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A DIFFICULT SUBJECT

WHAT is thinking? This is not a question that has an easy answer, if, indeed, it has any answer. This becomes evident in a thoughtful article in this year's Summer issue of the *Teachers College Record*, by Deanna Kuhn, who teaches psychology and education at Teachers College, Columbia University. She shows that while throughout this century efforts have been made by teachers to understand the process of critical thinking, very little progress has been made. "To date," she says, "the U.S. educational system has not been particularly successful in teaching thinking skills." Going on, she says:

> The reports that have proliferated in recent years paint a uniformly gloomy picture. The 1981 National Assessment of Educational Progress in reading and literature indicated that a majority of nine- to seventeen-year-old students are competent in initial comprehension of a passage, summary of its major theme or content, and superficial statements of personal reactions to it. However, students show little ability to analyze or evaluate a passage, drawing on portions of the text as evidence to support their judgments. Similarly, in a 1981 policy statement, the National Council of Teachers of Mathematics called for new teaching methods that address problem solving. Students are often competent in basic computational skills, the statement claims, but are unable to apply those skills in situations that require quantitative reasoning and problem solving.
>
> The evidence, then, suggests that education for thinking may be a goal on the order of goals like world peace. There is striking accord as to the desirability of the goal, especially for such a traditionally pluralistic field as education, yet only minimal progress has been made in realizing it. Why has there been such limited success in implementing such a highly and widely valued goal? . . . Part of the reason, I will suggest, has to do with the fields of educational and psychological research and ways in which they may have been poorly equipped to undertake this task. Yet another factor, almost certainly, is the inherent difficulty of the task.

Further on, she offers additional explanation:

> In sum, there exists little research evidence regarding the cognitive processes that are involved in people's thinking about real topics in everyday life. Would it be correct to conclude that there is little general interest in what people think about such topics? Clearly not. Somewhat paradoxically, perhaps, billions of dollars and vast technical expertise are devoted to ascertaining with considerable accuracy *what* people think about all sorts of social and political topics. *Why* they think what they do—that is, the cognitive processes that yield the judgments and inferences they make—in contrast, is something we know very little about.

What is wrong with modern education? it is natural to ask. The answer is likely to be, nothing new since the time of Socrates, when he, and after him Plato, pointed to the general ignorance of the Athenian population concerning matters of the highest importance. The affliction of the Greeks was that they supposed they had the knowledge they needed, believing that their erroneous opinions were the truth about being and life. Plato called this "double ignorance," the common delusion of civilized peoples, far more difficult to overcome than simple ignorance, which is well understood by those whom it affects and who are eager to correct it. Socrates pretended to no knowledge, yet he was accounted by the Oracle of Delphi to be the wisest man in all Athens by reason of his candid recognition of his own ignorance. Yet he could see that other men, animated by their desires and prejudices, held tightly to their opinions, which were largely based on hearsay and had seldom been tested in the fires of *elenchos* or cross-examination. Plato developed the proposition that knowledge of the nature of things was obtainable only by students who have a natural inclination to pursue the moral good. Without that inclination they can never achieve certainty, no matter how brilliant their instructors or how schooled their minds. This means that rare individuals, instead of avoiding

self-discipline, embrace it as the practice of true science and found their behavior, as well as they can, upon the principle that the welfare of one cannot be realized without the welfare of all.

This is obliquely suggested by Deanna Kuhn in her idea that "education for thinking may be a goal on the order of goals like world peace." People certainly want world peace, but they want it without having to give up any of the privileges they now enjoy and without investigating what would be justice to people in other parts of the world. The same inconsistencies are rife in our educational policies. As Alton Harrison, Jr., wrote in his *Contemporary Education* article (Summer, 1985):

> We delude ourselves into believing that the false commitment we have to ideals is genuine. And it is this self-deception that constitutes the greatest impediment to educational reform. For, you see, despite our protestations to the contrary, the kind of schools we have at any given time are essentially the kind of schools we want. . . . Why, you may ask, would people defeat the very changes or reforms they are trying to implement? If they do not want the change why not simply say so and support the status quo? The answer is that they do desire the change but they have an even stronger desire for the status quo.

