leue

Published by Down-to-Earth Books (Albany, NY).

Reviewed by Claudia Berman

The alternative movement started 25 years ago during the social revolution of the sixties and seventies. At this time, hundreds of small schools were created by parent groups or individuals. Many of the schools were short-lived. Those that have survived continue to provide an alternative to parents seeking a more holistic education than that provided by most public schools.

In 1969, Mary Leue, editor of *Challenging the Giant*, gathered a group of people in Albany, New York, and started The Free School, now one of the longest running independent alternative schools in the nation. After committed hard work and 15 years of experience, she and other members of the National Coalition for Alternative Community Schools (NCACS) founded ΣΚΟΛΕ: *The Journal of Alternative Education* (pronounced Skolay), dedicated to the documentation of small schools such as her own. Important lessons were being learned in these small schools that could benefit educators everywhere, but the schools had little voice in the larger educational public. The aim of the Journal is to supply a voice for the alternative education community with the hope that the small schools could share their successes and failures with a wider public.

This book is an anthology from ΣΚΟΛΕ. In this collection, the editor draws on writings from within the alternative educational community and presents rare views on schools that work. It contains writings from teachers, students and scholars. Some selections are written by professional writers, some are not. The tone of the book is one of casual sharing and acquaintance. Some pieces are written as journal

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entries while others are academic in nature. To add to the casual, reader-friendly tone of the book, the editor adds information or commentary after each article that helps put the article or author in context.

The methods, educators and philosophies addressed in the anthology are as varied as the people and schools themselves. Each alternative school has a unique character. Each account of a school's history, philosophy, or methods could stand alone. The beauty of the collection is that, in its entirety, along with Volume I which was published in 1992, it paints a collage of real people, situations, and educational methods that have been the basis of the alternative education movement for 25 years. It provides an invaluable glimpse into the guts of alternative education.

It is only recently that people involved with small alternative schools have found time or energy to write about what they have been creating. Most of them have been busy keeping the schools going and spending time with the children they serve. This anthology marks the beginning of documentation of this historic educational movement from within the schools themselves by the people who created them.

The articles share common elements that reflect the essence of alternative education: student and parent empowerment through democracy, a reverence for nature, and attention to the whole person (intellectual, physical, emotional, spiritual), to new research on the brain and learning styles, and to human relationships. Generally these schools embrace the holistic education vision summarized in the words of Global Alliance for Transforming Education (GATE) members, a small gem included in the book.

> This education emphasizes the challenge of creating a sustainable, just and peaceful society in harmony with the earth and its life. [It] seeks to transform the way we look at ourselves and our relationship to the world by emphasizing our innate human potentials — the intuitive, emotional, imaginative, creative and spiritual, as well as the rational, logical and verbal. (p. 265)

This book covers much ground in its casual collage format. The editor has included excerpts from books and reprints from other educational journals by such prominent educators and authors as Sylvia Ashton-Warner, John Taylor Gatto, Jonathan Kozal, Ted Sizer, Robert Theobald, and Ron Miller — all of whom have been instrumental in educational change and supporters of alternative education in the last 25 years. She has also included a summary of research from the Hofstra University Center for the Study of Educational Alternatives, a long-term public alternative school research project on how to design alternatives for success. This is a short but important piece that could be beneficial to many schools looking to create specialized programs or alternatives within larger schools.

Many alternative schools are family-based, creating a community of parents, teachers, and students. The anthology includes poetry selections from students, which enhance the character of the collage and remind us of the impact the students themselves have had on the alternative education movement. The anthology would not be complete without this addition.

This book, *Challenging the Giant Volume II*, and its partner, *Volume I*, are valuable additions to the growing library of materials that document the alternative education movement and support a holistic worldview.

Yardsticks: Children in the Classroom, Ages 4–12

By Chip Wood

Published by Northeast Foundation for Children (71 Montague City Road, Greenfield, MA 01301), 1994; 162 pages, Paper $12.95.

Reviewed by Julie King

In 1978, after six years of elementary school teaching, Chip Wood attended a Gesell Institute workshop on child development that changed his life as an educator. "Suddenly," he says, "I saw the children instead of the school; the lives to be lived, not just the lessons to be learned... I vowed to learn more."

And learn more, he did. He read, observed, taught, and reflected. Among those whose writings influenced his thinking are Piaget, Erikson, Montessori, Rudolf Steiner, Caroline Pratt, Lucy Sprague Mitchell, Dorothy Cohen, and Louise Bates Ames, as well as observers of the contemporary scene, including James Comer, Alvin Poussaint, Melvin Konner, Barbara Rogoff, Carol Gilligan, and Bertha Garrett Holliday. His strong belief in developmental educa-

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tion led to the founding of the Greenfield Center School in Greenfield, Massachusetts, and the Northeast Foundation for Children, which works with teachers in Washington, Baltimore, and other communities to help them establish schools that are responsive to children and that encourage children, themselves, to be responsive to others.

