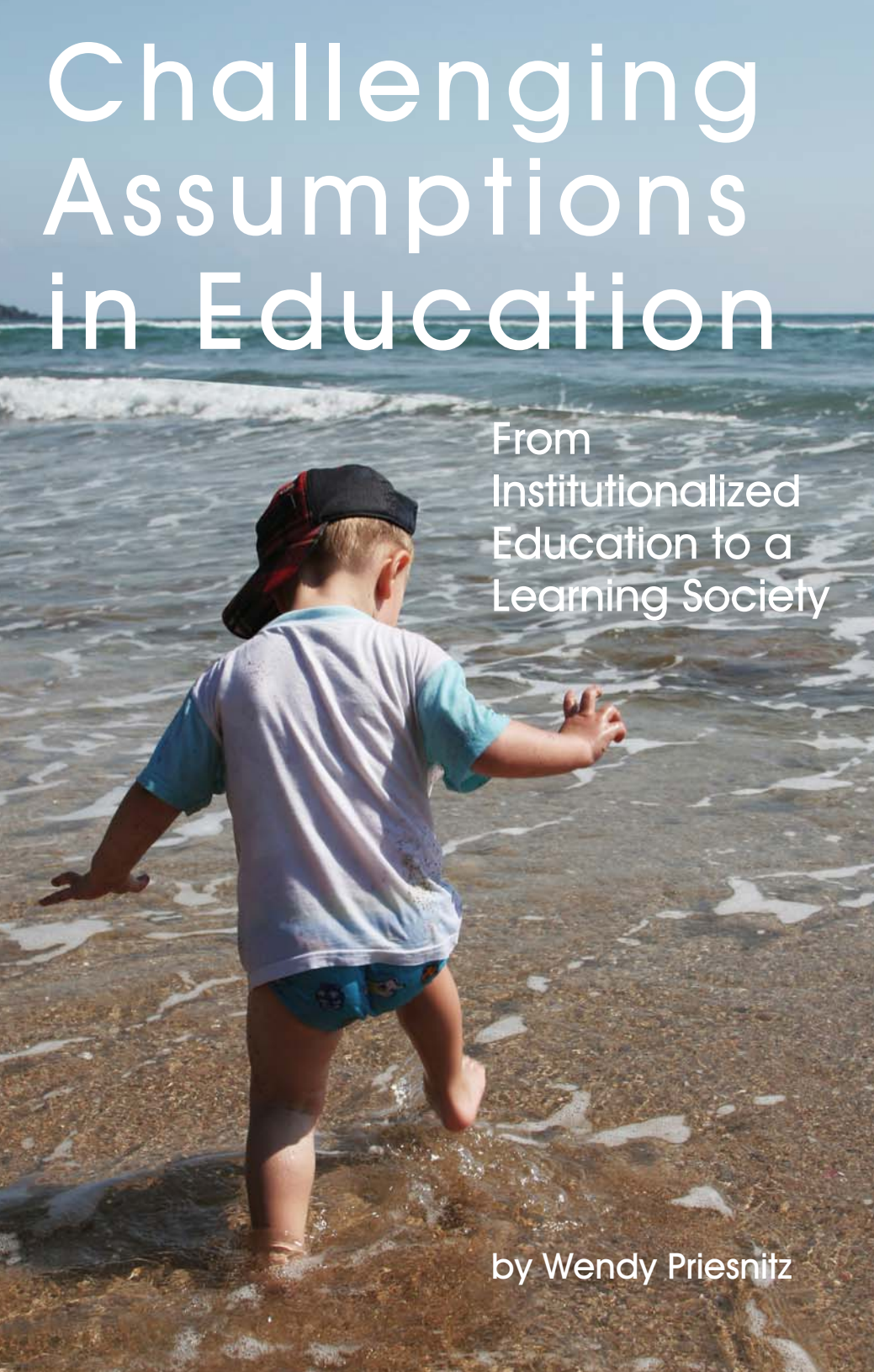
Challenging Assumptions in Education

From Institutionalized Education to a Learning Society



by Wendy Priesnitz

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CONTENTS

For over three decades, since I quit my job as a public school teacher after just four months in the classroom, I've struggled with the contradiction between my rejection of public schools and my unwillingness to deny the need for public education. I know that children don't need schools to learn and that, indeed, schools often get in the way of real learning...not to mention that they can suck the joy out of children's lives and destroy their innate love of learning. And over my years of unschooling advocacy, I have spoken with and listened to thousands of families who, like me, have been sure of the need to reject the school method of education, but who are unsure if their homeschooling model could ever practically replace the schooling industry. This book is my attempt to present a case for the urgent need to find ways to renovate our lives and our institutions so that self-directed learning – free of the constrictions of one-size-fits-all curriculum, misuse of adult power, standardized testing and other school trappings – can become the norm rather than the oddity. We owe our children the respect and trust that will allow them to guide their own learning and lives; we owe it to society and to the Earth to nurture future generations of self-reliant creative thinkers.

Thanks and love to my daughters Heidi and Melanie, who have taught me much about life and learning and continue to inspire me to think and write about how people learn.

This book is dedicated to my wonderfully patient husband Rolf who is also my best friend, admirer and business partner. Thanks to him for his unwavering love and support.

Wendy Priesnitz
April, 2008

Why Challenge Assumptions in Education?

"If our earth is to survive, we need to take responsibility for what we do. Taking control of our own education is the first step." *Heidi Priesnitz*

On one level, this book is an invitation to see children and childhood in a way that is different from how our culture defines them. On the other hand, this book is much more than that. It is no less than a plea for the future – not only for our children's future but for our way of life on this planet.

Our education system was designed to fight and win political and economic wars. We thought we needed people to build bombs, radar and airplanes. We

now have many of the same problems and some new ones as well, and we require different types of solutions. We have discovered that our present technologies are not sustainable. We urgently need to figure out how to slow if not reverse climate change, to feed the world's population and to preserve the planet's clean water supplies. We need to reduce our use of fossil fuels by developing renewable energy technologies. We need to change our waste management procedures, before we bury ourselves in both consumer and toxic waste. And more. The problems are so big that in order to fix them, we need to find new ways of working together rather than fighting with each other.

Unfortunately, our public education systems are not set up for solving these modern problems. Although today's young people are living in a sophisticated, fast-paced, highly technological world, the schools we make them attend are still operating much like they did a century ago. The dilemma is that as long as we educate people in this out-of-date manner, they will perpetuate the current way of doing things. In order to make change, we must fundamentally transform how we think about learning and about the position of individuals in society.

By our very use of words like "teaching" and "schooling," we seem to accept the idea that some people at the top are doing things to other people farther down the totem pole. Our current education systems reflect our society's paternalistic, hierarchical world view, which undervalues children in the same way it takes the earth's resources for granted. Nothing less than a complete paradigm shift will change this situa-

tion. And in order to create that shift, I believe that we will have to examine and challenge our assumptions about children and learning.

Challenging assumptions is not easy. Like most other people, my upbringing and my schooling taught me to accept what I was told by my parents, my teachers and everyone else in my life. I did that well. I was a good little girl and got good grades in school. I came from a working class family that lived in a mid-sized industrial city. Nobody in my family had gone to university and nobody suggested I go there either. My dream was to be an airline stewardess as we called flight attendants in the 1960s. But I had not been encouraged to go after my dreams; instead, I was supposed to know my place. So, as a relatively naive 19-year-old, I went to teachers' college. I was a good girl there too and got good grades once again. I did especially well at lesson planning and bulletin board decorating. And I actually got quite excited about the prospect of filling little heads with important facts.

When I graduated, I got a job teaching at a school in my old working-class neighborhood. What disappointment and disillusionment to discover that I was spending most of my time yelling at kids to keep them from swinging from the lights and jumping out the windows! They were not interested in my carefully planned lessons and colorfully decorated bulletin boards. In fact, they didn't want to be there at all. So I ended my career as a school teacher after only four months.

Then I did what I should have done while I was attending teachers' college. I started to think about how

people learn...as well as what we need to learn and why. I decided that all those lessons I had so carefully memorized in teachers' college about how to motivate students to learn were absolute nonsense. I realized that we only learn if we are not compelled and coerced; if we are given control over what, when, where, why and how we learn; and if we are trusted and respected. I realized that the learner is always in control of his or her learning, whether or not those trying to teach understand that or not. I realized that until schools get in the way, children do not need to be motivated to "learn"…because curiosity about the world and how it works is a natural human trait.

Fortunately, around the same time, I met and married a man who already intuitively knew all of this. In the early days of our marriage, we spoke often about how and why we would not send our yet-to-be-conceived children to school. And while I took my first tentative steps towards believing in myself as a writer, Rolf and I started a family.

When I was pregnant with our first daughter Heidi in 1972, I fought anger, frustration and sometimes despair at the state of the world into which I would bring her. Propelled by a desire to make the world a better place for our children, we decided that Heidi and her sister Melanie who was born 18 months later, would grow up unfettered, not only by school, but by many other assumptions that people make about children's subordinate place in the world.

Then, when the girls were ages three and four, we started a home-based business to publish Natural Life Magazine. We were in our mid 20s, with no training or

experience in the media world. Rolf was a plumber and I was an unemployed teacher/wannabe writer. But we knew that we wanted to provide information and inspiration to help people question the status quo and the conventional, consumer-oriented ways that were damaging our Earth. In those days, questioning the status quo meant joining the back-to-the-land movement, growing one's own food and learning about non-conventional methods of parenting. So that is what those first few issues of Natural Life were about, with articles about how to plant cabbages, have a home birth and construct a wash bucket bass fiddle.

Our home business, which has published this book, was, itself, a deliberately alternative economic, social and environmental choice. But little did I know that the entrepreneurial experience would have ramifications far beyond the value of putting food on our family's table – or that it would teach me to challenge assumptions...about economics, education and food production, and about what is truly important in life. I mean assumptions like:

- I have an earache so I must go to the doctor for antibiotics.
- Garbage is disposed of at the dump.
- Entertainment is expensive.
- We need a lawyer to settle the fence dispute with our neighbor.
- We need a professional architect and contractor if we're going to build a house.
- Artists are the only people who can make art.
- Businessmen wear suits and ties.
- Businesswomen have to act like businessmen.

- Business is conducted best in an office tower.
- Children must go to school.
- Children won't learn unless they're taught.

Along the way, my family and I lived a good life, while being true to our principles, at least most of the time. Instead of writing advertising copy to sell breakfast cereal or press releases to "greenwash" the public images of various multinational corporations, or composing mind numbing speeches for well meaning politicians, I plugged away at semi-profitable alternative journalistic pursuits, using my talents and skills to create change. We walked or rode our bikes whenever possible. We recycled and reused. We grew our own vegetables and bought locally grown organic food when we could. We made our own clothes or purchased them with no concern for brand name labels. We also made our own entertainment. And for our young daughters, we replaced schooling with life-based, self-directed exploration that made the world their classroom.

In 1979, in an attempt to communicate with other families who were challenging the assumption that children must attend school, I founded the Canadian Alliance of Home Schoolers (CAHS). It was a national network that helped launch many of the provincial support and advocacy organizations that are in place today in Canada. And although it long ago ceased to function as a membership organization, CAHS still receives thousands of phone calls and letters each year about how to help children learn without attending school.

Unfortunately, in 1979 I had not yet fully slain the

schooling dragon in my own mind. If I had, I would have given the organization a different name. The learning experience that my family was living – and that underlies many of the solutions in this book – had nothing to do with school (except for a determined lack of it!). As you will see, I believe that what is now popularly understood to be "homeschooling" – where parents teach their children at home in a school-like manner – is not meeting its full potential – and, in fact, is not the solution.

At any rate, as the end of the 20th century loomed, current events made me wonder if those small, personal choices I was making were enough. I watched child poverty and the abuse of women and children grow to epidemic proportions globally, while social safety nets were being torn apart in the name of fiscal responsibility. Youth crime appeared to be increasing, fueled at least partially by the violence that surrounds us, both in real life and in the media. I saw indigenous peoples still fighting for their basic rights. I saw logging companies continuing to ravage forests, tobacco companies cynically buying their way out of responsibility for their deadly product, global warming wreaking havoc with world weather patterns, garbage dumps overflowing, nuclear power plants and oil tankers leaking and toxic chemicals being found in mothers' milk. This was in spite of decades of effort on the part of environmental and social activists around the world.

That is how, in 1996, my need to "do more" led me to accept an invitation to run for the leadership of the Green Party of Canada. Although I had no formal ex-

perience with politics, I realized that, as the feminist slogan goes, "the personal is political" and many of the choices I had made in my life were, in reality, political.

The Canadian Greens were only 13 years old at the time, and I took on the daunting task of trying to build a truly progressive, grassroots alternative to the mainstream political parties. Unfortunately, I quickly learned that from day one, many in the tiny party wanted a party that was not a party, an organization that would not organize and a leader who would not lead. Disillusioned with other political parties, they were understandably wary of anything that could be construed to be bureaucracy. To the party's disadvantage, this had translated into a distrust of initiative, which resulted in lack of action, as well as seemingly endless conflicts about structure and process.

Feeling almost alone in my desire to build the party from the bottom-up and tired of butting my head against men with their own egotistical, back-room political agendas, I eventually resigned. I was disillusioned by the party's lack of ability to walk its talk, in spite of some wonderful policies and dedicated people. Later, I realized that the experience had taught me something important, in the same way that my brief school teaching career had done. I had learned that only when we have truly rejected the top-down model of organizing our lives and our institutions will we be able to concentrate on building sustainable communities. From these communities will rise political action and even political parties that can provide solutions to the problems that are tearing our society apart.

And surprise, surprise, I realized that I had known

the source of the problem – and hence the solution – all along! One of our most revered (and hierarchical) institutions takes young children, molds them into obedient consumers and fits them into their places in the hierarchy of our society, leaving few of them able to do anything except accept the status quo while bemoaning its problems. So I ended up back where I had started from – thinking about children and how we equip them to save the world, or at least to live happily and productively in it.

There are few assumptions more entrenched than those we have about how to educate children. So I decided to write this book to help others examine those assumptions and to explore alternative ways of thinking about how we can help children grow up into problem-solving, assumption-challenging, compassionate citizens who think independently and participate in the life of their communities and countries.

Of course, challenging assumptions can be uncomfortable. No matter how open-minded we are, most of us have at least one sacred cow based on the way we were raised or are currently living our adult lives. So some of the conclusions in this book will be controversial to some readers. They certainly are radical, because my own process of challenging assumptions has convinced me that we need to do nothing less than dismantle our public education systems and start over from scratch. There is no point continuing to pour increasing amounts of money into trying to fix our school systems, when it is those very systems that are the problem.