Some comments by Albert Shanker, president of the American Federation of Teachers, are appropriate here (from *Harper's* for February, 1986):

> We're forgetting something essential about schools. Although the aims of education certainly include the development of character, civic virtues, and so on, the public also pays its school taxes for quite a different purpose. The need to control children, to harbor them for a certain amount of time away from their working or otherwise engaged parents, tends to become the most important function schools perform. And this custodial function often conflicts with, even dominates the others. . . . If we were to design a place whose sole purpose was to develop the qualities all of you [a group of educators] listed, it might look nothing like an institution that, as its first priority, must ensure that three thousand kids get there at 8:30 in the morning, stay until 3:00 in the afternoon, and are reasonably well-behaved for most of that time.

Who runs these schools? As Shanker says, politicians play their part:

> Politicians look for slogan answers and quick results within election periods of two or four years. For all the tough exams being mandated, nobody is mentioning the obvious fact that these tests measure the end product of a long educational process: they measure what students *didn't* learn in the first, second, and third grades. You don't hear much talk about investing in the earlier grades so that when these students get to high schools they will have a better chance of making it. These "reforms" are political measures designed to get test numbers up fast, everybody wants some "improvements" to point to before the next election.

In the same seminar Theodore Sizer, for years headmaster of Phillips Academy in Andover, Mass., said of such improvements:

> And the recent reforms reinforce the tendency toward fact-stuffing, short answers, and mental passivity by emphasizing tighter requirements and standardized testing. One of the reasons the reforms aren't changing this tendency is the surprisingly substantial support for the schools. The idea that most people believe schools are in disastrous shape is, I think, quite mistaken. If anything, people exhibit a rather mindless, ill-informed satisfaction about the schools. This is why our political system avoids challenging the basic assumptions and merely strengthens and extends them our schools are basically OK; let's just push them a bit harder, add an eighth period to a seven-period day, add thirty days to a 180-day-a-year schedule, test the kids more.

The remarks of Walter Karp, a *Harper's* editor, will serve as a summing up of the thinking of the experienced teachers who took part in this seminar:

> A citizen is a political being; he has private powers and a public role. As Jefferson wrote, the education of a citizen must "enable every man to judge for himself what will secure or endanger his freedom."
>
> In practice, that goal is persistently betrayed. It is essential that citizens be able to judge for themselves and have the courage and confidence to think for themselves. Yet America's high schools

> characteristically breed conformity and mental passivity. They do this through large, impersonal classes, a focus on order as the first priority, and an emphasis on standardized, short-answer tests among other things. Our schools do not attempt to make citizens; they attempt to break citizens.

This is surely enough to show the hazards and obstacles which lie in the way of teachers who earnestly attempt to teach critical thinking. Such a teacher is likely to be identified as an enemy of the educational system and dealt with accordingly. As Graham Down, director of the Council for Basic Education, said:

> American schooling has become a sort of kaleidoscope of activities—announcements blasted over the public address system, and of course the chaotic changes in class every hour—in which the psychology, not to say sanity, of the teacher is challenged at every turn.

Since Deanna Kuhn likens teaching thinking to the goal of world peace, we might look at how people think about what needs to be done to prevent another war—especially nuclear war, which is now a primary concern for many, many people. What would be examples of good thinking about putting an end to war—any kind of war? Scores of recent books, if not hundreds, have been devoted to this subject. It is surprising to find, however, that the best thinkers of the nineteenth century, who were fundamentally workers for peace, are seldom seriously cited by contemporary writers. One wonders why. In an earlier MANAS lead article we quoted from four great figures of the past—Emerson, Thoreau, Tolstoy, and Gandhi—since their ideas seemed to go to the heart of the matter. They all wrote about the way we occupy our minds from day to day. Emerson spoke of the fact that the way we think creates the institutions of war, showing that if we want peace we must introduce revolutionary changes in our habits of thinking. Thoreau said virtually the same thing, declaring that we should "wash ourselves clean" of trivialities, admitting to our minds only ideas which have genuine character in them. He concluded:

> Of what consequence, though our planet explode, if there is no character involved in the explosion? In health we have not the least curiosity about such events. We do not live for idle amusement. I would not run round the corner to see the world blow up.

Tolstoy, writing in 1894, called for a deep change in public opinion:

> One free man says truthfully what he thinks and feels in the midst of thousands of men who by their words and actions are maintaining the exact opposite. It might be supposed that the man who has spoken out his thoughts would remain a solitary figure, and yet what more often happens is that all the others, or a large proportion of them, have for long past been thinking and feeling exactly the same only they do not say so freely. . . . That the order of life opposed to the conscience of man should change and be replaced by one that is in accord with it, it is necessary that the public opinion of the past should be replaced by a new and living public opinion.