Now Wood has written a book that capsulizes what he has learned in the intervening years about the characteristics of children at different ages and the educational implications of these for teachers and parents. The book illustrates his maxim that "Children's developmental needs should be the foundation for every choice we make in our classrooms and schools." The main portion, the "yardstick," is a Gesell-style guide to growth patterns and classroom behavior or preferences one may expect of children at each age from four to twelve. In the opening and closing chapters, he applies developmental thinking to issues of policy affecting all schools and to several aspects of the curriculum.

A book of this sort fills a gap on the bookshelves of teachers. Teacher education normally includes a course on human or child development. As novices, however, preservice teachers have little experience to which they can relate it and, consequently, few questions of their own. By the time they reach the classroom, the demands of management, curriculum planning, reporting, and other teaching responsibilities leave scant energy for delving into old notes or textbooks in search of the kinds of information this book contains. Even if teachers have the time and energy, the translation of textbook theory into practice requires extrapolations and modes of thinking they may not be accustomed to using. In the busy life of a school, there are few opportunities to think about and discuss the appropriateness of content or method for the children one is teaching. Parents have similar needs and similar problems evaluating their practices, though there is more written about age characteristics for parents than for teachers.

"Yardsticks," as we are reminded by the cover photo, are tools for measuring growth. The image is appropriate because Wood's book describes landmarks in the growth process, not performance standards, just as the height mark on the wall proclaims "This is how tall I am!" not "This is how tall I should be." The "yardsticks" for each age group open with a poignant quotation from children's literature that will bring a smile of recognition. The narrative description that follows includes classroom quotations and vignettes in addition to more general descriptions of interests, physical and conceptual abilities, emotional tenor, and social behavior. Those who have lived or worked with children of a particular age will find familiar characterizations here (Eight: "We have this great idea to do a play...!" Nine: "It's so boring!" Twelve: "You didn't tell us it was due today!"). Photographs of children from a spectrum of environments complement and extend the text.

Each set of "yardsticks" concludes with lists of growth patterns (physical, social, language and cognitive) and descriptions of classroom behavior or advice to the teacher in the categories of vision and fine motor ability, gross motor ability, cognitive growth, and social behavior. In general, the characterizations of children at each age logically follow from the narrative description and are quite comprehensive in terms of behavior that might affect learning in the classroom. They are also specific enough to be immediately applied.

The lists are clearly the distillation of years of experience and study. It is unfortunate that they have not been more carefully edited. Some items are so succinctly stated that little context is provided in which to understand them ("copying from the board can be harmful"). A few, like "basic skills begin to be mastered," in the list of growth patterns for eight-year-olds, are too vaguely stated to be helpful. Construction is not parallel: Entries are a random mixture of adjectives, phrases, and sentences that are sometimes descriptive, sometimes prescriptive. The implied subjects may be plural in one list ("voracious readers"), singular in the next ("likes rules and logic"). While these inconsistencies have little to do with the content, they are distracting and undermine the effectiveness of the charts.

Wood manages to avoid, in the main, the psychological and educational terminology that makes so many books on child development unusable to parents and sometimes to teachers. This kind of language creeps in only occasionally, as when he says of five-year-olds, "[Other changes] are related to changing cognitive patterns as children move from preoperational learning, bounded by the senses, to new and more complex thinking patterns." He cites Gesell, Erikson, and Piaget as the primary references for his charts, but notes he has also drawn from his own observations and those of the scores of teachers he has worked with. It is clear that the classroom has been his laboratory.

There is danger in setting norms, as Wood recognizes. He acknowledges he has had to be selective in culling out developmental characteristics that represent general patterns of development for specific ages. He points out that although some patterns have been identified and are well documented, there is still much that is unknown. He notes that a two-year span in development is common in any area of a child's development and that variables such as health, personality, temperament, environment, and culture affect development in different ways. Most of the readily accessible research on growth and development, he admits, comes from studies of white children by white researchers. For this reason, he devotes several pages to recent work on the differences between the culture of school and the culture of the African-American community. The discussion is so illuminating that one wishes he had given equal attention to factors influencing the developmental patterns of Hispanic, Asian, and Native American children.

No one who reads the entire book can mistake Wood's intent: to place children squarely in the center of our designs for their education. He models child-centered thinking about issues affecting all children (and all schools and school systems) in the first chapter. In addition to racial and cultural considerations, he applies the developmental lens to mixed-age groupings, ability grouping, grade retention, food, exercise, and the school day and year, ending with a reexamination of major developmental considerations. In the last chapter, he examines the curriculum in the same way. Except in considering the yearly calendar, where he dwells more on practices in other countries than on the benefits for children of a longer school year, Wood is true to his own criteria for decision making. Children's developmental needs are the basis of his arguments, and anyone who wishes to question his conclusions will have to do so on those grounds. Schools should be suited to children, not children to schools.

There will undoubtedly be some who use this guide as a handbook, treating descriptions as expectations. Children who do not match the descriptions exactly could be labeled developmentally delayed. Teachers may attempt to hold all to the norm instead of recognizing and providing for a variety of levels. Those who understand the intent, however, will use it to enhance their understanding and adapt their methods to serve the best interests of children. There is comfort and objectivity to be gained by all from learning that behavior which puzzles or annoys is part of a common pattern of growth.