Sociologists, futurists, politicians, entrepreneurs

and even some educators talk about the need for a revolution in education. But what they envision really amounts to nothing more than tinkering with the old, crumbling structure. Although there have been many cosmetic alterations to public education over the past century, the traditional blueprint for education persists...and it looks like a factory. From time to time alternative schools and programs emerge that are teaching a so-called "child-centered curriculum" or that are using team-teaching or a program of integrated studies or some other new pedagogy.

But the context of these well-meaning and sometimes less oppressive alternatives is still hierarchy and coercion. Most people still believe that children and young people must be made to go to school or else they won't become educated. And even the most radical critics of the school system seem not able to abandon the belief that children must be processed for a life as producers and consumers.

This is not surprising, since education is, itself, an industry. Our present system was designed to prepare workers for an Industrial Age culture, teaching authoritarianism, self-repression and strict obedience to the clock. True to the industrial model, control over what is to be learned rests somewhere inside a huge bureaucracy that oversees both teachers and students.

Getting rid of the factory model of public education challenges not just our assumptions about how children learn, but a variety of agendas related to who manages the affairs of our communities and how corporations make profits. Those vested interests allow otherwise insightful and community-minded people to

ignore the scandalous malfunctioning of our billion dollar education industry.

Overturning the education industry is not some kind of utopian dream. The transition from "educating" to "learning" is being recognized by a wide variety of often conservative business people from management guru Peter Drucker to futurists Alvin and Heidi Toffler. Drucker, in his book "Post Capitalist Society," writes of a society based on knowledge, one in which all society is an open, lifelong learning system in which every person can enter any level at any time.

The Tofflers, in their book "Creating a New Civilization," write that schools operate like factories. They say, "An important question to ask of any proposed educational innovation is simply this: Is it intended to make the factory run more efficiently, or is it designed, as it should be, to get rid of the factory model altogether and replace it with individualized, customized education?"

Some futurists were even thinking in those terms two decades ago. Back in 1979 the Research Branch of the Ontario Ministry of Education commissioned a study on future trends and strategic planning. Three scenarios were devised as being both possible and plausible. The author of one scenario, Dr. Norman Henchey, a professor at McGill University's Faculty of Education, foresaw the end of compulsory education by the year 2000. In his fictional account of the future, Henchey described a transition from compulsory schooling to a concept that he called "Guaranteed Access to Educational Services." According to the sce-

nario, this step becomes necessary because the definitions of schooling and education have become "so broad that any definition of compulsory learning has little meaning and is unenforceable."

But here we are long past the year 2000 and that sort of change has not happened. And it will not happen until we give up on the hierarchical, coercive, industrial model of education – whether it looks like a public school, a charter school, a private school or a home school. We must deschool society, as Ivan Illich so ably put it in his book "Deschooling Society," rather than merely reform the institution. We must demolish the institution of schooling because it impedes learning and enslaves children. Then we need to put both money and creativity into creating opportunities and infrastructures that respect children and help them learn.

To do that, we must challenge our dearly held assumptions about the purpose and process of education. These are assumptions that have created a society that chooses consumption over action, that favors developing new weapons to relating to each other, that encourages production over conservation.

I believe change on the scale that is required happens one person at a time. So I hope this book will take you on a personal journey to deschooling our society…and help you put learning back into the hands of a learner you know.

Assumption 1

Education is Something That is Done to You

"You cannot teach a person anything; you can only help him find it within himself." *Galileo*

Perhaps the most basic assumption we make about education is that learning can and should be produced in us – and that we can produce it in others. This assumption leads to another one: that learning is the result of treatment by an institution called school.

We assume that children do not want to learn and will not learn if left to their own devices. So we force children to gather together in one place for long hours with others of the same age, so that we can educate them. Even many people who reject traditional schooling in favor of homeschooling believe that education

must be "done to" children. They continue the process of manipulating children to learn, as well as judging and processing them in a variety of ways, then diagnosing them as having a problem if they don't learn what the adults have decided they need to learn.

Unfortunately for children, this assumption is no more valid than the one which says wellness results from treatment by a hospital. One may get well in a hospital and there are some situations where a hospital stay may be the only way to get well. But there are also many examples where hospitals have hindered the healing process or where relatively well people have become ill in hospitals, either through mistreatment or by catching other people's diseases. Most people would be healthier if they took responsibility for their own well-being, rather than rushing off to be treated by an institution every time they have a health problem.

Similarly, people do learn in schools. However, schools are not the only – or for many people, the best – environment for learning. And that is because they focus on teaching rather than on learning. Human beings do not need to be taught in order to learn. We are born interacting with and exploring our surroundings. Babies are active learners, their burning curiosity motivating them to learn how the world works. And if they are given a safe, supportive environment, they will continue to learn hungrily and naturally – in the manner and at the speed that suits them best. In fact, you cannot stop young children learning from everything they experience. They are always experimenting with cause and effect. And they are always soaking up information from their environment. Speak a language

in their presence, and they will learn it. Perform a task near them, and they will imitate you.

Cognitive psychologist Alison Gopnik, who is co-author of a research study called "The Scientist in the Crib," says babies' brains are smarter, faster, more flexible and busier than adults'. Her research has confirmed that, contrary to traditional beliefs about children, toddlers think in a logical manner, arriving at abstract principles early and quickly. "They think, draw conclusions, make predictions, look for explanations and even do experiments," she writes.

This instinct to learn, to manipulate, to master is not news to parents, teachers or psychologists. The late Robert White, Harvard developmental psychologist, called it an "urge toward competence." What he meant was that we are born with the need to have an impact on our surroundings, to control the world in which we live. We do not just sit and wait for the world to come to us (unless we've been told to sit down, be quiet and wait). We actively try to interpret the world, to make sense of it. Of course, this drive to discover means we are constantly learning...and experiencing the pride that comes with having learned.

Some psychologists feel that the pleasure we take from this drive to learn is also its motivation. Perhaps this hedonistic aspect of self-directed learning is also its downfall! How can something so important be so much fun? Can learning really be so effortless? Unfortunately, by turning learning into forced drudgery – intentionally or not – schools suffocate the natural desire to discover and master the world.

What results is a kind of self-fulfilling prophesy.

Because schools suffocate this hunger to learn, learning appears to be difficult and we assume that children must be motivated to do it. The tools of manipulation and motivation include rewards and a whole array of demeaningly "fun" exercises reproduced from boring workbooks. In reality, people do not need external rewards to learn. We do not learn things because the process is fun, but because what we learn allows us to accomplish something. And that accomplishment is sufficient reward.

Think for a moment about how babies learn to walk and talk – perhaps two of the most challenging learning experiences human beings experience. Babies learn how to talk because they have a need to communicate, and because they see everyone around them talking. Because we assume that our children will learn how to talk, the actual learning process appears to be quite effortless.

We do not provide babies with formal instruction in speaking, breaking the topic up into bite-sized chunks of information. Instead, we just naturally model the use of what schools call whole language, focusing on concrete, meaningful interaction with our children. When baby says, "Dadda," we aren't likely to reply, "Say that in a complete sentence!" or "You must pronounce that more clearly!" Instead, we praise and encourage practice. We model the behavior. We participate in the learning experience. We celebrate success when they finally manage recognizable words.

Nor do we consciously teach children to walk, sitting them down in front of chalkboards and drawing

diagrams of which muscles move which body parts. We do not test their incremental mastery of the skill or nag them to practice. We provide safe, supportive environments where they can practice, and we provide nourishing food so they develop straight bones and strong muscles. And most importantly, we trust them to learn. And so they do.

But there is more to learning than meets the eye. It is actually a very sophisticated mental process. No matter what the topic is or how motivated we are, people of all ages learn best when there is time for research, for digression, for processing the information, for immersion in the project, for spontaneous activities or even sidetracks. We learn by muddling through problems and discovering the satisfaction of accomplishment. Learning is a process of figuring things out, making connections, getting ideas and testing them, taking risks, making mistakes without fear of ridicule or embarrassment, and trying again. An optimum learning environment provides opportunities to explore, to investigate questions and ideas.

Discovery leads learners to find out about the world. Reading novels sparks an interest in history. Setting up a lemonade stand requires and develops a knowledge of arithmetic. Communicating with grandma hones creative writing skills. A conversation over the back fence can result in the enthusiastic pursuit of a common interest with a like-minded friend – not because two people share the same age but because they share a passion for a certain subject.

A real teacher is a facilitator, collaborator and supporter of this learning process, rather than someone

who attempts to create, control or manipulate learning. This type of support requires respecting and trusting the learner; talking with them; providing opportunities for interaction with people and things; sharing and modeling learning; supporting the risk- and mistake-making processes; enriching the environment with books, pens, paper and other materials; celebrating good ideas and satisfying accomplishments; and helping troubleshoot when things go wrong. It also means providing the time for children to investigate their own ideas, and being a flexible and patient observer of a process that does not always appear to be sequential or organized.

Schools are not designed for this sort of active learning. They can't possibly present enough opportunities, time, space or flexibility for self-directed learning to take place, in spite of the fact that many teachers will tell you this is exactly what they are doing. Nevertheless, some teachers manage to make the best of the institutional situation they are in.

John Taylor Gatto is an educational reformer and home education proponent who won numerous awards for his hands-off style of teaching, including New York City's 1990 Teacher of the Year. And here is how he has described his teaching method: "The successes I've achieved in my own teaching practice involve a large component of trust, not the kind of trust conditional on performance, but a kind of categorical trust...a faith in people that believes unless people are allowed to make their own mistakes, early and often, and then are helped to get up on their feet and try again, they will never master themselves. What I do right is

simple: I get out of kids' way. I give them space and time and respect and a helping hand if I am asked for it."

As a teacher, Gatto understood that active learners can benefit from access to resource people but do not require motivation or coercion by teachers. Active learners do not need the forced guidance of someone else's agenda or curriculum. They do not need formal lessons taught at predetermined hours on days set aside especially for learning.

Nor does active learning require assessment or grading. The concepts of "passing" and "failing" are really only relevant to situations where children are coerced into learning, where education is thought of as a series of hurdles to be scaled, and where accountability is the bottom line from an economic efficiency perspective. Nobody needs tests or grades in order to learn.

When we interfere with and try to control or measure the natural learning process, we remove children's pleasure in discovery and inhibit their fearless approach to problem-solving. We have all seen that sort of interference in action. My two-year-old daughter wants to put her own shoes on. She proudly puts the left shoe on the right foot, then determinedly spends ten minutes creating a massive knot in the laces. Her grandmother, not being able to watch any longer, says, "You're doing it all wrong. Here, let Grandma do it for you!" My daughter bursts into tears. Fortunately, I have the courage to intervene because the legacy of that type of "help" left me with a resistance to trying something new for fear of not being able to do it per-

fectly well the first time.

When people are fearful, confused or bored, or have been convinced that something is too difficult or that they are too dumb, they shut down. The surest way to make someone fearful of risk-taking is to demonstrate their chance of failing. It is no wonder our schools are full of bored, frustrated, angry, passive children who have lost their ability – and desire – to question, experience and learn.

Another wall that schools bump up against when they try to "do education" to children is that of individual differences. Simply put, the learning process is different for each individual, although there are obviously many common factors. Each of us learns in our own unique way, at our own speed, using our own learning style.

Some people respond well to verbal instruction. These people are called auditory learners by those who have tried to label these differences. Visual learners need to see something to understand it. Other people, called kinesthetic learners, must involve their bodies in their learning, keeping in motion and touching something concrete. Still others learn best through a combination of these experiences. When the learning environment fits our style, we learn quickly and effortlessly. When it does not, we easily become frustrated and maybe even completely turn off learning.

Only about 30 percent of children are auditory learners and can learn easily from verbal instruction, which dominates most school learning experiences. But even then, many of these children are not entirely suited to the classroom environment. Auditory learn-

ers often talk while writing or repeat words aloud when they are supposed to be engaged in what schools call "silent reading." Auditory learners also enjoy watching and performing plays, remember names but forget faces, are distracted by noise and are annoyed by games and pictures.

Visual learners have been estimated to comprise approximately 40 percent of the population. They learn by seeing words and pictures, and by writing. They often remember faces but not names, have vivid imaginations, think in pictures, mirror their emotions with their facial expressions and use color in their work. This is the type of person for whom television, movies or computer games can be addicting.

Kinesthetic learners learn best by using their large motor skills and employing their whole bodies. Generally, they are not avid readers and spell poorly. They remember what was done, but not what they saw or talked about. Touch is important to these impulsive children. They do not respond well to verbal instructions, love games and can often be seen hitting and pounding.

There is a subset of kinesthetic learners sometimes called tactile learners. They exhibit many of the same traits as kinesthetic learners, except they employ small motor skills. All children are mostly kinesthetic until age six or so.

In reality, most people employ all these different modes of learning at different times and for different purposes. In addition, when considering how individual children learn, we need to understand that formal, book-based learning is entirely inappropriate and inef-

fective with young children. At age four, the two hemispheres of the brain begin to specialize, with each side developing strengths in different functions. Around age five, what is called lateral integration begins. This means that the two sides of the brain begin to interact to process information, a process that is usually completed by age nine. Many researchers suggest that children are not ready to handle pure abstract information until at least age eight. Like physical growth, the rate of this type of development varies from child to child.

Unfortunately, institutions do not easily accommodate this much individuality. Schools must, by their very nature, provide group experiences. And the caretaking mode of education makes it impractical to create a system for grouping large numbers of learners that is fluid enough to allow everyone to learn all the time using the appropriate learning style.

Schools – and probably Western society as a whole – focus on just two ways of seeing the world. They deal best with linguistic and logical forms of intelligence, and ignore others. Howard Gardner, a psychologist and co-director of Harvard's Project Zero, has refined the idea of individual learning styles into a theory that he calls "multiple intelligences." He says we possess eight distinct forms of intelligence: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal and naturalist.

Teachers, according to Gardner, value children who are good with words and logic, but have problems with those whose abilities lie elsewhere. The exceptions to that rule are Waldorf and Montessori teachers,

who integrate the eight intelligences in their own unique ways.

This idea of multiple intelligences suggests that optimum learning occurs when people can employ all eight intelligences. Take reading, for example. Focusing on spatial intelligence, children might learn to read through pictures that represent words or letters. Musical intelligence contributes to the process of learning to read when children sing the lyrics to songs. Kinesthetically, they might pantomime the words. Mathematical children might learn to read more easily when it is presented logically or through a computer software program. Interpersonally oriented children can often be found teaching a younger child to read, whereas intrapersonal children might prefer to teach themselves to read by going off to a corner somewhere. And the naturalist might enjoy reading about bugs or oceans.

When children are not able to employ the appropriate learning style, or do not fit into the mode of intelligence favored in school, they do not learn – although they memorize. Because we assume that teaching results in learning, students are blamed when the subject being taught is not learned. So children learn that "math is difficult" or "I'm too stupid to learn to spell" or "I can't draw."