Finally, Gandhi wrote in 1941:

> I believe it perfectly possible for an individual to adopt a way of life of the future—the nonviolent way—without having to wait for others to do so. And if an individual can observe a certain rule of conduct, cannot a group of individuals do the same? Cannot whole groups of people—whole nations?

There is one contemporary to be added to these four—a man who writes in the same spirit, Joseph Weizenbaum, author of *Computer Power and Human Reason.* In his last chapter he said:

> For the present dilemma, the operative rule is that the salvation of the world—and that *is* what I am talking about—depends upon converting others to sound ideas. That rule is false. The salvation of the world depends only on the individual whose world it is. At least, every individual must act as if the whole future of the world depends on him. Anything else is a shirking of responsibility and is itself a dehumanizing force, for anything less encourages the individual to look upon himself as a mere actor in a drama written by anonymous agents, as less than a whole person, and that is the beginning of passivity and aimlessness.

Deanna Kuhn, in the *Teachers College Record*, proposes that critical thinking taken from actual experiences of life in the world would give

better illustrations of the actual processes of thought than the abstract and contentless "purified" reasoning that educators provide for the study of thinking. An example of this is supplied by Wendell Berry in his collection of essays, *Standing by Words* (North Point Press). In the title essay he considers how the members of the Nuclear Regulatory Commission wrestled with the problem of explaining to the public the possible dangers to the surrounding countryside of the nuclear disaster at Three Mile Island. He speaks of the time when the Commissioners were working to "engineer a press release," of which "The focus . . . has to be reassuring. . . ."

Commissioner Ahearne, Berry says, apparently felt that what had been worked out was "a bit *too* reassuring," and he wanted to *"suggest* the possibility of a bad outcome, apparently a meltdown." He said:

> "I think it would be technically a lot better if you said—something about there's a possibility—it's small, but it could lead to serious problems."
>
> And, a few sentences later, Commissioner Kennedy told him:
>
> "Well I understand what you're saying. . . . You could put a little sentence in right there . . . to say, were this—in the unlikely event that this occurred, increased temperatures would result and possible further fuel damage."

Berry comments:

> What is remarkable, and frightening, about this language is its inability to admit what it is talking about. Because these specialists have routinely eliminated themselves, as such and such representative human beings, from consideration, according to the prescribed "objectivity" of their discipline, they cannot bring themselves to acknowledge to each other, much danger to a lot of people. Their subject, as bearers of a public trust, is this danger, and it can be nothing else. It is a technical problem least of all. And yet when their language approaches this subject, it either diminishes it, or dissolves into confusions of both syntax and purpose. Mr. Mattson [chief of safety for the Nuclear Reactor Regulation organization] speaks clearly and coherently enough so long as numbers and the jargon of "candy canes" and "hot legs" are adequate to his purpose. But as soon as he tries to communicate his sense of the human urgency of the problem, his language collapses into a kind of rant around the metaphor of "a horse race," a metaphor that works, not to reveal, but to obscure his meaning. And the two commissioners, struggling with their obligation to inform the public of the possibility of a disaster, find themselves virtually languageless—without the necessary words and with only the shambles of a syntax. They cannot say what they are talking about. And so their obligation to *inform* becomes a tongue-tied—and therefore surely futile—effort to *reassure*. Public responsibility becomes public relations, apparently, for want of a language adequately responsive to its subject.
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> So inept is the speech of these commissioners that we must deliberately remind ourselves that they are not stupid and are probably not amoral. They are highly trained, intelligent, worried men whose understanding of language is by now to a considerable extent a public one. They are atomic scientists whose criteria of language are identical to those of at least some linguistic scientists. They determine the correctness of their statement to the press exactly . . . by their purpose, audience, and situation. . . . But the result was not "cooperation and mutual benefit"; it was incoherence and dishonesty, leading to public suspicion, distrust, and fear.

Quite evidently, Berry is a Platonic thinker who bases his critical thinking, here, on the responsibility of public servants. This is essentially Plato's view, who regarded all valid thought as having an ethical ground. He regarded the highest truth as being "decisional," adopted by the choice of the reasoner from a sense of duty, as distinguished from Aristotle, the great logician, who held that apodictic truth—two and two are four, and you'd better believe it—was the most important. As Robert Cushman says in his *Therapeia*, a study of Platonic philosophy:

> Plato was doubtless the first to understand and declare that demonstrative truths, the truths of the "abstract" sciences, are certain and enforceable just because they are also hypothetical. In proportion as propositions are rigorous, in the same measure; they are hypothetical, and *vice versa.* Apodictic knowledge is rigorous because it is cogently derived from "arbitrary" or unexamined postulates which are simply taken for granted. But Plato perceived that apodictic knowledge is not the most significant kind.

