Dear Families,

Below is a wonderful article about the work of Author/Educator John Holt written by Peter Gray. Both of these Educators and Play Proponents had a great influence on Bev Bos and myself during the early days of our work together. Although Holt is best known for his support for Homeschooling and Un-schooling, we were particularly moved by his book, "How Children Learn." I hope you enjoy this fine article.

Michael Leeman

The Joy and Sorrow of Rereading Holt's "How Children Learn"

Peter Gray Ph.D., Freedom to Learn

Here, summed up, are John Holt's great insights about children's learning

In a survey we conducted a few years ago, Gina Riley and I asked unschooling families to name the writers whose works had influenced them most in their decision to take that route. John Holt was by far the most often cited, named by more than half of the 232 families in the survey (see here or here (link is external)). Holt died in 1985, of cancer at the too-young age of 62. Yet he continues to exert great influence.

My colleague Pat Farenga, who has managed Holt's legacy ever since his death, recently oversaw the publication of the 50th anniversary edition of what to me is Holt's most significant book, How Children Learn (link is external) (Da Capo Press, 2017). I read the first edition decades ago, without full appreciation, before I had begun my own research into children's learning. Rereading the book now led me repeatedly to think, How true, How brilliant, How sad. Sad because these true facts and brilliant insights are still understood by only a small percentage of the population, and our schools are now even worse than they were when Holt was alive. They are even more anxiety provoking, more wasteful of young people's time, more insulting of young people's intelligence, and more disruptive of deep learning and understanding.

But yet I'm optimistic, as I think Holt might be if he were alive today, because even though the percentage who understand that children learn best when allowed to control their own learning remains small, that percentage is growing. It is reflected in the ever-increasing number of families who are choosing to take their children out of standard schools for Self-Directed Education or something close to it. A growing number of parents are seeing the light of children's brilliance and are choosing to allow it to shine. Eventually, I think, we will reach a tipping point, where the rate of school leaving accelerates sharply. Then what we now call standard schooling will die of irrelevance, replaced by centers designed to optimize children's natural ways of learning (see here or here (link is external)).

John Holt. Wikimedia, Creative Commons
Source: John Holt. Wikimedia, Creative Commons
Some of Holts's Insights into Children's Learning

Holt was an astute and brilliant observer of children. If he had studied some species of animal, instead of human children, we would call him a naturalist. He observed children in their natural, free, might I even say wild condition, where they were not being controlled by a teacher in a classroom or an experimenter in a laboratory. This is something that far too few developmental psychologists or educational researchers have done. He became close to and observed the children of his relatives and friends when they were playing and exploring, and he observed children in schools during breaks in their formal lessons. Through such observations, he came to certain profound conclusions about children's learning. Here is a summary of them, which I extracted from the pages of How Children Learn.

• Children don't choose to learn in order to do things in the future. They choose to do right now what others in their world do, and through doing they learn.

Schools try to teach children skills and knowledge that may benefit them at some unknown time in the future. But children are interested in now, not the future. They want to do real things now. By doing what they want to do they also prepare themselves wonderfully for the future, but that is a side effect. This, I think, is the main insight of the book; most of the other ideas are more or less corollaries.

Children are brilliant learners because they don't think of themselves as learning; they think of themselves as doing. They want to engage in whole, meaningful activities, like the activities they see around them, and they aren't afraid to try. They want to walk, like other people do, but at first they aren't good at it. So they keep trying, day after day, and their walking keeps getting better. They want to talk, like other people do, but at first they don't know about the relationships of sounds to meanings. Their sentences come across to us as babbled nonsense, but in the child's mind he or she is talking. Improvement comes because the child attends to others' talking, gradually picks up some of the repeated sounds and their meanings, and works them into his or her own utterances in increasingly appropriate ways.