They are the lucky ones. Their less fortunate peers, whose frustration or lowered self-esteem leads them to misbehave, are diagnosed with mysterious learning "diseases" during their "treatment" at school. These diseases are loosely called attentional deficits (AD) or learning disabilities (LD). Clinicians and re-

searchers use terms like Attention Deficit Disorder (ADD), Attention Deficit Hyperactivity Disorder (ADHD), ADD-combined type, ADD-predominantly inattentive type, Executive Function Disorder (EFD) and opposition defiant disorder (ODD). Parents and teachers sometimes just call it hyperactivity.

A cure is then prescribed, expectations for academic performance are lowered and the learning diseased children are often segregated from their peers. The "cure" is usually a dangerous drug like Ritalin.

One study of American preschoolers between ages two and four found that 150,000 children were on such drugs in 1995 – a 50 percent increase from just four years earlier. The lead researcher, an assistant professor of pharmacy and medicine at the University of Maryland, hypothesized that the dramatic increase was due to the increasing number of children in daycare, whose parents feel pressured to make their children's behavior conform.

In addition to possibly creating psychological dependence, Ritalin can have a number of side-effects, including increased blood pressure, heart rate, respiration and temperature; stomach pains; weight loss; growth retardation; facial tics; muscle twitching; nervousness; irritability; agitation; insomnia; heart palpitations; and more violent behaviors like psychotic episodes and paranoid delusions.

The real tragedy is that treating most of these children with a drug is unnecessary. Rather than being mentally ill, they are more often than not suffering from what can be called "school disabilities." Lack of ability to concentrate, short attention span, daydream-

ing, overly disruptive or even destructive behavior and many other perceived problems can often be traced to the influence of the school setting or an inappropriate style of teaching, rather than to the students' inherent lack of ability to learn. What we call hyperactivity can be caused by anxiety, food allergies, boredom or overstimulation by video games or television.

Labeling children with one of these so-called "disorders" or "disabilities" is really blaming the victim, according to some psychologists. The system that has failed to educate these children then punishes them for not learning. Thomas Armstrong, author of "In Their Own Way: Discovering and Encouraging Your Child's Personal Learning Style," has written a number of articles declaring that attention deficit disorder is a myth.

The proof that we need to challenge the assumption of learning disabilities may be in the way children behave when they are not in school. Many parents whose children are on medication for these so-called "disabilities" lay off the drugs on weekends or summer holidays because the children's "symptoms" do not pose a problem at those times. And families who remove their children from school in favor of home-based learning often find the problems disappear altogether. I suspect that the difficulties disappear simply because these children are involved in activities in which they are interested, are interacting one-on-one, are with people they trust and who trust them, and can control their own activities (including moving around as much as they want).

In the past, these kids might have been labeled as

"daydreamers" or "bundles of energy." But they were seldom, if ever, thought to have a psychiatric illness just because they didn't fit into a certain structure. In fact, these children are often quite creative, excelling in music, dance, writing or inventing – when they are allowed to indulge in those activities. How sad that in order to help kids function well in what Armstrong calls "the worksheet wasteland" of school, we are medicating them in ways that shut down their creativity! People like Thomas Edison, Winston Churchill, Sara Bernhardt, Louis Armstrong and Albert Einstein did poorly in school. I wonder if they would be given a learning disability label if they went to public school today!

While my formal schooling happened before the curious notion of learning disabilities was invented, I certainly developed a school-induced "disease." I call my problem math phobia. Successive years of having math done to me left me with a dislike of the subject – indeed, a fear of it – that is still with me 50 years later. My palms still get wet and my brain still shuts down when I recall the terror I experienced standing in the aisle beside my seat trying to make my brain cough up an answer to a math question posed by the teacher during a timed drill.

My daughters, on the other hand, did not have teachers or parents bent on teaching them math because they did not go to school or experience school-at-home. True, my non-math phobic husband spent time with them, talking about the "subject" and playing math games. But because he did not try to force feed them math, they did not find it difficult, their

minds did not shut down when the subject came up, and they still enjoy using it in their everyday lives.

Fortunately, my math phobia did not get me labeled in any way by my teachers. Possibly they did not even notice it. In spite of my hatred of the subject (and my lack of long-term retention of even the multiplication tables over which I slaved so hard), I received good marks in math. I knew how to write tests and I was a passively obedient, neat, well-organized student.

Students like me, who do appear to be learning what is being taught because their learning styles fit the school experience, or who are clever enough to play the game of manipulating the process for their own ends, are advanced grade by grade through the system. But at the end of the assembly line, there is no guarantee that their diploma signifies competence, knowledge or maturity. In many cases, what has supposedly been learned is soon forgotten, simply because the information was memorized but not internalized...it was taught but not learned.

Although the institution of schooling may not be the best place for many children to learn, it has other important functions. Requiring children to meet together in dedicated buildings for a certain number of hours each weekday serves parents who need child care, teachers who like to work regular hours at challenging jobs, and everyone else in the industry that services the institution. But it is time to admit to ourselves that the industrial model on which we have based our school systems is not designed for the benefit of learners. Children have become the justification

for the school industry – its products. In that way, schools need children more than children need schools!

So now that we have challenged the assumption that education can be done to people, with what do we replace it? We must begin at the beginning – by confronting our own feelings about learning. We must begin by separating what really contributes to learning from what schools say is helpful. And we must begin by trusting in children's desire and ability to learn.

Then we must observe how our own children learn and provide them with environments where learning can happen. For many families, this will mean unschooling their children. But it also means that we must deschool our communities and perhaps all of society. Everyone – parents, non-parents, grandparents, teachers, politicians, the corporate sector – must take responsibility for creating and maintaining learning environments. This includes modeling the behavior; making the environment safe, stimulating and respectful; providing access to requested resources; consoling when things go wrong; and celebrating when things go right. Then we must get out of the way and not meddle in the learning process unless we are invited. In fact, we need to trust people of all ages – family members, work colleagues, neighbors and employees – to figure things out for themselves unless they ask for our help.

Like John Taylor Gatto and John Holt before him, teachers can become part of the solution instead of part of the problem. They can spend most of their time outside the classroom, demonstrating their successes and

educating the rest of society about how children learn. They have the credibility to advocate on behalf of allowing children to learn and in favor of abolishing the sausage method of processing students. Like me, both Holt and Gatto eventually abandoned the school mode altogether, in favor of supporting learners to educate themselves.

But teachers who remain in the classroom can also become part of the much-needed debate that will help everyone – including children – understand and challenge this assumption. Children's literacy advocate and author Frank Smith says we must be honest with children about the purpose of some of the processing that is done to them in schools. And he has talked with six-year-olds in classrooms about why they are being given "busy work." He says they will accept a certain amount of such activity without confusion if they are told the truth about its purpose, but should not be fed the myth that it will help them learn and that their performance on it reflects whether they are smart or stupid.

At the same time, we can work together in our communities to create a learning society that will eventually replace schools as we now know them. If we refer to Gardner's model of the eight intelligences, we can begin to see that everyday life can easily provide a full-spectrum learning environment that appreciates individual differences and is suited to each child's learning abilities and needs. We need to demand that our politicians use our tax money to fund libraries, museums, theaters, other community institutions – and yes, even school buildings – so they

can afford to provide spaces for people of all ages to explore, interact and learn (on their own initiative, of course).

Institutions should exist to be used, rather than to produce something. If they are effective, people will use them. If they are accessible and stimulating, they will naturally incubate self-organizing, fluid groups of individuals and families who cooperate to use the spaces and resources to provide experiences that nurture learning.

What we should not do is create new schools – be they charter schools, private schools or home schools – which perpetuate the old assumptions of how children learn or who controls children's lives.

Assumption 2

Knowledge Belongs to a Cult of Experts

"Do not worry about your problems with mathematics; I assure you mine are far greater."

Albert Einstein

The assumption that learning is difficult and can only result from formal instruction goes hand-in-hand with the assumption that there are two groups of people – those who have knowledge and those who do not have it.

Ever since the Industrial Revolution created the need for specialized knowledge to run equipment and manage employees, our education system has been creating a cult of experts – people who spend large portions of their working lives focusing on increas-

ingly narrow ranges of highly specialized information. In a market-driven economy, these "experts" are able to charge for access to the information they own. Even the basic keys to life like genes and seeds are now being patented and turned into commodities that are for sale to the highest bidder.

Most of us willingly pay others to design and build our houses, program our computers, settle our legal disputes, entertain us, grow our food and cure our illnesses. We do not have time to look after these aspects of daily life for ourselves because we are too busy pursuing our own fields of expertise.

But there is more to it than that. The "experts" have an interest in convincing us that what they know how to do is too difficult, time-consuming or complicated for the rest of us to learn. And because we have bought into the assumption that we can only "get knowledge" by being painstakingly taught by highly schooled experts, we do not recognize or value the knowledge, wisdom and skills that we have gained – often incidentally – on our own. So even those of us who want to build our own houses, program our own computers, entertain ourselves or look after our own health do not feel qualified to do so.

Even if we wanted to learn these skills, it could be difficult. Many of them are not taught in school and even people who have such skills often do not value them enough to pass them along to their children or other young people. Commercially prepared courses are often too expensive or otherwise inaccessible. But the big stumbling block for most of us is our own attitude. We have been conditioned not to think of our-

selves as self-reliant people who can do these things...or teach ourselves to do them. School has taught us to be emotionally and intellectually dependent.

The issue is complicated by the fact that we rank some types of knowledge as more important than other types, often based on the relative amount of physical effort required or the amount of money they earn. For instance, the ability to fix a car or build a house, which require physicality and a tolerance for dirt, rank lower on the prestige scale than more intellectual tasks like programming a computer or doing genetic research.

This obsession with ranking people by their jobs and salaries extends to most other aspects of life. Sports fans rank athletes and teams; beauty contests rank the best looking women; orchestra members are ranked by where they sit in the orchestra pit; business magazines rank the most profitable and fastest growing companies; newspapers rank the year's or the century's most important news stories.

Being surrounded by all this comparing and ranking leads us to compare ourselves with other people – or to an unattainable (and often nonexistent) set of criteria. If this sort of comparing and competing encouraged us to fulfill our own potential, it might be useful. Unfortunately for many people, it merely results in reduced self-esteem because we do not measure up to some "expert" standard.

Categorizing and ranking ourselves and our activities in this way begins in school. Poor readers are separated from good readers. Those with behavioral difficulties or different learning styles are put into spe-

cial education classes. The most academically inclined students are separated off for a few hours a day for "enrichment" activities. A prize is offered to the student who reads the most books or completes the fanciest science project (often resulting in parents doing the work instead of the child). Competition is everywhere, from spelling contests and math drills to the sports field.

One of the odder – and most arbitrary – ways we categorize people in schools is by age. The production line method of education requires this linear type of age segregation. But it is not the best way for people to learn, nor is it even the best way to socialize people. Most North American schools were ungraded until the second half of the 19th century, although grades were already well established in Germany at that time. The European model came from a belief that a group of minds can be organized in the same manner that a military officer directs the body movements of a group of soldiers.

In reality, all this sorting does is hamper those students who learn more slowly or more quickly than the norm, which sets the pace. Besides, we adults do not arrange our working or social lives in that way, so why should we require it of our children? Historian Joseph Kett has demonstrated that the natural social life of American children prior to age-segregated schooling consisted of groups of people from ages eight to 22, which looks a lot like the natural social life of unschooled children today!

Kett has also conducted research in collaboration with juvenile justice specialists, which suggests that

youth crime may result from our age-segregated youth culture.

At any rate, this ranking and sorting process prepares us to accept an adult life where the "experts" are separated from the rest of us and conditions us to accept jobs that may be boring and uninspiring. White collar ("expert") jobs are not really seen as jobs at all, but as career positions. This type of work allows the "experts" to advance themselves on an increasingly lucrative career path, while blue collar jobs are seen as dead-end situations.

In this type of scenario, success is defined by improved social status and high income rather than by personal satisfaction or the implementation of talents and skills for personal or societal benefit. When we allow ourselves to be ranked by our careers, we also allow ourselves to make life decisions based on what would look good on a resume, rather than on what we enjoy doing or on what would help us grow and develop our potential.

This is not the way young children behave. They define themselves in many ways all at once. They are painters, singers, mathematicians, scientists, athletes and engineers. They try everything without worrying about which "jobs" they like best, are better in, are more important in society's ranking, or in which they have special training. Then somewhere along the way – often earlier in their young lives rather than later – we persuade them to become "experts." We narrow their minds and their imaginations so they will begin to concentrate on career goals, to think of themselves only as scientists or engineers. We channel them into special-

ties, which require specialized training. Although many careers properly require specialized training, this narrowing of focus, when allied with the cult-of-experts mentality, feeds dependency on other people who are considered to be "experts" in their fields.

That's why we consume entertainment produced and packaged by others, rather than making our own music in our own living rooms. We purchase half-ripe, pesticide-laden, semi-nutritious food grown by others in far away locations, rather than growing our own. We even buy prepackaged greeting cards for our loved ones because we do not believe in our own ability to wish them happy birthday more effectively in person or with a hand-written note.

How crippling this is for the human spirit! As a writer, I often speak to people who love to write and who are quite proficient at stringing words together effectively, but who do not see themselves as writers. Why not? Because they did not study writing at university or because they do not make their living selling words. I always tell them the truth as I see it: If you write, you are a writer. Likewise, if you paint, you are a painter. If you dance, you are a dancer. If you play with numbers, you are a mathematician. And you can be many of these at the same time.

In my conversations with these people, I have helped some of them challenge the assumption that you need to be highly trained, narrowly specialized and spectacularly talented to pursue an interest in a certain field...or to admit to your interest and take your place among others in that community of interest. Or that pursuing your passion should be relegated

to hobby status while you do "real work" during the day.

I do not find it surprising that many of us believe these assumptions, since everything about our education system is geared to perpetuating them. Students are given massive amounts of homework and their time is frighteningly over-programmed. Parents and students alike are told they must sacrifice and accumulate massive amounts of debt in order to finance university or college educations. None of this is designed to enhance the learning process or make us happier, more fulfilled people. It is designed to ensure that our little piece of expertise fits tightly into the global economic puzzle. School teaches us how to become good workaholics so we can contribute to the Gross National Product and generate profits for our employers.

These day, we are hearing more often about people who have stepped off the treadmill and dropped out of a high powered career at mid-life, having played the game but not feeling they have won much. So we have a computer scientist beginning a second career as a self-employed innkeeper. Or a doctor launching a new career as a social entrepreneur. Or a stock broker developing his talent as a baseball player. Or a successful corporate executive enrolling in divinity college. If only our whole society could experience the life-changing paradigm shift undergone by those brave souls who thumb their noses at the cult of experts!

Few people question the fact that most of the big problems we are dealing with today – environmental degradation, ethical challenges around biotechnology,

poverty and hunger, to name a few – have been created or managed by graduates from the world's best schools. But still, we continue to revere the members of this cult of experts.