> It possesses, among other defects, a purely hypothetical nature.
>
> It is the intention of this study to show how Plato identified the main occupation of philosophy with a totally different sort of truth, which we may call decisional truth. . . . It is self-authenticating only for those who are possessed, both by nature and discipline, of a character and disposition to acknowledgement. It is one and the same thing, for Plato, that highest knowledge, in the final analysis, is self-confirmatory, and that it is a matter of acknowledgement through the assistance of dialectic. . . . Thus virtue is a precondition of knowledge, and Plato readily concedes that the Ideal Structure of Being is inaccessible to corrupted minds.

This seems a clear clue to the reason for "the inherent difficulty of the task of thinking," as Deanna Kuhn puts it, as well as to the confusions of educators who attempt to deal with this subject.

REVIEW
A SPLENDID PREFACE

RECENTLY, in the house of a friend, we came across a book that appeared about nineteen years ago, *I'm OK, You're OK,* and because of the clever title we had deliberately ignored. But since the book was handy on the shelf of a friend, a vague curiosity about what was behind the title led us to pick it up. We found it to be a book about a school of psychiatry, developed as Transactional Analysis by Eric Berne, with whom the author, Thomas A. Harris, also a psychiatrist, was associated for some ten years. Here we plan to tell something about what Dr. Harris says in his Preface, which seems to us by far the best part of the book.

He wrote the book about Transactional Analysis because he found that—

> It has given hope to people who have become discouraged by the vagueness of many of the traditional types of psychotherapy. It has given a new answer to people who want to change rather than to adjust, to people who want transformation rather than conformation. It is realistic in that it confronts the patient with the fact that he is responsible for what happens in the future no matter what has happened in the past. Moreover, it is enabling persons to change, to establish self-control and self-direction and to discover the reality of freedom of choice.

Dr. Harris doesn't think much of the peculiar vocabulary developed by the various schools of psychoanalysis, starting with Freud.

> One difficulty with many psychoanalytic words is that they do not have the same meanings for everybody. The word *ego,* for instance, means many things to many people. Freud had an elaborate definition, as has nearly every psychoanalyst since his time; but these long, complicated constructions are not particularly helpful to one who is trying to understand why he can never hold a job, particularly if one of his problems is that he cannot read well enough to follow instructions. There is not even agreement by theoreticians as to what ego means. Vague meanings and complicated theories have inhibited more than helped the treatment process. Herman Melville observed that "a man of true science uses but few hard words, and those only when none other will answer his purpose; whereas the smatterer in science . . . thinks that by mouthing hard words he understands hard things."

Dr. Harris hopes to correct the "vagueness" of therapeutic language by offering a precise yet ordinary vocabulary, which sounds like a very good idea, but his quotation from Melville seems a proper warning. Would a precise vocabulary really help us understand ourselves if the choosers of fixed meanings turn out to have shut out elements which are actually the heart of the matter? If there is ever any real progress in self-understanding, wouldn't the meanings of diagnostic words need to be changed, and wouldn't fixed meanings be harder to replace if they are believed to be already securely established? Maybe vague meanings become better by having octaves of significance; might a poetic language which stimulates the imagination be far more useful than the fixed meanings that we have in, say, physics and chemistry? Wouldn't a "loose" vocabulary place more responsibility on the patient than on the doctor? Wouldn't being vague about whole ranges of things be healthier than certainties based upon hard language growing out of misconception?

A quotation given by Dr. Harris from Mike Gorman, director of the National Committee Against Mental Illness, seems to make room for this view:

> I submit that *psychiatry must develop a "public" language, decontaminated of technical jargon and suited to the discussion of universal problems of our society.* I realize that this is a very difficult task; it means taking leave of the comfortable, secure, and protected words of the profession and adjusting to the much breezier dialogue of the open tribunal. As difficult as this task is, it must be done if psychiatry is to be heard in the civic halls of our nation. . . .
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> Psychiatry must face up to the fact that it cannot begin to meet the demands for psychological and social help from the poor, the underachieving in our schools, the frustrated among our blue collar workers, the claustrophobic residents in our crowded cities and so on almost *ad infinitum.*

The more general the thinking in Dr. Harris's book, the better it is. He says in his first chapter:

> Throughout history one impression of human nature has been consistent: that man has a multiple nature. Most often it has been expressed as a dual nature. It has been expressed mythologically, philosophically, and religiously. Always it has been seen as a conflict: the conflict between good and evil, the lower nature and the higher nature, the inner man and the outer man. "There are times," said Somerset Maugham, "when I look over the various parts of my character with perplexity. I recognize that I am made up of several persons and that the person that at the moment has the upper hand will inevitably give place to another. But which is the real one? All of them or none?"
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> That man can aspire to and achieve goodness is evident through all of history, however that goodness may be understood. Moses saw goodness supremely as justice, Plato essentially as wisdom, and Jesus centrally as love; yet they all agreed that virtue, however understood, was consistently undermined by something in human nature which was at war with something else. But what were these somethings? . . .
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> I stood in the lobby of a theater at the end of a showing of the motion picture *Who's Afraid of Virginia Woolf?* We are dutifully impressed by formulations such as Freud's definition of psychoanalysis as a "dynamic conception which reduces mental life to an interplay of reciprocally urging and checking forces." Such a definition and its countless elaborations may be useful to "the professionals," but how useful are these formulations to people who hurt? George and Martha in Edward Albee's play used red-hot, gutsy, four-letter words that were precise and to the point. The question is, As therapists can we speak with George and Martha as precisely and pointedly about *why* they act as they do and hurt as they do? Can what we say be not only true but also helpful, because we are understood? "Speak English! I can't understand a word you're saying" is not an uncommonly held attitude toward persons who claim to be experts in the psychological fields. Restating esoteric psychoanalytic ideas in even more esoteric terms does not reach people where they live. As a consequence the reflections of ordinary folk are often expressed in pitiful redundancies and in superficial conversations with summary comments as, "Well, isn't that always the way?" with no understanding of how it can be different.

The excellence of the opening pages of *I'm OK, You're OK* seems due to the fact that it takes us back to the days of Athens in the time of Socrates and to the Socratic revelation of how little we know about ourselves. Socrates engaged people in conversation on the streets of Athens, asking them questions. They tried to answer his questions, but almost no one had answers he found satisfactory. He wanted them to seek in themselves a core of self-knowledge and they were not used to any such inquiry and resisted as much as they could. Did he give them the answers? No, he did not. If they questioned him, he claimed to be as bewildered as they were, and explained that the Oracle had proclaimed him the wisest man in Athens because he recognized his own ignorance, while other people believed in errors and mistaken opinions, supposing they knew. Plato called this "double ignorance," compared to the condition of simple people who knew how really ignorant they were and were eager to learn. Socrates busied himself showing people how to *unlearn* what they believed but which was untrue, and so got himself unliked so much that the Athenians condemned him to death.

Where does Transactional Analysis take us after establishing this point? It gives us a new vocabulary, represented by three states of mind—of the Parent, the Child, and the Adult. The title of the book is constructed from the meanings given to these three states. I'm okay is the parent's view. I'm not okay is the child's view. But if the parent behaves badly the child may conclude, I'm okay, you're not okay. The true adult, however, being really experienced, decides, I'm okay, you're okay, which is the outlook of maturity. This position has value and serves the reader well at this level, but is it really an improvement on Socrates?

In the Platonic philosophy, everyone is both okay and not okay—true enough—and Socrates worked at helping people to get rid of the non-okay part of their nature. He knew what Paul Tillich recognized many centuries later: "The

passion for truth is silenced by answers which have the weight of undisputed authority." The joker in the Platonic deck is that you never find an authority other than yourself, although, all through the reading you have the feeling that somewhere there *is* an authority—that Socrates has it, somehow or other, but he won't or can't explain how he got it, or even admit what he knows. It's frustrating but it keeps him going, and also you, the reader.

Socrates, we may say, was a psychologist without doctrines. Can this, we may ask, be improved upon? Even by someone who knows "everything," would it be any better than the kind of stimulation to self-search that Socrates provided? He seemed convinced that the kind of truth that he was in pursuit of could not be "told" to someone else, and that those who claimed to give such instruction were sophisticated pretenders. Was he right or wrong about this?

If he was right, we need to go after self-knowledge independently, in a very different way. The right doctrines might be of help, so long as we don't mistake doctrines for knowledge, but that might prove difficult indeed.