As children grow older they continue to attend to others' activities around them and, in unpredictable ways at unpredictable times, choose those that they want to do and start doing them. Children start reading, because they see that others read, and if they are read to they discover that reading is a route to the enjoyment of stories. Children don't become readers by first learning to read; they start right off by reading. They may read signs, which they recognize. They may recite, verbatim, the words in a memorized little book, as they turn the pages; or they may turn the pages of an unfamiliar book and say whatever comes to mind. We may not call that reading, but to the child it is reading. Over time, the child begins to recognize certain words, even in new contexts, and begins to infer the relationships between letters and sounds. In this way, the child's walking, talking, and reading are skills that pretty much everyone picks up in our culture because they are so prevalent. Other skills are picked up more selectively, by those who somehow become fascinated by them. Holt gives an example of a six-year-old girl who became interested in typing, with an electric typewriter (this was the 1960s). She would type fast, like the adults in her family, but without attention to the fact that the letters on the page were random. She would produce whole documents this way. Over time she began to realize that her documents differed from those of adults in that they were not readable, and then she began to pay attention to which keys she would strike and to the effect this had on the sheet of paper. She began to type very carefully rather than fast. Before long she was typing out readable statements.

You and I might say that the child is learning to walk, talk, read, or type; but from the child's view that would be wrong. The child is walking with the very first step, talking with the first cooed or babbled utterance, reading with the first recognition of "stop" on a sign, and typing with the first striking of keys. The child isn't learning to do these; he or she is doing them, right from the beginning, and in the process is getting better at them.

My colleague Kerry McDonald made this point very well recently in an essay about her young unschooled daughter who loves to bake. In Kerry's words, "When people ask her what she wants to be when she grows up, she responds breezily, 'A baker, but I already am one."

• Children go from whole to parts in their learning, not from parts to whole.

This clearly is a corollary of the point that children learn because they are motivated to do the things they see others do. They are, of course, motivated to do whole things, not pieces abstracted out of the whole. They are motivated to speak meaningful sentences, not phonemes. Nobody speaks phonemes. They are motivated to read interesting stories, not memorize grapheme-phoneme relationships or be drilled on sight words. As Holt points out repeatedly, one of our biggest mistakes in schools is to break tasks down into components and try to get children to practice the components isolated from the whole. In doing so

we turn what would be meaningful and exciting into something meaningless and boring. Children pick up the components (e.g. grapheme-phoneme relationships) naturally, incidentally, as they go along in their exciting work of doing things that are real, meaningful, and whole.

• Children learn by making mistakes and then noticing and correcting their own mistakes.

Children are motivated not just to do what they see others do, but to do those things well. They are not afraid to do what they cannot yet do well, but they are not blind to the mismatches between their own performance and that of the experts they see around them. So, they start right off doing, but then, as they repeat what they did, they work at improving. In Holt's words "Very young children seem to have what could be called an instinct of Workmanship. We tend not to see it, because they are unskillful and their materials are crude. But watch the loving care with which a little child smooths off a sand cake or pats and shapes a mud pie." And later "When they are not bribed or bullied, they want to do whatever they are doing better than they did it before."

We adults have a strong tendency to correct children, to point out their mistakes, in the belief that we are helping them learn. But when we do this, according to Holt, we are in effect belittling the child, telling the child that he or she isn't doing it right and we can do it better. We are causing the child to feel judged, and therefore anxious, thereby taking away some of his or her fearlessness about trying this or any other new activity. We may be causing the child to turn away from the very activity that we wanted to support. When a child first starts an activity, the child can't worry about mistakes, because to do so would make it impossible to start. Only the child knows when he or she is ready to attend to mistakes and make corrections.

Holt points out that we don't need to correct children, because they are very good at correcting themselves. They are continually trying to improve what they do, on their own schedules, in their own ways. As illustration, Holt described his observation of a little girl misreading certain words as she read a story aloud, but then she corrected her own mistakes in subsequent re-readings, as she figured out what made sense and what didn't. In Holt's words, "Left alone, not hurried, not made anxious, she was able to find and correct most of the mistakes herself."

• Children may learn better by watching older children than by watching adults.

Holt points out that young children are well aware of the ways that they are not as competent as the adults around them, and this can be a source of shame and anxiety, even if the adults don't rub it in. He writes, "Parents who do everything well may not always be good examples for their children; sometimes such children feel, since they can never hope to be as good as their parents, there is no use in even trying." This, he says, is why children may learn better by watching somewhat older children than by watching adults. As one example, he describes how young boys naturally and efficiently improved their softball skills by observing somewhat older and more experienced boys, who were better than they but not so much better as to be out of reach. This observation fits very well with findings from my research on the value of age-mixed play.