The "experts" often have multiple pieces of framed paper proudly hanging on their walls and numerous letters marching along after their names – the symbols of successfully having been processed on the educational production line. We admire this accomplishment so much that we even bestow its symbols on certain people who were never processed. Honorary degrees are regularly awarded by universities to politicians, writers and other public figures who ironically often made their mark without attending a post-secondary institution (or at least not the one that is giving them the bogus degree). In many cases, these degrees are bestowed upon people who are valuable to the university because they have donated a lot of money or are thought to be magnets for other people's largesse.

Those who actually have to attend school to earn the related credentials realize very quickly that the main way the school industry sorts people into knowledge "haves" or "have nots" is by testing. People who take a test and then fail are, by definition, "failures." Those who do well on a particular test are supposedly intelligent, have a higher IQ than most of us, have memorized a certain set of facts, have been taught well, or will succeed in kindergarten, university or a specific job, depending on the stated purpose of the test. They are on their way to becoming "experts"!

Testing is also a tool used by various educational

stakeholders to justify their own existence or to demonstrate that they are accomplishing their goals. Contrary to what they would have us believe, the job of educational evaluators is to find ways to describe education and to define outcomes that politicians and parents can understand, not to facilitate learning. In spite of the make-believe thinking and rhetoric of politicians, improved learning does not somehow magically occur once teachers and students are made accountable to taxpayers!

One of the most common kinds of academic measurement is standardized testing, which is a fad that seems to go in and out of favor on a regular basis. Many North American school systems are currently in the midst of a back-to-basics, accountability driven phase, which seems inevitably to lead to more testing of students in order to ensure they are being processed correctly and equitably. In some areas, teachers are even being subjected to standardized testing in order to make sure they are proficient processors.

Testing is also used to identify preschool children with potential "learning disabilities" or "language delays" and to see if they are ready for school. Such identification is, in many areas, mandated by law even though one could question whether children are being tested for readiness for learning or for readiness for the culture of school.

This type of preschool screening legislation, which became popular in the 1980s, created a veritable epidemic of companies using questionable and sometimes borderline illegal marketing techniques for their tests. As a result, the Canadian Psychological

Association has published guidelines for the claims that can be made, in order to curb their misuse.

Then there is IQ and other cognitive ability testing, which is widely used to determine whether or not students deserve to be enrolled in so-called "gifted programs." According to Joseph Renzulli, a professor of education at the University of Connecticut, such testing favors children who possess what he calls "schoolhouse giftedness," which might also be called "test-taking giftedness." Aside from the wisdom of using gifted programs at all, this practice discriminates against kids who may be poor test-takers yet possess other talents and traits such as creativity, curiosity, leadership and problem-solving ability.

Testing is most often used as a method of judging whether or not something that supposedly has been taught has been learned. The objection to this use of testing is that it presumes to judge knowledge by measuring a student's performance at one moment in time. Nothing is ever that black and white, and children grow and change minute by minute.

Many psychologists have criticized the practice of identifying children's strengths and weaknesses from test scores and then establishing intervention programs because the process often fails to improve academic performance.

To their credit, even the so-called "experts" are sometimes cautious about using tests to measure and evaluate learning. In "For the Love of Learning," the Report of the Royal Commission on Learning in Ontario, Canada, a government-mandated panel wrote: *"...learning does not proceed in neat steps, each one*

exactly equal, nor in an unvarying sequence; therefore, tests cannot be applied to students as simply as quality control can be applied to objects coming off a conveyor belt. Tests will not fix students' problems or improve teaching; they will not guarantee that students will find successful jobs or careers."

Although tests have a facade of academic objectivity, they mostly reflect ability to memorize and regurgitate information, and to perform well under stress. Test taking itself is a skill that can easily be mastered. My mathematically-inclined and previously self-educated eldest daughter Heidi had not learned that skill when she first attended school in grade nine. Consequently, she received a 30 percent mark on her first math test. But after receiving a few minutes of coaching about how to take tests, as well as some stress relief advice, she began to receive marks in the 90 percent range on math tests.

Test scores may be unreliable for a variety of other reasons, such as bias in the tests that is based on gender, cultural background, age, class or disability. Various studies have shown that those who are poor, members of some minority groups or female perform less well on some tests than their knowledge or skills would warrant. Aside from being highly subjective, tests may also be poorly written, may not measure what they set out to measure or don't directly reflect what the learner is attempting to learn. Unfortunately, these problems are often ignored.

Too often, massive and inaccurate generalizations are made as a result of test scores, and children labeled or denied certain types of opportunities such as en-

riched or remedial programs or even home-based learning.

A literature search of test results indicates little correlation between even the most sophisticated standardized tests and long-term intellectual performance and character habits. In the late 1960s in Ontario, where I attended high school, passing marks on standardized exams were a prerequisite for graduation. Shortly after I graduated, these exams were discontinued and teachers' marks became the only basis for university entrance. Apparently, that change was made in large part because it was found that teachers' marks predicted university achievement as well as the standardized exams. It is, of course, not surprising that a teacher who has worked with a student for at least a year would be a better predictor of success than a single test.

In fact, the need to focus on boosting test scores often "dumbs down" the learning process rather than improving it. Creative writing falls victim to rigid essay formats. Exploration and experimentation are replaced by rote memorization of formulas and facts. High anxiety and cheer leading take over as staff and students alike feel the pressure to perform well. Author of the book "Insult to Intelligence" Frank Smith says that not only is constant testing not conducive to learning, it is "intellectual harassment!"

However, schools like to measure things. The school industry requires a fast and efficient way to judge the productivity of the educational production line. So standardized testing is increasingly being carried out across North America as part of the attempt by

non-creative, bottom-line oriented politicians to demonstrate value for taxpayers' dollars.

Intellectual development is difficult to observe, let alone measure, especially when individual attention is scarce, like in schools. But the fact that tests are not useful to individual students does not really matter. That is not their purpose, after all. Nor does it seem to matter that tests cannot demonstrate wisdom or common sense, humor or resilience, independence or critical thinking ability, or any other traits necessary to attaining health, wealth or happiness in the 21st century. These important attributes are difficult to measure (or else schools would probably find a way to do so!) But students are given the message that the attributes must not be important because they are not measured.

Testing is not even the best way to measure a measurable skill. The best test of proficiency in a specific skill is to use that skill in a real-life situation. Like their elders, children need to work on real projects with useful results and communicate with real people for productive purposes. If they can do that, they will be receiving valuable feedback from their experiences, which will make them want to further hone their skills. They should be able to do this through a wide variety of methods, including individual coaching and mentoring, and access to appropriate books or software. People who are demonstrating and refining their mastery of skills and knowledge on a daily basis have no need to write tests.

Then why do parents go along with – and often lobby for – testing? Because we want our children to

succeed at becoming "experts" so they can compete successfully for jobs. We assume that the purpose of school is to allow our children to be successful in life. And success usually means employed. It does not refer to having learned something because they were interested in it or because they needed to know it to function in their daily lives. It means they learned something that made them better able to climb the career ladder.

Standardized testing is used to measure the efficiency of the climb to the top by comparing children to others of their age, based upon some "expert's" criteria of what children their age "should" know. Achievement tests are designed to arrange students along a continuum in order to make placement decisions in higher grades, in post secondary institutions and in job competitions.

Of course, nowhere in this process of grading, testing and sorting do schools treat children as the "experts." They are merely "experts-in-training." Childhood is a rehearsal for adulthood or personhood, in the same way that schools are a substitute for the richness of everyday life. For the most part, compulsory attendance at school replaces real experiences with pseudo experiences. It dismisses the value of children's own experiences, thoughts and opinions, substituting instead the opinions of "experts" – teachers or textbook authors who often have a different world view than their students. Most teachers think of themselves as "experts," but aside from their level of knowledge of the topic they are employed to teach, they are merely agents paid to carry out other people's agendas, required by curriculum to parrot other people's ideas.

This state of affairs worries many people, including sociologist Elise Boulding. Speaking at a symposium entitled Learning Tomorrows, Boulding described the need to recapture the "authenticity of human experience." She explained that as a result of the information explosion and advances in technology, we now suffer from the unique experience of feeling educated even though the knowledge we are internalizing is secondhand. She said that we need to return to our children the experience of learning-by-doing.

Deeply concerned about children's rights, Boulding described young people in our society as "surplus personnel," unneeded and legally minor. This makes them doubly "inauthentic." At the Learning Tomorrows conference, she pointed out that children are thought to be nonproductive people who are not credible enough to be shaping the products, customs and social spaces of the society in which they live. To remedy this injustice, she advocated a community-based educational system where people of all ages would learn from each other in the process of going about their daily business, instead of from so-called "experts" who operate schools as factory assembly lines.

However, the assembly lines are firmly in place, bumping out students into the adult world like so many sausages. In spite of the lack of authentic experiences along the way, graduates are expected to suddenly perform adult tasks and make adult decisions. Fortunately for the sanity of these newly minted adults, but unfortunately for the state of the earth, the parameters of this decision-making have been defined by the school experience and mostly involve choosing whether to buy

Coca Cola or Pepsi, a Volkswagen or a Cadillac, a white purse or a red one.

The school assembly line has conditioned us to think that anything more taxing should be left to the "experts" – and one can even hire a shopping "expert," given the money and inclination! Doctoring ourselves is irresponsible, constructing our own houses is impossible, learning on our own is unreliable and making decisions about what is best for our communities is subversive.

Fortunately, increasing numbers of people are challenging the assumption that knowledge belongs to "experts." We are discovering on our own, mostly by using new technologies like the Internet, that what the "experts" tell us is not necessarily true, and even that many "experts" have their own self-interested, self-perpetuating agendas, which require keeping us in the dark.

The Internet may be the answer to breaking down the barriers between the knowledge haves and have-nots, by making highly specialized information easily accessible to people of all ages and political persuasions. Using tools like wikis and social networking websites, we are taking for ourselves the ability to share and comment on news – and even decide what is defined as news. We are learning to trust ourselves rather than relying exclusively on the cult of experts and are even creating our own encyclopedia called *Wikipedia*.

Activists use the Internet and text messaging as tools to organize successful public education and protest campaigns against initiatives like the Multina-

tional Agreement on Investment, genetically engineered food, the environmentally and socially destructive agenda of the World Trade Organization and despotic governments around the world. Non-governmental citizen organizations have been able to use these speedy and accessible tools to educate and mobilize millions of people to affect issues that formerly were known about only by the corporate and government elite.

There are many other ways to change this cult-of-the-expert paradigm. For instance, since studies show there is little correlation between education levels and job performance, there is no reason to judge people's employability (or anything else for that matter, except their ability to write tests and hand in essays on time) by their degrees. So those of us who are in hiring positions can reconsider human resource policies that require (or pay more for) university or college degrees. We can look at a wide range of other qualifications, such as job and practical life experience, related skills and level of maturity.

Again, the computer industry is at the leading edge of change in this area. My once unschooled youngest daughter Melanie has been hired for more than one responsible position precisely because she is not a university graduate. In one instance, her boss, who had interviewed dozens of university grads, looked at her experience and talent, and hired her because she didn't have a degree. Those who had just graduated, he said, had three-year-old knowledge because their professors had been out of the fast-changing computer industry for at least that long. My

daughter, who ended up supervising a number of recent grads, discovered that these employees lacked more than current knowledge. To her frustration, they also retained the school-bred mentality that they only need accomplish enough to get by and should goof off until just before they got caught.

To really change the cult-of-experts mentality, many of us will have to examine our own past university experiences. A good place to begin is by focusing on the benefits received from the university years, beyond the piece of paper received upon graduation. We need to separate our identities as people from our university degrees. That, of course, ultimately means letting our names appear naked on our business cards.

We must also stop holding up for public ridicule those who protect themselves from the "experts" by leaving the school system entirely. Skipping classes, daydreaming or dropping out can be seen as self-protection. Leaving school early may be the ultimate rebellion against something that is dehumanizing. People should be praised for rejecting situations that they find meaningless or manipulative, not punished. Just think of all the very rich Internet entrepreneurs who dropped out of high school or college!

One self-educated teen I know refers to herself as having risen up rather than dropped out. Deschooling champion John Holt used to say that it made more sense to refer to drop-outs as drop-ins, given that they are leaving a lifeless situation in favor of real life. I refer to people who leave school prior to graduating as unschooling themselves, a term similar in nature to unconditioning or unbending.

More useful than name calling is to ask these people why they left school, instead of assuming they are faulty in some way and cannot meet the expectations of the system. Do we ask priests, teachers or leaders of political parties why they left their positions? If we did, we might find that these brave souls are potential reformers rather than failures. We might learn ways to make things better in a variety of institutions.

We might also be able to reinforce the sense of self that allowed them to escape from a situation that was not working for them. A strong sense of self is one of the most useful tools for embracing both the future's potential and its uncertainty. So we should be happy for school leavers, because they have a better chance than most of escaping the emotional and intellectual dependency created when we buy into the assumption that knowledge belongs to the cult of "experts." Escaping may, in fact, allow them to do very well in life, as demonstrated once again by the computer industry, with its many successful school leavers, like Microsoft founder Bill Gates.

And, again, even people who currently work in schools can be part of the paradigm shift, as many of them are. They can make the outside world more accessible to students and downplay the need for and importance of testing. They can design and negotiate learning contracts with their students that reflect the realities of the students' lives and those of their communities.

This sort of learning is developing some credibility within mainstream education circles, but only for adults. Under the guise of "lifelong learning," people

are becoming familiar with the principle of learning from daily life activities, interaction with others, contact with nature, the Internet and popular culture. Is it such a leap of faith to extend the concept to children?

E.F. Schumacher Society guest lecturer Bill Ellis has observed a phenomenon developing in the homeschooling movement, which he has dubbed "Co-operative Community Life-Long Learning Centers (CCL-LLCs)." These groups typically form as a result of the interaction of a few families in a local homeschooling group. They resemble community centers – either bricks and mortar or virtual – that are formally organized, cooperatively owned and controlled by the member families they serve. They provide a variety of services, which could include counseling, mentoring, supplies, facilities, workshops and classes. Most importantly, says Ellis, they use all aspects of the community for education, and everyone in the community as a resource. Libraries, churches, museums, local businesses, farms, government offices, the local newspaper, the streets, the parks and even nature itself are all part of the learning system.

So, in short, the result of challenging this assumption is that we can get rid of all the trappings created by so-called educational "experts." That includes text books, lesson plans, testing, grading, report cards, homework assignments, class schedules and compulsory attendance regulations. We can also get rid of gifted and special education programs because real learning is personalized, individualized and self-paced. And we can abolish a one-size-fits-all curriculum that is not created by the learner.

Assumption 3

Others Know Best What Children Should Learn

"It is a very grave mistake to think that the enjoyment of seeing and searching can be promoted by means of coercion and a sense of duty."