COMMENTARY
ISSUES OF AUTHORITY

WHAT authority do or should teachers in schools have? This question is discussed at length by ten contributors to the Fall *Teachers College Record.* The articles are learned, with quotation from Plato to Wittgenstein and Polanyi, becoming hard on the ordinary reader, who may be lost among the shorthand citations of people he has never heard of, despite the fact that he is quite equal to grasping the sense of what the writer means to convey. One of the clearest of the papers is by Alven Michael Neiman, an assistant dean in the college of arts and letters in the University of Notre Dame, which we shall endeavor to summarize here.

He starts out by saying that authority in the classroom is of two kinds. First, there is the common-sense authority required for any teaching or learning to take place. He calls this social-political authority, which is needed to maintain order. Hardly anyone will object to this. The mental transactions of the schoolroom cannot take place without order. Then, second, there is the authority of knowledge, presumably possessed by the teacher. Neiman calls this epistemic authority, and there are those who deny its existence altogether. Neiman believes this authority has a qualified reality and deserves respect.

The argument against it is based on the claim that no statement about the nature of things can be final—we are always learning more—and there are revolutions in scientific certainty which call into question the very idea of objectivity. The culture, it is said, determines what we suppose to be changeless, definable, and reliable fact. When culture changes its views, the facts are retired and other things and happenings are elevated to importance as the starting-points of science and the facts of "reality."

Yet, on the other hand, the *way* in which world-views alter and are replaced can be studied, and in some degree understood. This may amount to knowledge of another sort—knowledge which applies in some sense at every cultural level. Further, there are minorities made up of specialists like physicists and scholars whose members agree with one another and form a consensus which lasts for a time, representing the best knowledge that exists for that time. These are the forms of knowledge to which the teacher has had access; they have a considerable authority and deserve respect—a respect which is joined with the warning that they may indeed change. This requires teachers to be philosophers of a sort, and, it may be asked, why not?

If we acknowledge this, then we are driven to the conclusion that teaching is really the highest calling or profession, deserving the greatest respect. So it must also be acknowledged that in our civilization we practice the exact opposite of this, treating teachers like unimportant hirelings. How can this be changed? How can we arrange to have our teachers duplicates of Elliot Wigginton?

CHILDREN
. . . and Ourselves
MIRACLE IN APPALACHIA

FROM some time in the 1960s, when we first heard about John Holt and then started reading him—everything we could find that he wrote—we have been converts to his way of thinking, even to the point of believing him right about the public and private schools of the country. What did Holt say about them? They are hopeless (with a few remarkable exceptions). They can't be fixed up and made to work. They are really against education and they care little or nothing about the welfare of the children. No matter what the administrators say, these are the facts. Even though only a small percentage of parents are either able to teach their own children or are willing to try, facts remain facts and Holt, as an experienced teacher of children of all ages, believed that if a few parents begin to teach their own, others would hear about how well they were doing and would attempt it themselves. We don't have any figures hard enough to cite the numbers of established home-schoolers, but people who are active in teaching their own children say that some ten thousand parents are now doing it.

If you read current articles on what is happening in the public schools—schools in every part of the country—you are likely to agree with these parents that the schools in this country are really hopeless, that nothing can be done to improve most of them, and that instead of wasting one's time in this direction the thing to do is help parents to work with their own children. Holt took this up as his lifework, publishing his paper, *Growing Without Schooling,* as a voice for the parents who come to agree, and for teachers who are learning how to take part, working with parents who join together in small groups—ones and twos—to teach their own children. The question arises: Could there be schools which carry on in this spirit, accomplishing what has lately seemed quite impossible?

One answer to this question—if there is an answer—is wrapped up in another question: Are there teachers with the qualities required? A book we have been reading lately—*Sometimes a Shining Moment,* by Elliot Wigginton (Doubleday, $19.95)—provides a qualified "yes" for an answer. Wigginton begins his introduction to this book of 400 pages:

> I am a public high school English teacher. . . . If you pick up this book when it is published in the fall of 1985, your interest will coincide with the beginning of my twentieth year in the profession. And actually, if the truth be told, it is only rarely that I wonder why I am still teaching. I know why. I teach because it is something I do well; it is a craft I enjoy and am intrigued by; there is room within its certain boundaries for infinite variety and flexibility of approach, and so if I become bored or my work becomes routine, I have no one to blame but myself; and unlike other jobs I could have, I sometimes receive indications that I am making a difference in the quality of people's lives. That, and one more thing: I genuinely enjoy daily contact with the majority of the people with whom I work. Our disagreements are Frost's "lovers' quarrels."
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> I'm not saying that teaching is the only field in which benefits exist, and I'm not saying I will stay in the profession for the rest of my working days. If I do begin looking for a new job, however, I'll cross my fingers and hope to find one with a similar profile.