• Fantasy provides children the means to do and learn from activities that they can't yet do in reality.

A number of psychologists, I included, have written about the cognitive value of fantasy, how it underlies the highest form of human thinking, hypothetical reasoning. But Holt brings us another insight about fantasy; it provides a means of "doing" what the child cannot do in reality. In his discussion of fantasy, Holt criticizes the view, held by Maria Montessori and some of her followers, that fantasy should be discouraged in children because it is escape from reality. Holt, in contrast thought, "Children use fantasy not to get out of, but to get into, the real world."

A little child can't really drive a truck, but in fantasy he can be a truck driver. Through such fantasy he can learn a lot about trucks and even something about driving one as he makes his toy truck imitate what real

trucks do. Holt points out that children playing fantasy games usually choose roles that exist in the adult world around them. They pretend to be mommies or daddies, truck drivers, train conductors, pilots, doctors, teachers, police officers, or the like. In their play they model, as close as they can, their understanding of what adults in those roles do. I have learned from anthropologists that such fantasy is normal for children everywhere. For example, young hunter-gatherer boys imagine themselves to be courageous big game hunters as they stalk butterflies or small rodents and try to hit them with their small arrows. They are practicing what it feels like to be a hunter, and they are also developing real hunting skills. That is so much more exciting than, say, engaging in target practice.

This point about fantasy is another elaboration of Holt's main point that children learn by doing what they want to do right now, not by practicing for the future. In fantasy, the child can, right now, do things that nature or authority won't permit him or her to do in reality.

• Children make sense of the world by creating mental models and assimilating new information to those models.

As children interact with the world their minds are continually active. They are trying to make sense of things. Holt points out, as have others (including, most famously, Piaget), that children are truly scientists, developing hunches (hypotheses) and then testing those hunches and accepting, modifying, or rejecting them based on experience. But the motivation must come from within the child; it can't be imposed. As illustration, Holt describes cases where children who were allowed to just "mess around" with balance beams and pendulums, when they wanted to, learned much more, in a lasting way, about the natural laws of balance and pendulum action than did those who were taught explicitly.

Children often use mental models that they developed from previous activities to help them make sense of new activities. Holt gives a wonderful example of a boy who loved trains and knew a lot about them. When this boy began to get interested in reading he noticed that a printed sentence is like a train, with a front end and a back end, going in a certain direction. He called the capital letter at the beginning the "engine" and the period at the end the "caboose." This model, of course, was one uniquely useful to this boy. Among other things, it helped him transfer his love of trains into a love of reading. But the model had to come from the boy himself. If a teacher had imposed it on him, it would probably have come across to him as artificial and would have subverted his own attempt to make sense of sentences. And if a teacher tried to use this analogy between a sentence and a train in teaching children who had no particular interest in trains, that would be just silly.

How Teaching Interferes with Children's Learning

When Holt wrote the first edition of How Children Learn (published in 1967), he was still trying to figure out how to become a better teacher. When he revised the book for the second edition (published in 1983) he inserted many corrections, which revealed his growing belief that teaching of any sort is usually a mistake, except in response to a student's explicit request for help. Here, for example, is one of his 1983 insertions (p 112): "When we teach without being asked we are saying in effect, 'You're not smart enough to know that you should know this, and not smart enough to learn it." And a few pages later (p 126), he inserted, "The spirit of independence in learning is one of the most valuable assets a learner can have, and we who want to help children's learning at home or in school, must learn to respect and encourage it."

Children naturally resist being taught because it undermines their independence and their confidence in their own abilities to figure things out and to ask for help, themselves, when they need it. Moreover, no teacher—certainly not one in a classroom of more than a few children—can get into each child's head and understand that child's motives, mental models, and passions at the time. Only the child has access to all of this, which is why children learn best when they are allowed complete control of their own learning. Or, as the child would say, when they are allowed complete control of their own doing.

For much more on Self-Directed Education, see Free to Learn and the website of the Alliance for Self-Directed Education

About the Author

Peter Gray, Ph.D., is a research professor at Boston College and author of the newly published book Free to Learn (Basic Books) and Psychology.