Albert Einstein

In an article published in my Natural Life Magazine in 1994, John Taylor Gatto wrote: "After you fall into a habit of accepting what the experts tell you to think, you lose the power to think for yourself." That is why so few of us challenge the thinking behind nuclear power plants, corporately funded universities or schools. These institutions have not come about as the

result of us thinking about what would make our own lives – and those of our families and communities – better on a day-to-day basis. They are received ideas from corporations, governments or others who have their own interests at heart, not ours. For instance, the received idea (or assumption) that children need to go to school to learn protects the vested interest of the school industry. As we begin to challenge that assumption, we realize that what is really required is a variety of accessible ways for people to learn, which may not be in the best interest of the school industry.

This training to pay attention to what others think – this belief that others know best what is good for us – results in what sociologist David Riesman has called "other-directed" people. Looking to one's peers for direction is an inauthentic way to live. Yet most of us allow peer pressure to affect everything from our working lives, to how we spend our leisure time, to our consumption habits. And so do most of our adolescent offspring. Rather than deploring this lack of trust in our own opinions and feelings, we accept peer pressure as an inevitable part of modern living.

People who submit to others' standards to measure their own growth have put themselves into assigned slots. In turn, they put others into their assigned slots, so that everything fits nicely together. Because this transfer of responsibility for what we think is important starts early in life, few people question why the slots exist in the first place.

Rather than exploring why so many of us let peer pressure rule our lives, we accept the assumption, from the day we start nursery school or kindergarten, that

other people know better than we do how we should spend our time. In reality, the idea that a stranger who just happens to be an adult "expert" should decide what and when thousands of faceless children should learn is the height of arrogance.

Many countries have outlawed discrimination based on gender and race, but still allow discrimination based on age. What justification is there for the assumption that anyone older than a teenager knows best what is good for those who are younger? Our adult grasp of life makes us feel superior to young people, and we condescendingly use that superiority to justify the substitution of our priorities for theirs.

In school, the trap of dependency on others opens with "good students" waiting for teachers to tell them what to do. Learning to follow instructions is an important objective of school training. "Experts" call all the shots and make all the decisions, including about such basic human rights as when it is appropriate to go to the bathroom and when it is OK to talk (which is seldom if you are a student and often if you are a teacher).

The diet of other people's ideas that children are fed in school is called a curriculum. Because we accept the assumption that learning is difficult and must be produced, controlled and manipulated, we assume that curriculum must be created by "experts" – people we think are much better qualified than mere parents, let alone children, to decide exactly the type of information we should know and how we should learn it.

Learners are never consulted about their interests, needs or wants. Likewise, people other than learners decide on the criteria by which the learners' mastery of

this prefabricated curriculum will be measured. It is no wonder that many students have to be artificially motivated or even forced to eat this diet...and in many cases fail to digest it. They are never consulted as to their tastes, or even level of hunger, let alone trusted to understand their own nutritional requirements or dietary quirks! Unfortunately, the force-feeding process is so relentless that many students gag on it. They tune out or leave school, and in some cases, become permanently soured on learning.

In schools, learning programs and prepared curriculum materials are used primarily for control purposes. Learning is a mysterious process – open-ended, difficult to observe and manage, especially in large group settings. Nevertheless, schools exist to create, assess and report on – that is, to control – learning. Combine that with the "experts'" lack of trust of "non-experts", and you have the rationale for a curriculum. Politicians, departments of education and school boards impose detailed programs on teachers because they do not trust them to teach. When teachers do not complain about this outside control and even come to rely on these programs, it is because they do not trust children to learn without them. There is a great deal of comfort involved for everyone in the use of curriculum...except, of course, for students, who often end up frustrated and confused.

Frustrated minds that are allowed only to experience the world as others see fit to present it are wasted minds. Tuned-out people are of little help to themselves or society. But young people and their flexible, fertile minds could be a valuable resource for solving

many of our most vexing problems. They certainly should be consulted when problems are being solved and policies designed that impact directly on them. If they were, the solutions would be different than they are now, and there would be a much higher degree of buy-in by the younger generation.

This is a battle women have fought for many years: to participate as full partners in society, against both blatant discrimination and more well-meaning opinions about their feeble-mindedness or lack of interest in the affairs of the world. How sad, then, that a whole army of women teachers works alongside male "experts" unintentionally repeating the same crime of exclusion against young people in our school systems.

However, we cannot blame individuals or even groups of people for the problem. We are all victims of the same set of received ideas. But additionally, creating a curriculum diet is the only way to feed information simultaneously to huge groups of people. For purely management reasons, knowledge must be chopped up, parceled out and fed to children in small portions. Whether or not the divisions make sense to a particular learner, or the portions are of the correct size, is secondary to the need to get everyone fed at least something. Most educational research is focused on inventing ways to shovel bits and pieces of information into mouths more efficiently, more effectively and earlier.

Unfortunately, shoveling a diet of facts into mouths is not the best way to help people learn. Creating a curriculum results in a hodge podge of information being presented, which is fragmented,

decontextualized and trivialized. And while it may seem to be efficient, and as governments love to claim, "standardized", the reality is that there are many theories about what people should know and when – few of them based on science. The so-called "experts" have been disagreeing, and their theories going in and out of style, ever since Socrates sat down to teach Plato.

Even if educational theory is not really based on science, most parents know by observation a few things about how children learn. They know that learning requires context, that children's needs vary and that each child has a unique way of learning. They know that we learn best when we are interested and involved in a topic or task, not because we are told it is important. They know that we learn best when we have a real-life need to learn a real-life skill, not because someone has decided what we should know, then taken it upon themselves to teach it to us.

The marvel is that with so many of us understanding the power of active learning, up to 80 percent of classroom time is spent listening to a teacher talk! Lectures prevail because they are an efficient way of dispensing the curriculum. When the time allotted to one lecture is over, students must move on to another subject. As John Taylor Gatto puts it, they never receive a complete experience at school, except on the installment plan!

In spite of catch phrases like "child-directed learning" and all the good intentions of teachers, the curriculum rules. It must be completed so that testing, grading and reporting can be conducted. In this sort of

atmosphere, duplicating the results of scientific experiments that others have already performed becomes more important than finding out something new. Finishing pages of math equations becomes more important than understanding how the numbers relate to each other.

My daughter Heidi, who did well in math in high school after she learned how to write tests, did not actually learn much math there. Having not attended school until she was 13, she avoided math phobia. But in high school, she learned to pay attention only superficially because she detested the idea of turning her enthusiasm and interest off and on like a tap to fit the timetable. Fortunately, since she had spent time thinking about and working with mathematical concepts outside of school, she understood the process and the concepts. Her teachers often commented about how surprised they were at the depth of that understanding and her lack of reliance on formulae and other shortcuts, which form the core of the math curriculum.

Whether or not the curriculum-based method of delivering information to people ever made sense is another discussion. Any historian who has studied the roots of our educational system is better qualified than I am to judge that. It may be that at one point the amount of information that schools were charged with communicating, not to mention the student population, was small enough for a standardized plan to work. Or delivering information in that way might have been easier at a time when society's expectations of school's role was clearer and less all-encompassing.

However, it is clear that at the beginning of the 21st

century, we are naive to think it possible to communicate all the facts in the world in 12, 15 or even 20 years of formal education, no matter how much the information is compartmentalized or packaged. At any rate, memorizing random facts is never what education has been about. Education is about making meaning of the world, and about acquiring the skills and information that can help us do that. And that is what many educational philosophers would have us believe their theories are aimed at. Latin is taught, they say, because it strengthens the mind's capacity for rational thought. Math is taught, they say, in order to inculcate rigor and logic in children's scattered minds. Reading is taught, they say, to open up the riches of the world to children. In fact, after a number of years of being taught these subjects, most people cannot speak Latin, have a math phobia and would rather watch television than read.

That is because the curriculum model of learning is woefully behind the times. Scientists like Isaac Newton once thought that the universe was composed of a set of building blocks, one stacked upon another, much like we construct curriculum. However, in more recent years quantum physics has shown us that the universe is a much more intricately interwoven set of relationships. Interestingly, this is exactly the way children view the world before being exposed to the random segmentation we inflict upon them in school. While the process of learning to talk, for instance, may seem chaotic, it is actually a complex and interconnected sequence of learnings, all set in a context that is crystal clear to – and controlled by – the learner.

The packaged curriculum, on the other hand, has

no context. Knowledge is divided up into sometimes arbitrary, often disconnected, subject areas. Each meal-sized portion of each subject area is desiccated, premixed and fed to groups of learners by teachers who have minimal knowledge of, and connection to, what other teachers are doing. The information provided often has no relation to the lives of the learners, especially those not in the dominant culture. And few tools are provided for decoding the information, or for thinking critically about it.

The result is languid acceptance, half-hearted digestion, and mindless regurgitation of the information that has been fed. And that is not a good recipe for developing minds who can think us out of the social and environmental messes we have put ourselves in. Think how much more delicious, nourishing and useful the experience would be if these meals could be created by hungry individuals weaving together their own education using their own timetables and the resources found in their communities.

Even in impoverished areas, the nutrients required for this sort of learning are, or should be made, accessible. Community can be defined in many ways in the 21st century. And the global community is a reality, given the use of computer technology.

As leading-edge as governments like to claim their school systems are, their methods and curriculum mentality are old-fashioned. They are based on the linearity required by the printing press, in an era when technology has transformed the way we communicate, understand, process and analyze information. It used to be that children received information

in a measured way, which increased in speed and quantity as their reading skills developed. Parents and teachers could control the flow of the information delivered to young people.

But that has all changed. A technological revolution is sweeping the world and schools are not keeping up. In this fast-paced era of television and the Internet, young people receive huge quantities of sophisticated information from newscasts and the World Wide Web. And significantly, computers provide access to the specific type of information learners want – exactly when they want it, rather than when the curriculum says it should be made available. Perhaps that is why so many students view school and its curriculum as irrelevant!

The media tells us stories, with an increasing regularity, about teenagers who have dropped out of school and made billions of dollars running computer companies...or who are continuing in school to please their elders and making millions on the side running computer companies. But these cases are treated as anomalies. School systems continue to pour money into bricks and mortar and staff. And where computers are available (often by arrangement with the corporate world), their use is controlled and parceled in the same way that bits and pieces of information are doled out.

Unfortunately, many adults fear technology, either because of misinformation or their own lack of confidence in using it. In addition, many teachers fear that technology could take their places. And many parents fear that an Orwellian or pornographic world could engulf their children via the Internet. In short,

they fear that the use of computers will undermine their control.

Seymour Papert – one of the early pioneers of Artificial Intelligence at MIT and a colleague of education philosopher Jean Piaget – says that if you liken the education system to a kind of living organism, the computer is a foreign body that threatens the established order of the system, and like all systems, this triggers a defense mechanism. The defense mechanism consists of taking charge. So instead of being a revolutionary learning tool that cuts across disciplines, the computer has been confined to a computer room, added to the curriculum as a subject of its own and taught by a specialized computer teacher. It has been tamed in the process, says Papert, who invented the groundbreaking LOGO computer language, which gave children control over technology and thus over their own learning. In the process, this way of using computers in schools (and some "homeschools") has made the most objectionably rote aspects of learning even more so.

If used well, technology can enhance learning immeasurably. The use of computers allows children to move at their own speed and pursue their own interests, solves many illiteracy problems, and brings a world of information to the desktop. In the book "Computers as Tutors: Solving the Crisis in Education", Frederick Bennett lists many other benefits to the effective use of computers in schools. Among them are fulfillment of the need to succeed, reduction of prejudice against race and gender, and elimination of substitute teaching. He also notes that "computerized

education would allow and foster smaller, neighborhood schools and make busing anachronistic".

In fact, computers make schools anachronistic. Released from the controlling school environment, computers provide rich learning experiences. But for computers to be anything more than gimmicks used for sugarcoating the delivery of curriculum pablum, children must be able to use computers on their own, without following someone else's agenda. They must be able to use the World Wide Web to research topics they're interested in, interact with people of similar interests via email, write letters, create spreadsheets and databases, publish newsletters, design graphics and websites, and yes, play games.

Of course, this type of learning is incompatible with the present structure of schools. So not surprisingly, the electronic revolution is fueling a "back to basics" campaign in most education systems, in which fear of the future (and fear of a loss of control, as Papert says) drives a return to the past. The reasoning goes that our schools are failing to provide skills that are necessary to compete in the world technology market. Blinded by the need to control and a fear of the unknown, schools try to solve the problem by tinkering with the same systems that did not have the foresight to anticipate – and that do not have the ability to equip people to deal with – technology. Children are being forced once again to rely on rote learning to succeed in a stepped-up campaign of grading and testing.

No matter what the technology that is involved, people who are not used to trusting themselves or their children to learn, or whose own learning style requires

a large degree of external organization, often feel they need a crutch like a curriculum. But that is still no justification for telling someone else what to learn and when to learn it. The solution is for learners to create their own curricula – with the help of someone older or more experienced if necessary. This type of interest-based framework provides a "big picture" view of a topic or skill, in which the relationships among all the various tidbits of information and facts can be seen. It could be said that learners naturally set up this sort of learning framework for themselves, continually reorganizing and creating categories and sub-categories. We just do not always analyze it or write it down.

Unlike an "expert"-driven curriculum, this type of framework is based on what the learner thinks he or she should know. It is self-regulated and self-organizing. Call it a curriculum if you like, as long as it allows students to retain and develop their ability to see the big picture, while creating and manipulating a structure that makes sense to them. (Unfortunately, the process of segmenting information actually works against that goal for many people.)

What is important to realize is that curriculum documents do not create learning. Papers and plans should be seen as mere products of a process that, in itself, produces little outward physical evidence. Papers and plans can be something for adults to hold onto when children's intellectual growth seems chaotic or obscure. When parents tell me they are worried that their young people cannot be relied upon to direct their own learning, I recommend a form of curriculum that I call a learning contract. It is a plan, drawn up jointly by

parent and learner, and agreed to by both parties. Such an agreement provides direction for a learner who is moving from passive to active learning mode, and some reassurance for the parent that there is actually a direction. I also suggest that either parents or learners (depending on the children's ages) keep a journal of what is being done and learned. In a relatively short period of time, most parents understand that neither they nor the learner needs any form of curriculum.

What these parents learn – and what we collectively need to learn if we are to design a better education system – is that education must be organized around learning rather than around teaching. The responsibility for deciding what to learn, how to learn it, and when to learn it must be firmly in the hands of learners. Then teachers can take on a new role as learning facilitators. This would involve providing learners with respect, tools, resources, support and training where requested. In this new role, teachers would advocate for the flexibility and freedom required by learners to explore and develop their talents and interests. What better calling than to help people fulfill their potential by helping them develop the self-directed, skilled learning tools with which they were born?