Twenty years ago, or a little more, Wigginton graduated from Cornell and started looking for a job. Because he grew up in Georgia he decided that he wanted to teach in Appalachia. He applied for and got a job teaching English—ninth and tenth grade English—in Rabun Gap-Nacoochi School, where he began work in 1966. The school had an unusual history. It was founded about 1900 by Rabun County's only graduate of Harvard.

> Because there were no paved roads or automobiles, making daily travel to and from a central school a near-impossibility, he built over thirty small but comfortable satellite homes on campus, each with its own barn and farm acreage. A family with children would move into one of those homes and live there for as long as its children were of school age, leaving its own farm in the care of relatives or friends. When the last of the children graduated, the family would return to its own farm, thus vacating the home for another family. Rent and tuition were paid in the form of upkeep on the satellite farms and the requirement that parents and children help with the maintenance and smooth running of the school as a whole; there was ground to

> be plowed with teams of mules, crops to be planted and harvested and canned for the school's dining hall; dairy and beef cattle to be attended to, feed and fodder to be raised and gathered, hay to be baled and laid by; and sorghum molasses to be boiled down and bottled. The curriculum of the school was geared to the immediate needs and to the longer-range physical, spiritual, and mental uplifting of the families involved. Much of what was learned in the classroom or on the job was immediately applied by the students on the school farm itself—and presumably at their own homes. The addition of dormitories made it possible to reach additional local students who would live on campus during the week and return home on weekends and holidays

The program sounds magnificent, and no doubt was, but how could it work in 1960? It couldn't, and Wigginton says: "By the time I reached the school, it was still in the thick of a long-standing identity crisis of gigantic proportions." It was then a school filled with students with no common interest or background. Interesting them in English was impossible. Wigginton couldn't do it; nobody could do it. The classes could not be held together. Yet the youngsters were smart, as phrases from what they would sometimes write proved. Of some of the students Wigginton says:

> When in school, they seem only to know how to sneer. There is nothing you can threaten them with (and I mean nothing short of death) that can make them do anything they do not feel like doing—homework, keeping quiet in class, etc. The universal comment is, "I don't care" and they really *don't* seem to. I have kicked them out of class and had them come back the next day even *worse.* I keep telling myself that they really *do* care but they are just putting up a fake front—bravura—and they've been so used to being knocked down that with a little encouragement they'll come along fine. That's the accepted panacea. It may be true, too, but I don't see it yet. Whatever the cause, they really do seem to be genuine in their not caring. If I could just convince them that it *isn't* cool to shoot craps in the classroom, or throw my chalk away so I can't use the blackboard or any of a thousand other things that irritate a teacher to the point of no return. The problem is, it *is* "cool"—at least here.

What do you do in a situation like that? Quit teaching and go to work in a bank is one solution. Elliot Wigginton thought of something else—start a magazine which the English classes would write for, edit, and produce. It worked, and produced miracles in the students. From the word go it was *their* magazine.

> The name finally selected was *Foxfire*—an organism that grows on decaying organic matter in damp dark coves in the mountains and glows in the dark. Many of the students had seen it before, and those who hadn't were either fascinated by the idea that such things existed, or liked the sound of the word. In any case they cheered their approval. Everyone had an equal say. No one had been slighted or left out. To varying degrees, each had been caught up in the unfolding drama despite himself, and the classes had come together as one. Teaching was beginning to make sense.

What was Elliot Wigginton teaching? How to do an interview with a mountain lady over eighty—on how to weave or to make soap—with a moonshiner on how his still worked, with a cabinet maker who made beautiful chairs, and other old settlers in Appalachia. The high school students began to love their ancestors and the ancients of the hills and valleys loved the visits of the young and to tell about what they could do. The magazine was a magnificent success and the book the English class did about it, *Moments*—the telling mostly by Wigginton—published by Doubleday four years after he went to work in Rabun Gap, eventually sold two million copies, certainly a record-breaking achievement for a book about teaching school.

But if you read now what went into the school, and what kind of man Wigginton was and is, you begin to wonder about the possibility of there being another school like that. It's just not impossible—that's all.