Assumption 4

Schools Provide Effective Education

"I have never let my schooling interfere with my education." *Mark Twain*

If well schooled, expert teachers delivering scientifically researched curricula is the best way to ensure learning, why do recent American statistics show that by ninth grade, half of public school students have either failed a grade or left school altogether, costing taxpayers an estimated ten billion dollars? Dropout rates range from five to 25 percent across North America, and may reach as high as 70 percent in some poor

parts of the United States. A recent study by Statistics Canada found that approximately 20 percent of Canadian 19- and 20-year-olds have not obtained a high school diploma. Forty-two percent of the Aboriginal working-age population has less than a high school education.

Even among those who graduate from high school, there is a significant number who experience difficulties in their jobs or post secondary education due to problems with basic numeracy or literacy. After thousands of hours of compulsory schooling, funded by tens of thousands of tax dollars per student, too many people still do not have a basic education. Many high school graduates still cannot read the ingredients on a box of cereal or the instructions for assembling a simple toy. Nor can they change a flat tire, read a book, repair a faucet, balance a bank book or make change.

Aside from these basic skills, many important aspects of life – how to walk and talk, to play, to think, to work independently, to listen to music, to appreciate poetry or Shakespeare, to design and grow a garden, to facilitate a meeting, to formulate creative solutions to problems – are not taught in school. We learn these things by living our lives and, in most cases, in spite of attending school. In fact, school usually gets in the way of learning them.

In schools, many of these things fall under the category of creativity. And according to the school mentality, creativity is a gift, which most people are born without. It's not something that is necessarily part of the curriculum and is often thought of as a frill. Although creative geniuses may not be born everyday,

creativity is far from unique. In fact, it is one of the things that we need to foster if our children are to grow up to solve some of the world's problems.

The way schools try to develop children's gifts is by segregating those who meet or exceed some pre-ordained criteria in certain areas. These children are given so-called "enrichment" experiences or extra training to develop their talents and abilities, and to alleviate the boredom and mediocrity of the regular classroom.

Some of these experiences are wonderful, but why should not all students partake in mentally stimulating activities like book discussion groups, critical-thinking seminars and courses in creative problem-solving? Why not give every child the opportunity to create new models for solving the global warming crisis?

As wonderful as these elite programs may sound, the reality is often very different. Depending on a particular school board's resources and the number of students deemed suitable for such opportunities, some children may be transported to other schools for their special classes, with the accompanying dislocation and wasted time. And sometimes the fare is not much more palatable than what they would be served without all the fuss. The underlying assumptions are still the same: Children – no matter how intelligent they are – must be fed information based on someone else's agenda. And the result is also the same: Enthusiastic, active learners get turned off learning.

A few years ago, the principal of our local public elementary school invited me to help a multi-grade

group of so-called "gifted" students learn about journalism and newspaper publishing. I agreed, preparing a couple of sessions to demonstrate reporting, interviewing and news writing skills, to which the young people responded well. Of course, not all of them were interested in the topic, but most of them seemed to enjoy the experience anyway. Then they became reporters. They each covered an event at their school and wrote about it, using the techniques they had supposedly learned.

The next time I met with them, I provided editorial feedback, in the same way I would to adult journalists, true to the principal's instructions. Although most of them were indignant that I would ask for a rewrite, the pieces eventually were published in a special section of the weekly community newspaper I was publishing at the time.

In an attempt to provide these students with an ongoing, real-world learning experience, I agreed to make the column a monthly feature. Unfortunately, neither the teacher nor the students seemed willing or able to meet my deadlines. And the quality of work got worse month by month, with none of the writers adhering in any way to the most basic principles we had discussed – and that they had used when writing their initial articles. In a few cases, when students had apparently tried to write in a journalistic style, their articles had been badly rewritten or incorrectly edited by teachers who were not involved with the program and who knew nothing about news writing. I eventually called the whole thing to a halt and branded it as a lose-lose situation.

I should have known better. I should have remembered that creativity and initiative do not flourish in an atmosphere of coercion. And I should have remembered that real-life accountability does not develop in an atmosphere where the only consequence of poor performance is poor marks and where projects must be left unfinished when bells ring to signal the change of classes.

While specific talents and interests deserve special training, the best way to help children develop their creative abilities is to surround them with creativity and allow them to pursue their own ideas in the real world. If adults model creative thinking, children will follow their lead. If adults try to look at the world in new ways and to find new ways to do conventional things, children will do the same thing.

Aside from providing a non-stimulating environment for all but a few students who have been ranked as part of an elite group, much of the school mentality actually undermines innovation. There is little room for true individuality in a school setting. Nor, for that matter, is there much room for the creative process, which is uneven, bumpy and non-standardized. Pressure to produce, as well as evaluation, judgment, criticism and comparison, kill any original thinking and creativity that manage to survive the scheduled coloring book and connect the dots experiences.

All children are gifted and talented in some ways. Giftedness comes in many forms. Everyone's gifts deserve to be nurtured and every child deserves to be intellectually stimulated. The late Calvin Taylor, psychologist and former chair of the World Confer-

ence of Gifted and Talented Children, wrote that besides the traditional academic abilities, there are at least eight different talents that could be developed in children, including creative thinking, planning skills, the ability to implement a plan, decision making, forecasting, communication, human relations and recognizing opportunities. These are talents the world desperately needs.

The ability to interact well with others – that is, to be well socialized – is another recognized goal of school systems. One of the main concerns people have about alternatives like home-based learning and private schools is that they supposedly deny children the opportunity to interact positively with a diverse group of other individuals. However, it is a myth that schools offer positive socialization and most unschooling parents will tell you that the main reason they want their children not to attend school is the poor socialization that occurs there in the form of competition, bullying and violence.

Students socialized in schools often adopt an aggressive stance, which is characterized by rudeness, put-downs of friends and family, and an oversensitivity to peer pressure. In a frighteningly increasing number of cases, children of all ages are taking weapons to school – and sometimes using them with tragic results.

This same socialization process means that high academic achievers are often resented by their peers. And of course, that can result in them not living up to their potential in order to be popular. When I attended high school, I purposely hid my academic abilities be-

cause I didn't think being smart would attract friends – especially of the male sort.

That pressure has not changed much in 40 years. Mary Ann Swiatek, professor of psychology at Lafayette College, has used the "Social Coping Questionnaire," which is a series of 35 questions that assess thoughts, feelings and behaviors related to being gifted, to study ways students can make friends despite their "egghead" reputations.

It is not just academically oriented kids who are the victims of violence in schools. According to Alyson McLellan, a school vice-principal and co-author of the book "Take Action Against Bullying," school yard bullying occurs once every seven minutes, and incidents last approximately 37 seconds. She also says that students are reluctant to report bullying because they fear retaliation. For that reason, teachers do not seem to be able to do much about the problem. One study conducted in Toronto, Ontario schools found that in 25 recorded incidents of bullying, only one met with intervention by teachers.

Undoubtedly, the increase in depictions of violence on television and in movies and other types of entertainment like video games is a contributing factor to this disturbing situation. But a Canadian street-proofing organization called Stay Alert...Stay Safe (SASS) says the main reason kids become bullies is low self-esteem – and the best way to protect kids against becoming bullies and being their victims is to increase their self-esteem. However, since schools are a major contributor to lowered self-esteem, they create their own Catch-22 situation regarding violence.

Instead of dealing with the self-esteem issue, educators label the bullies, in the same way they label children who seem to have trouble learning. Children whose social behavior differs from the norm are diagnosed as Emotionally Disturbed (SED), Behavior Disturbed (BD), Emotionally Handicapped (EH) or Emotional/Behavioral Disordered (EBD). The types of problem behavior covered by these so-called "diseases" or disorders range from disruptive behavior, withdrawn behavior, failure to complete homework assignments and inability to learn and friendships with "deviant peers" to depression. But this behavior is only labeled when it affects school performance.

One of the contributors to low self-esteem among students is poor reading ability. How to read is one of the basics that schools are expected to teach, and one that they often do poorly. Since reading skill is required for virtually all other school-based learning, slow or non readers are not able to easily climb the academic ladder. Those with difficulty reading lose the excitement and love for learning that they had when they entered school. The embarrassment of demonstrating poor reading skills in front of peers on a daily basis leads to problems with self-esteem and motivation (and often unsociable behavior).

The National Institute of Child Health and Human Development (NICHD) puts it bluntly: "It is clear from our longitudinal studies that follow good and poor readers from kindergarten into young adulthood that...poor readers are largely doomed to failure."

Since so many children have difficulty learning from the reading instruction provided by schools, a

great deal of hand wringing occurs. Millions of websites deal with reading instruction and one mail order bookseller lists over 9,000 titles on the subject.

Governments and educational research institutes have spent billions of dollars over the last 40 years trying to understand why approximately half of the children who attend North American schools learn to read and write with ease, almost as though by magic, while the other half find learning to read to be a formidable challenge. Researchers study the environmental, experiential, cognitive, genetic, neurobiological and instructional conditions that foster strong reading development. They report on the risk factors related to reading failure. And, of course, they create instructional procedures.

There are dozens of theories about reading and how to teach it – many of them conflicting. But there are basically three different models. They can be called top-down, bottom-up and interactive. Top-down reading models suggest that processing of a text begins in the mind of the readers with an assumption about the meaning of a text. Readers identify letters and words only to confirm their assumptions about the meaning of the text. In other words, meaning is brought to print, not derived from print. So-called whole language instruction falls into this category.

A bottom-up reading model is its opposite, emphasizing a single-direction, part-to-whole processing of a text. It gives little emphasis to the influences of the reader's contextual knowledge, emphasizes the written or printed text and proceeds from part to whole, such as in phonics instruction.

The third model combines the other two, recognizing the interaction of bottom-up and top-down processes simultaneously throughout the reading process. Interactive methods of reading instruction understand the complexity of the process of learning to decode written information.

Regardless of the order in which the process occurs, to learn to read English, children must learn the connections between the approximately 44 sounds of spoken English (called phonemes) and the 26 letters of the alphabet. It appears that the neural systems that perceive the phonemes in our language are less efficient in some children than in others. Differences in neural efficiency may also underlie individual differences in learning skills such as singing, playing an instrument or painting. Researchers have attributed these differences to everything from environment to genetics, but recognize that lack of exposure to language, including written materials, is a major factor when it comes to learning to read.

Of course, the ultimate goal of reading instruction is to enable children to understand what they read. Interestingly, the research about how to develop comprehension is not as well developed as that on how to get children to recognize and pronounce words. But we do know that people who understand what they read relate their background knowledge to what is on the page. Research tells us that good comprehenders have good vocabularies. They also have the ability to summarize, predict and clarify what they have read, and they frequently use questions to guide their understanding. These are all skills that are developed

through active reading, writing and discussion. So in spite of a multi-million dollar industry that has formed to help kids learn to read, the reality is that they learn by being read to, by reading and by interacting with the world.

And as we have seen, people learn at different speeds and in different ways. There is plenty of evidence within the unschooling community that, left to set their own agenda, some children learn to read earlier than they are expected to learn in school, and some later. In school, early readers are praised as being intelligent; late readers are the subject of much anxiety. In fact, there is little evidence that early reading is either a result of a superior intellect or good preparation for success in university. In fact, there is an increasing body of evidence that forcing children to read before they are ready may create physiological and psychological damage and risk impairing their interest in reading.

The reality is that, given a stimulating, trusting environment and some assistance when requested, children will usually learn to read. One place where these factors come together is England's Summerhill School. Zoe Redhead, daughter of Summerhill's founder A.S. Neill, and current principal of the British alternative school, tells a story about one of the school's instructors. This woman was once a student at the school and did not learn how to read until she was a teenager – simply because she did not see the need. Redhead says the woman is grateful that her desire not to learn to read was respected, and that she is now an avid and skilled reader.

Aside from skills like reading and creative thinking, schools attempt to teach a large body of facts. As we saw earlier, certain skills and facts are often taught in order to develop certain abilities and attitudes. There is scant proof that happens, but there is a great deal of evidence that being forced to study something because "it is good for you" or "because I say so" leads to rebellion, apathy and boredom.

Not only is trying to teach facts counterproductive to learning, facts can be just plain wrong because knowledge – and our understanding of it – is constantly changing. Some researchers claim that within the near future, the accumulated knowledge of the world will double every two years. New methods, processes and technologies are continually being introduced. The processing of information, for instance, has undergone revolutionary change in the past few decades. And who knows how much it will change in the next ten or 20 years? Most public schools just do not have the funds to keep their text books up to date. Nor do most teachers have the time to remain current in their knowledge.

Science is one collection of so-called facts that has outgrown itself many times. Nuclear fission has not turned out to be the harmless, clean source of energy its discoverers promised it would be. And Saturn has more rings than I was told it had when I went to school. At one time, Freud's theories were the latest in science but many of them now seem to be primitive and laughable at best and destructive at worst.

Instead of requiring that children memorize a certain body of information – only to have it be ques-

tioned or become irrelevant in the future – schools should protect and cultivate the attitudes and skills that contribute to active learning. The model that says children can learn in 12 or 13 years of schooling all the skills and facts that will apply during their whole lifetime is absurdly out of date. With a flexible, inquiring mind and access to a library and the Internet, anyone with basic research skills can find the facts they need. What they may require help with is learning how to analyze, filter and interpret those facts – that is, developing the skill of learning.

People who are going to live fulfilling lives in the 21st century, while having any chance of pulling the planet out of its current dismal condition, also need to be able to adapt quickly to change, solve complex problems, challenge assumptions and think outside the box.

Unenthusiastically and haphazardly spoon-feeding people unrelated and sometimes out-of-date bits of information is not the way to develop these leading-edge skills and attitudes. If we really believe that education is as important as most of us say it is, we should provide learners with access to the best minds, the most current resources, the most advanced tools and the most stimulating environments. We should not allow schools to have a monopoly on helping people learn, because the method of education they are providing is irrelevant to the needs of both individuals and society.

Because students can sense that what schools are teaching is often irrelevant – or at least out of sync with their lives – they resist being there and resist what

teachers are trying to teach them. Or else they numb their spirits enough to accept being there, which is worse than resisting. As a result, many teachers become more skilled in classroom management and artificial motivation techniques than they are in the actual subjects they teach. Language teachers are often less articulate in their specialty language than young people who have been exposed to everyday immersion in a foreign language. Even the best arts and trades teachers are often less skillful, creative and passionate than their counterparts who are working and creating in the real world.

Helping children learn should not be the specialty of a self-appointed group of "experts." Since we have seen that education is not something you can do to other people, we need to "de-expertize" and even decertify teaching. Many people, in a variety of different life roles and occupations, have much to offer children, as both role models and as learning facilitators.

For many centuries, children learned the skills they needed to make a living at their parents' sides or by living and working alongside everyone else in the community, rather than being segregated from real life. In a much more complex world, this same type of learning is still possible if we all share a sense of responsibility for helping develop the minds that will lead us into the future.

In our current global economy, no one – neither parent nor teacher – will have all the experiences and information necessary to prepare young people for a rapidly developing future. But we can share our skills and insights with them, or take on apprentices in order

to pass along our knowledge and skills – no matter how complex our work. Learning about a job on the job is much more efficient than learning about it in a classroom. As a society we need to find ways to finance and facilitate this important real-world learning.

Back in the 1960s, in order to facilitate the learning of skills, philosopher/author Ivan Illich proposed a system of public educational credits in the form of an educational passport provided to each child at birth. In order to help the poor, whom Illich felt probably would not use their yearly grants early in life, the proposed scheme included a provision whereby interest would accumulate for those who saved their entitlements for use later in life.

Illich's idea has evolved into what we now know as the educational voucher system, which has been tried in some places but remains controversial. The major concern is that vouchers play into the hands of racists, fundamentalists or others with potentially socially divisive or dangerous agendas. However, allowing individuals to use their educational credits anywhere in the community, rather than merely in public or private schools, could solve that problem and go a long way toward returning the responsibility for learning to the learner.

A system of educational credits could facilitate a variety of arrangements where learners could spend time in workplaces of their choice. These arrangements could be informal and open-ended. Or they could be more formal mechanisms for organizing learning experiences, such as skills exchanges and apprenticeship or internship arrangements.

Parents are their children's first mentors. Their children are, in effect, apprentice walkers and talkers. When families choose not to send their five-year-olds to school, mentorship becomes more of a challenge. Many homeschooling families abdicate this role and instead look for curricula to substitute for real life learning experiences. Or they feel inadequate to accept the challenge of mentoring their children, which includes helping learners find the right resources and experiences at the right time.

Supporting family- and community-based mentoring and learning could be a new role for the people who are now drawn to classroom teaching. They could help identify learning opportunities, organize group experiences where requested by learners, collect and catalogue learning resources, and so on. These mentoring facilitators could also organize opportunities for people of all ages to apprentice themselves to people who have skills they want to learn. In many ways, their role would be similar to that of librarians. Libraries are much more effective and democratic learning institutions than schools have ever been, but where I live library funding is not a public spending priority. Anyone who sees the learning potential in libraries should lobby politicians to make their funding a priority.

As a young learner who didn't attend school, my daughter Heidi found numerous people in her family and community who were willing and able to share their knowledge. As a 22-year-old, she formalized the process by starting the Mentor Apprentice Exchange (MAX), a directory dedicated to fostering informal

mentorships and apprenticeships. The now-defunct directory listed contact information for apprenticeship opportunities in a variety of fields and for individuals of all ages. There is no reason why individual communities could not produce their own directories of this sort.

In a series of articles Heidi wrote to introduce the concept, she stressed that mentors need not be business people. The accumulated knowledge and experience of the retired people living in our communities is also a valuable learning resource for children. People of different generations can both teach and learn from each other. But to facilitate this, we need to end the policy of warehousing both the elderly and the young in separate institutions.

Meanwhile, young people can simply visit seniors' residences or nursing homes or they can volunteer their services there. The volunteer sector is increasingly being called upon to provide supports that governments used to provide. In Canada, one-third of all people over the age of 15 contribute their time, energy and abilities to charitable and community organizations as volunteers, but we often ignore volunteering as a learning experience. Statistics Canada has found that many volunteers feel their volunteer efforts have increased their chances of finding a job. In addition to helping job seekers locate employment opportunities, volunteer activities provide the opportunity to learn new skills that can be applied directly to jobs. This seems especially true, according to the Statistics Canada surveys, for people in the 15 to 24 age group.

When people start thinking for themselves, they often find they are happier working for themselves as well. So self-employment is a career option for those who challenge assumptions. Running a business or working freelance allows a degree of control not available in a job, and usually does not require a high school diploma or university degree. In fact, the school experience does not prepare us well for the amount of initiative, independence and self-confidence required by self-employment. Those qualities are often present in unschooled young people, which may be one of the reasons many of them explore the option of running a business. My daughter Heidi had her own business when she was eight years old, and now in her mid 30s is still happily self-employed, without an elementary school education or a university degree.

Nevertheless, there is still a role for universities. Some careers require a post-secondary education and the licensing or certification that results from it. And some people enjoy and benefit from the university experience. Many young people who have not attended elementary or high school choose to go to university or college, and flourish there...once they have persisted long and convincingly enough to be accepted without the usual credentials. Those institutions need to abolish their preconceived notions that people younger than 17 or without a high school diploma are not capable of studying at the university level.

On the other hand, all of us need to abolish our preconceived notions that university is for everyone. Many young students – both schooled and unschooled – find university to be too much, too fast, too soon.

They find it to be an extension of high school, with its memorize, then write a test, then forget cycles, rather than the change of consciousness experience they had expected.

As the concept of lifelong learning develops its mainstream legs, there are increasing numbers of alternatives to university for those who do not want to avoid it entirely. There is now the option of letting the post-secondary education experience come to you through a proliferation of off-site classrooms, flexible course times and distance learning opportunities, either via the Internet or traditional correspondence.

Harvard's Howard Gardner, the author of the Multiple Intelligences theory discussed earlier, predicts that this concept will be taken much further in the near future and the acquisition of credentials from universities or other such institutions will become less important. He says that the use of technology will allow individuals to educate themselves and to exhibit their mastery via computer simulation. This, he predicts, will be as true for lawyers and airline pilots as it will be for neurosurgeons.

There are many examples across North America of self-educated young people who are attending university, starting their own businesses, doing work that is important to them and otherwise living fulfilling and successful lives. For over three years, my magazine *Life Learning* published a series of profiles of formerly homeschooled young 20- and 30-somethings, written by Peter Kowalke, who was himself unschooled and is now a New York magazine editor. Their varied experiences and candor about the adjustments they have

made to both the work and higher education worlds makes for compelling reading. But the one common thread is their gratitude for the trust their parents demonstrated in helping them learn without attending school.

Whatever educational options we create for adults, we must remember that young people deserve the same flexibility, control, access to resources and opportunities to be part of – and learn from – the daily life of the communities in which they live. Transforming schools into these learning opportunities is the biggest challenge we have in transforming our education systems.

Assumption 5

Schools Have a Noble Purpose

"The wish to preserve the past rather than the hope of creating the future dominates the minds of those who control the teaching of the young."

Bertrand Russell

Not only is it ineffective to try and force children to learn, it is also unjust. But if you ask most people why we need a strong public school system, they will talk about social justice. They will tell you that the public school system forms the foundation of a caring, tolerant and democratic society. They will also tell you that a strong public school system provides equal opportunity for all, regardless of socio-economic background.

Those are terrific goals. Unfortunately, the reality does not reflect the ideology. This is, in fact, another assumption that is crying out to be challenged. Scratch

the surface of most public school systems and you will find something quite different than justice and democracy, in spite of good intentions. You will find an archaic institution, which defies everything we know about effective organizations and what we have learned about cognitive development. You will also find an institution that perpetuates social hierarchies, disempowers people and forces them to do things against their will – supposedly for their own good – while encouraging a destructive level of consumerism and consumption. If a democratic society is one in which people are collectively in control of their lives and the lives of their communities, then our present-day school systems are anti-democratic.

The chief function of state-run public education has never been to empower citizens to make responsible decisions about the future of the earth or to provide the intellectual means for people to live harmoniously together. The purpose of schools has always been, at very least, to train an efficient workforce and, at worst, to imprint a social script written by the governing class. And that social script involved, as H. L. Mencken wrote in 1924, mass standardization.

One influential model of public schooling was created in Europe in the early 1800s when the Prussians needed a system of forced schooling that would teach men how to take orders so they would make obedient soldiers. Prussia was not alone in its need for a strong army and virtually all of the early enforcers of compulsory school attendance laws were European military dictatorships.

In Canada, one well known early pioneer of public

education was Egerton Ryerson, who set up a free, compulsory school system in Ontario in the mid 19th century. One of his main aims was to preserve the class structure in place at the time. One of his system's main features was corporal punishment, which quite handily (pun intended!) created docile, passive and submissive graduates.

Modern versions of those qualities are still the norm. Children are often promoted from one grade to the next based on desired social behavior like a strong work ethic, obedience, neat work habits, completed homework and good attendance. In some schools, especially in economically disadvantaged neighborhoods, you can pass a course just by showing up and doing what you are told, while not learning much or any of the content. Processing students in this way efficiently gets them through school, gives them a diploma and might slot them into a job. And for this, they are supposed to be grateful and even eager to attend regularly!

So much for school being the great leveler, providing children with the opportunity to break out of poverty. In a study called "Equality of Educational Opportunity," the late sociologist James Coleman found that "schools bring little influence to bear on a child's achievement that is independent of his background and general social context." Similarly, the school board in the City of Toronto, Canada tracks the economic background of students and has consistently found that economic background is the best indicator of whether students will end up in blue collar jobs or in university.

Sociologists seem to agree that schools play a primary role in reinforcing the social and economic tone of a society (as opposed to changing it). At this time in history, the very structure of schools delivers a hidden socioeconomic curriculum of standardization, competition, productivity, linear thinking and hierarchical top-down management by experts. Virtually every facet of modern schooling seems to have been designed and implemented to promote the smooth functioning of the system, rather than for optimum learning. And as governments tighten their fiscal belts and slash school budgets, the system inevitably is refined for optimum efficiency.

If efficiency, productivity, accountability and standardization are desirable features of the social and economic climate in which we want to live, then schools must be doing a good job. However, if we strive for a more humane, democratic, creatively thinking society, then schools should be helping us understand where we have gone wrong and how to change things, rather than perpetuating systems that are not working in everyone's best interests.

As we have already seen, children learn by example and from their environment. Most children's early experiences are undemocratic. Their human rights, including free speech, are ignored in the name of protection. They are in the way and legally minor. At very young ages, they are forced – sometimes literally kicking and screaming – to attend an often unfriendly and sometimes threatening place that robs them of even more of their rights.

Teachers (benevolent and unaware as they often

are of this situation) are allowed to exercise a kind of power over their students that has fewer restrictions than that allowed by caregivers in other institutions like jails. Students are taught about human rights and government in social studies classes and sometimes even play act the roles, but they are not able to practice these vital components of good citizenship in their daily lives at school. Children do not need to be taught about oppression; they are oppressed. They do not need to be taught about human rights abuses; their human rights are trampled on every day they are in school.

In the same way that children in our schools are ruled and regulated by a group of friendly "experts," citizens in our countries are governed by a professional class of politicians and, in some cases, media. They are both similar to the competitive, top-down model of the marketplace. Instead of self-government, we have a representative democracy in which the elite have centralized power for their own benefit, just as power is centralized in school. And that is the way those in charge like it. Telling us what is good for us and selling us something (products or prescribed facts) is easier than to have us meddle in education, politics or economics.

In this kind of democracy, the role of citizens is not to author public policy, but merely to influence it. The object of political debate in a schooled society is not to discuss via a two-way dialogue, but to persuade, in the same way that children sometimes wheedle and pout and throw tantrums in order to get their way. Because most of us have never learned to take the initia-

tive to make change, we resort to protesting, criticizing and complaining about what we are being fed...or to misbehaving when the teacher is looking the other way.

Physical domination because of size, age or gender has taught us that power flows from the top down. Big kids bully little kids, teachers and principals have power over their students, strong men abuse physically weaker women and children, big countries take over smaller ones and everyone trashes the environment. Most of us accept this distribution of power, as well as its often brutal consequences. Those who do protest are made to feel like rebels and outsiders, scrambling for tidbits of public funding or begging their oppressors for money to pay the rent on a tiny, back street office...and often fighting off law enforcement officials when they take part in peaceful public protests.

Sometimes the protesters are successful. We change a program here, save a building from demolition there, secure some extra funding for a women's shelter, protect a wildlife preserve from a road being widened, persuade politicians to amend a few pieces of legislation. Even when these activities accomplish what they were designed to do, they are just fighting symptoms and effects, rather than the root cause, which is misuse of power and undemocratic policy making.

Unfortunately, our bad experiences with power as young children lead us to condemn power. We confuse the kind of misuse of power that we are fighting with the positive power to control what happens to us,

or at least to propose alternatives. Many of us have never even experienced the kind of collective power that can be used to build alternative institutions. Our schooling has led us to misunderstand the difference between the power to do something and the force that makes us do something.

And that makes us all vulnerable to the power of despots like Hitler, Mussolini and Pinochet or the many African dictators of more recent times. A different relationship to power might have allowed the citizens of Germany, Italy and Chile to prevent the horrendous deeds of their leaders. Or maybe not. However, history shows us that few people in these countries felt their voices were strong enough to counteract what was going on at the top, or they turned a blind eye to the abuses. Perhaps, as children in school, they were told one too many times to sit in their seats and listen, to put up their hands when they had to go to the bathroom, to buy what they were offered...all because someone else supposedly knew what was best for them. Perhaps, as I was as a child, they were told that children should be seen and not heard...and they believed that and carried it into adulthood.

The time is ripe for change because we now live in an era when information often has more power than physical strength. But we need new arrangements for handling that power. We need to replace our traditional hierarchical method of governing and educating ourselves with arrangements that give "power to the people" as John Lennon put it.

But we also have to find ways to encourage people to accept power over their own lives, which can be a

scary prospect. And then, we need to invent ways to teach ourselves the skills to use it well for our common good.

Unfortunately, instead of pursuing ways to advance the process of global democratization, schools seem to be concentrating these days on teaching children how to be good little consumers. In addition to the hidden economic agenda that we have already examined, corporations are becoming more overt in their goal of educating young consumers about their brands.

What is astonishing to me is the manner in which the merger of schools and corporations is being helped along quite happily by those in charge of schools, many of whom seem to act more like corporate CEOs than educators. A good example is the principal of a school in the American south who suspended a young boy because he dared to wear a Pepsi T-shirt during an event sponsored by Coca Cola. The principal said that his school badly needed the corporate sponsorship funds to replace declining public funding and that the student was undermining his ability to attract and retain that money.

Helping marketers cash in on schools' need to raise money is, itself, becoming big business. There are even expensive conferences organized to help companies mold their tiny consumers. At one such event, entitled "Kid Power: Creative Kid-Targeted Marketing Strategies," marketing guru James McNeal, who authored the book *Kids as Customers: A Handbook of Marketing to Children,* told participants that children are consumers-in-training with spending power of $20 billion. And what better place to train

those budding consumers than in school, where the audience is captive?

Another presentation was made by a company called MIR Communications. MIR pitches itself as helping companies maximize their in-school presence through the use of marketing techniques like product sampling, sponsored lesson plans, sponsored school/class activities and contests. Sponsored educational materials are a favorite way for many companies to get their messages into classrooms. Actually public relations materials designed to look like classroom activities, they range from the overtly commercial like designing a McDonald's restaurant to the more subtle lesson plan produced by Exxon about the flourishing wildlife in Alaska, which was designed to help the company clean up its image after the Valdez oil spill.