FRONTIERS

How It Happens

WHILE far too much has been written about "creativity" and the "creative act," now and then one comes across material that seems just right. One of the rare chapters of material of this sort *was* put together recently from the writings of George Nelson, the distinguished industrial designer who died last March, by his friends in the profession who loved and admired him. Nelson, who was born in 1908, started out as an architect, found work as a writer about architecture, and then, realizing that he didn't like being an architect, became an industrial designer. But he never stopped writing, and what follows is made up of extracts from various of his writings about the work of the designer. Here he calls getting a great idea a "zap moment," meaning what A. H. Maslow named a "peak experience."

> So now I was an industrial designer. How nice! You walk through an art school, you get to be an architect, you really don't like most of it. You become a magazine writer, and then because you write one thing too many, you are an industrial designer [hired by a furniture manufacturer].
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> I had another zap moment or peak when I opened my office in 1947.
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> It was important to me to have certain status symbols around, and one of the symbols was a spherical hanging lamp made in Sweden. It had a silk covering that was very difficult to make; they had to cut gores and sew them onto a wire frame. But I wanted one badly.
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> We had a modest office and I felt that if I had one of these big hanging spheres from Sweden, it would show that I was really with it, a pillar of contemporary design. One day Bonniers, a Swedish import store in New York, announced a sale of these lamps. I rushed down with one of the guys in the office and found one shopworn sample with thumbmarks on it and a price of $125.
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> It is hard to remember what $125 meant in the late forties. You could buy a brand new Ford convertible for $640, complete with rumble seat and white wall tires. This automobile, with motor, lights, gas tank, and wheels, was only five times the cost of this one lamp. I was furious and was stalking angrily down the stairs when suddenly an image popped into my mind which seemed to have nothing to do with anything. It was a picture in *The New York Times* some weeks before which showed Liberty ships being mothballed by having the decks covered with netting and then being sprayed with a self-webbing plastic, and again, whammo! We rushed back to the office and made a roughly spherical wire frame; we called various places until we located the manufacturer of the spiderwebby spray. By the next night we had a plastic-covered lamp, and when you put a light in it, it glowed, and it did not cost $125.

What produced this wonderfully creative idea? Nobody knows, least of all George Nelson. As he says, "But note again the irrational jump from dissatisfaction with a product that was overpriced to remembering an item in the newspaper that seemingly had nothing to do with it."

He goes on:

> In all the experiences I have been describing, what we get is an invariable pattern. It is not mine; it's everybody's. First you collect and analyze information, then apparently the non-rational part of the brain goes through a mysterious search for bits of information that have no meaning to the logical part of the brain, and then—if you're lucky—these irrelevant items come together and something happens.
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> For the process to work, for the creative act, the logical, analytical part of the brain has got to be put out of action. This goes against normal behavior. Because in our kind of technical industrial world, we've been brainwashed from birth to believe that everything can be discovered by observing, measuring, analyzing, and thinking, but it simply isn't so. The entire history of scientific discovery, mathematical discovery, bears this out. We cannot *think* our way into creative behavior.

Nelson tells some stories of great discoveries from the history of science, then says:

> There is something significant to note in all these tales: anyone who has such experiences never says, "I *did* it", he always says, "I *found* it." The creative act is always *finding* something.

An interesting and revealing comment follows:

One of the most common misconceptions about creativity is the notion that it has to be associated with certain professions or activities. Even an observer as sympathetic and perceptive as Dr. Abraham Maslow confesses that he was a victim of this view, and he wrote about it: "I soon discovered that I had, like most other people, been thinking of creativeness in terms of products . . . assuming that any painter, any poet, any composer was leading a creative life. Theorists, artists, scientists, inventors, writers could be creative. Nobody else could be."

The reality is different. There is no such thing as a creative profession. There are as many hacks in architecture, graphics, and industrial design as there are in banking, garbage collection, or any faculty in any university. *Only individuals can be creative.* Also, all individuals are born with the potential.

The comments continue:

There are curious aspects of this creative act and the extraordinary feelings that come when it happens. As I said, there is no way of willing it. The ground must be prepared in some way, and then, maybe, ,it happens. But you can't say, "Today at eleven forty-five I'd better stop what I am doing and be creative." There is no possible way of doing this. Another aspect of this question of creativity is that the importance to the creator of whatever may be discovered or invented has no connection whatever with the value society may put upon it. What the creator creates is to him a total thing and a magnificent experience, what this is worth to the society is a different matter. . . . What the creative act really means is the unfolding of the human psyche in the sudden realization that one has taken a lot of disconnected pieces and found, not done, a way of putting them together.

The sparkling ideas go on for a while, but these are enough to explain why George Nelson's friends loved him and why putting some of his ideas together was the best tribute they could think of.