Students can do the Prego Thickness Experiment, a science experiment involving pizza. Or they can learn from star professional athletes how Nike finds "creative ways to balance the needs of business and the environment" through its Air to Earth environmental education program. A program developed by General Mills called Grow-Up! includes growth charts for students, booklets for parents and samples of the company's Fruit Roll-Ups. Kellogg's and Mars candy sponsor nutrition curricula, and polluters like Dupont, Dow Chemical and the Polystyrene Council sponsor environmental curricula.

These materials have traditionally taken the form of audiovisual material, websites, teachers' kits, informational booklets, board games and, of course, the

old reliable workbooks. Another standard approach involves companies giving prizes and incentives to schools and students as a result of students collecting cash register tapes or cereal box tops, or reading a certain number of books. And now, even textbooks are being used as promotional vehicles. For instance, a sixth grade math text published by McGraw-Hill asked students to figure out how much money they need to save to buy a pair of Nike brand shoes and teaches students fractions by counting M&M brand candies.

High school economics curriculum is often influenced by corporate foundations, particularly those with an extreme conservative philosophy. That results in activities and textbooks promoting, without question, a "free-market" ideology.

When the Consumers Union collected and evaluated samples of these so-called educational materials across a variety of subject areas a few years ago, it found that 80 percent contained biased or incomplete information and promoted a viewpoint that favored consumption of the sponsors' products. Surprise, surprise! That was precisely the point of the exercise.

A more blatant way companies are selling to this captive school audience is through direct advertising, which can appear on school walls, posters, buses, computer screen savers and athletic scoreboards. There are also a number of advertising-funded magazines, which are geared to curriculum topics and distributed free to schools to be used as teaching aids. Then there is the simple idea of giving schools free textbook covers with pictures of sports and music celebrities, public

service messages and ads from fast food and clothing companies. Companies find this is a great way to reach bored students while helping schools preserve expensive textbooks.

Perhaps the most seductive way to reach these consumers-in-waiting is via television in the classroom. Channel One reaches over six million teenaged students in 11,000 American schools with 12-minute current events programs that include two minutes of commercials from clothing and junk food manufacturers. It offers schools free audiovisual equipment in exchange for the right to broadcast its programming. A similar project in Canada called Youth News Network (YNN) had a more difficult time infiltrating schools during the 1990s, with teachers' organizations, school boards and some provincial governments blocking its path to the degree that it went out of business.

To their credit, some school systems present media literacy programs to counteract this sort of commercialization. However, many of these courses have been marginalized due to a back-to-basics emphasis on the "Three Rs." At any rate, many of them concentrate on print media, television and radio, children's literature and the Internet, dealing only peripherally with the consumer agenda in their own schools.

Professional sports "heroes" figure prominently in in-school marketing pitches. Of course, competitive sports has always been a mainstay of school life, especially for boys. The ability to be competitive is thought to be crucial to the development of a well functioning business sector, while cooperative skills are

traditionally frowned upon. However, in recent years, professional sports teams have joined other corporations in the invasion of the classroom with their own sponsored lesson plans. For instance, a National Hockey League sports themed elementary school curriculum includes workbooks emblazoned with team logos, NHL lore and pictures of Wayne Gretzky.

Aside from the obvious problems of encouraging children to worship as heroes rich men who play an increasingly violent "game," such materials teach the passivity of purchased spectator entertainment instead of active participation, whether it be in sports, the arts or other recreational activities. As we have already seen, children are being taught that they are not "expert" enough to entertain themselves; professional sports in the classroom just reinforces that disempowering notion.

Even our universities are losing their intellectual way in the chase for funding for themselves and highly paid jobs for their graduates. Instead of being incubators of ideas that improve the world, they are becoming places that convert attendance and research into wealth. Just half a century ago, universities were still places where the emphasis was on forming and discussing ideas, where people prepared for a lifetime of public service, where the demise of corrupt or repressive regimes was plotted, and where free speech and democracy were protected. But now, researchers in the university community are increasingly relying on the corporations who pay their bills to tell them what to study and how to interpret the results. We still see the occasional rebellious burst of creativity from within

the walls of post-secondary institutions, but too often those bursts are quickly smothered by the forces of efficiency, competition and corporate accountability.

This corporate agenda is not limited to North America. It is being pursued relentlessly and successfully to all corners of the developing world, where it is especially worrisome. Many people in other countries who do not go to school – but want to – are motivated by a desire to emulate the North American way of life. The problem is that not only are they being robbed of their traditions and culture by being targeted by corporate marketing machines, and their desire to improve their quality of life plays them right into the hands of those very marketers. Children and adults alike prefer American goods bearing brand names they have learned about through movies, television and advertising. This includes sugary breakfast cereal and American cigarettes, as well as energy guzzling luxuries like cars and electric toothbrushes.

Sadly, these people have been sold a bill of goods. While nobody can dispute the importance of literacy, having received straight "A"s in school may provide the means to respond to advertisements for computers, televisions and electric toothbrushes. But it may still leave people powerless to obtain or retain jobs in their communities or to protect the source of their drinking water from corporate pollution. Or worse, they may not even be able to recognize the importance of keeping jobs in their communities or to make the connection between a logging company's clear-cut and their polluted well.

Once people are trained to be consumers, the dif-

ferences among them widen. In virtually every country in the world, the amount of material consumption by college graduates sets the standard for everyone else. Those with degrees can afford televisions and cars; those without, cannot. The fewer university graduates there are in a country, the more their standard of living is aspired to by others. The trouble is, the planet will not survive if the developing world tries to mimic North America's high levels of consumption.

So what can we do to create an education system that is truly democratic and public? First of all, we can start thinking out of the education-equals-school box.

We can respect and advocate for young people's right to make their own decisions (within parameters that address their physical and emotional safety, of course). When children are part of a community, they have an interest in making that community function well. They take responsibility for their actions and to contribute to the group. They encourage each other's learning, and use other children and adults as resources for their own learning. So we should trust their ability to live democratically and cooperatively if given the opportunity...and learn from them.

One of the big changes we need to make (and one which underlies the overturning of every assumption in this book) is to learn to like children and to want them around all day. Many so-called developed countries – especially those in North America – are not particularly child- or family-friendly. Our cities, our workplaces, our institutions – all facets of daily life, in fact – are not fully open to children, who are relegated to segregated spaces through no choice of their own.

Young people are kept away from many places and much equipment, on the grounds that they would damage either themselves or their surroundings if given free access to things usually available only to the "experts." Or they are denied access on the grounds that they would slow down the important work of production and consumption. None of these are good enough excuses to bar children from learning from and within their communities.

A true learning society would make the modifications necessary so that a wide variety of experiences could be accessible to people of all ages and abilities. If governments don't feel they have new funds available, decreasing spending on executive salaries, text books, tests and the other paraphernalia that are part of the school industry will free-up money for creating a learning society.

What I am suggesting is that we "de-professionalize" the educational environment and put learning back into our communities and into the hands of learners, with the support of mentors and truly stimulating environments. As we have seen throughout this book, that will not be an easy task, since there are many assumptions to challenge and vested interests in the way. As the relatively small population of homeschooling families has discovered over the past few decades, deschooling ourselves can be as difficult as renouncing limitless consumption as a way of life.

One challenge to making this change is that not all children are blessed with access to people who can facilitate an ideal learning environment or advocate for them in the adult world. Many children lack even the

basic necessities, let alone live in a family that is strong enough to nurture learning. But the solution for that is to provide social and economic supports to families in crisis, not to subject children to an obsolete method of school-based instruction.

Towards a Learning Society

"How could youth better learn to live than by at once trying the experiment of living?"
Henry David Thoreau

Never before in history have we faced problems that more urgently require effective, publicly funded educational opportunities. But we must not allow our assumptions to confuse equal educational opportunities with compulsory schooling. That would be like confusing spirituality with organized religion, or wellness with a hospital. One does not necessarily result from the other. Processing people through schools like sausages does not guarantee educated sausages!

The choice is in our hands. We can continue the 19th century-style sausage factory method of education, which stifles learning. Or we can tear down the institutionalized barriers that impede learning and cre-

ate 21st century-style learning opportunities – opportunities that do not require huge amounts of real estate and bureaucracy. This new "public education system" will be diverse enough to accommodate learners of all ages, interests, abilities and styles. It will put individuals in charge of their own learning agendas. It will help those who want to share their knowledge to find those who want to learn. It will provide all who want to learn with access to available resources at any time in their lives.

And most importantly, it will allow children and young people to participate fully in the lives of their communities. The emphasis on respect for and trust in the learner is key to creating a learning society. To truly respect children and their place in our society, we must put an end to coerced learning.

As a business owner, I see the choice as an economic one. Why continue to pour money into a clearly outmoded system that most people admit is not working? If we truly challenge the assumptions that education is done to people, and that adult "experts" should be in control of what children learn, we cannot continue to spend ever-increasing amounts of money training and licensing teachers to deliver prepackaged, one-size-fits-all curriculum.

As a mother, I see the choice as one that helps me fulfill my responsibility to my children. I know I can't predict the future, and that the challenges of the next century will have to be met by those living it. My job as a parent is to be sure my children are equipped to deal with those challenges.

As a citizen, I see the choice as being about solv-

ing social justice and environmental problems. It is also about the need to reverse the sense of disconnection from public life that the majority of citizens are currently feeling. I believe that we can take matters into our own hands, provide real leadership and make genuine progress with respect to the issues that affect our communities and the Earth. I believe it is feasible to create an atmosphere in which people of all ages, with different backgrounds, traits and talents, work together to develop a positive vision of the future, and form the partnerships necessary to make that vision a reality.

If enough people lose their faith in schooling – and act on that loss of faith – we will, I believe, be able to make the transformation from institutionalized education to a learning society. We are going to have to decide what we want: sausages or independent thinkers. And as I have learned with my own children, if we choose to nurture independent thinkers, we have to be willing to accept the consequences!

"There is, on the whole, nothing on earth intended for innocent people so horrible as a school."

George Bernard Shaw

Agenda for Change

"Education is not the filling of a pail, but the lighting of a fire." *William Butler Yeats*

In this book I have suggested just some of the ways that we can challenge assumptions about learning...and what changes we can make once we accept the need for a new educational paradigm. Since these changes are personal as well as political, they will require the best efforts of many people working together.

So I invite you to brainstorm with me about ways to create a learning society. Contact me by email at assumptions@lifemedia.ca or by regular mail c/o Life Media, 508-264 Queens Quay W., Toronto ON M5J 1B5.

Send me your ideas for incorporation in future editions of this book. I would love to hear from you!

To begin the discussion, here is a summary of the

changes I think we need to make in order to replace schools with a true learning society.

- Trust children's ability and desire to learn
- Return responsibility for learning to the learner
- Organize education around learning rather than teaching
- Abolish compulsory education
- Respect children's human rights, in particular their right to make developmentally appropriate decisions about their own lives and education
- Provide the opportunity for people of all ages to have authentic learning experiences
- Trust people of all ages to figure things out for themselves
- Cultivate a critical attitude towards authority
- Provide publicly-funded, non-compulsory courses and training opportunities, which are open to people of all ages and abilities
- Provide financial access for every citizen, no matter what age, to non-conventional educational resources
- Create opportunities for individuals to organize fluid, multi-age, interest-based learning groups
- Fund museums, libraries, theaters and other community institutions to provide learning spaces and resources
- Separate our identities from our university degrees
- Hire people based on experience and talent, rather than on paper credentials
- Remove discrimination against school leavers
- Be honest with children about the purpose of "busy

work”

- Provide income supports to families to encourage parents to stay home with their children
- Reintegrate seniors into our communities
- Guarantee public Internet access
- Decertify and de-professionalize teaching
- Fund learning facilitators rather than teachers
- Provide support for mentors
- Discourage rote learning
- Stop testing people about what they have learned
- Stop ranking people based on test results
- Abolish grades and report cards
- Abolish curricula, text books, lesson plans and course requirements
- Avoid specialization for its own sake
- Encourage people to do things for themselves
- Help learners arrange apprenticeships
- Encourage youth self-employment
- Encourage and value volunteerism
- Make workplaces friendly to and safe for children
- Recognize children’s ability to contribute to the economy, without exploitation
- Require publicly funded universities to accept anyone of any age who can demonstrate proficiency in the subject to be studied

“Some people talk in their sleep. Lecturers talk while other people sleep.” *Albert Camus*

Glossary

The way we use language can reinforce the status quo or it can be a tool for creating change. Since there are as many assumptions connected to the words involved with education as to the concepts themselves, here are the definitions I use for these words.

school - (verb) a coercive attempt to educate people in which teachers attempt to produce learning in age-specific groups of children and young people, using a standard curriculum, memorization and drill, and testing of their retention of a specific number of facts and skills.

homeschool - (verb) an attempt to educate people in which parents attempt to produce learning in their own children, using a standard curriculum, memorization and drill, and testing of their retention of a specific number of facts and skills.

unschool - (verb) to remove a child from a situation where teachers or parents attempt to produce learning in them, and where children are given the freedom to learn what they want, when and where they want, using a variety of resources found in their communities and electronically from around the world.

deschool - (verb) to de-institutionalize children and society so that learners of all ages are given the free-

dom to learn what they want, when and where they want, using a variety of resources found in their communities and electronically from around the world

learning - (verb) a personal and experiential process of understanding the world and acquiring the confidence to explore its workings, which results from the freedom to interact with one's environment on one's own terms, without influence from teachers, standardized curriculum, memorization, drill or testing

education - (noun) the deliberate influencing of the process of learning; comes from the Latin word *educare*, which suggests a process of developing one's own natural ability to discover and understand the world through experiencing that world. Also known as "life learning" or "natural learning".

expert - (noun) a highly schooled person who spends large portions of his or her working life focusing on increasingly narrow ranges of highly specialized information, who has an interest in convincing us that what they know how to do is too difficult, time-consuming or complicated for the rest of us to learn, and who charges for access to their information.

curriculum - (noun) the arbitrary and disconnected means by which facts are organized in order to facilitate and control teachers' attempts to impart those facts in schools and other formal learning environments.

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Index

D

E

F

G

H

I

K

L

M

N

P

Q

R

S

T

U

V

W

Y

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About the Author:

Wendy Priesnitz is a Canadian unschooling pioneer. She and her husband Rolf helped their two daughters learn without schooling when home-based education was almost unheard of. In 1979, she founded the Canadian Alliance of Home Schoolers and continues to share her experience and long-term perspective through workshops, speeches, articles and books. She has served as president of the Ontario Association of Alternative and Independent Schools and leader of the Green Party of Canada, and authored eight other books, including School Free, a bestselling homeschooling support guide. She is also the Editor-in-Chief of the acclaimed magazine Natural Life, which has been providing inspiration and information about natural family living since 1976.

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