The effect of television on children is in part a reflection of the effect of current schooling practices, so that the simplicity of television is a reflection of the discontinuity and incoherence of modern schooling practices. This state of affairs in schooling is due to several factors: (1) efforts to make schooling less stuffy and mechanical and more like life; (2) science as a cultural force, and particularly the influence of child psychology; (3) science as constant innovation or a collection of new methods, new research, and new fads, and in particular, explicit psychology and an emphasis on testing and measurement; and (4) a discontinuity in curriculum, including too many disparate subjects of study. One particular example is the current emphasis on the teaching of critical thinking, which is not itself a subject. Instead, schooling must be seen as the removal of ignorance without killing curiosity, and a new effort must be made to define a school subject. It is often forgotten that a school subject must be teachable. These subjects must then be given some unity, with a permanent aim to be the increasing of students' attention spans. As William James once noted, schoolwork is hard, and there is no way to make it easy and "natural." School work must be restored so as to recapture minds, with teachers teaching rather than innovating and distracting. (EW)
Introduction

Jacques Barzun practices what we at CBE preach. He is that increasingly rare creature in the twentieth century—a liberally educated man, whose breadth of mind has brought penetrating insights into music and philosophy, literature and history, nullifying those baneful, arbitrary borders between disciplines. He is, finally, a man of great good sense.

In a Basic Education review of the reissue of Barzun's *Teacher in America*, John Holdren revealed much about Barzun's character as well as his writing. He does not ask us to genuflect at the altar of Great Books. On the contrary, he is refreshingly irreverent. "When an honest man tells me he took down a classic from the shelf and found it dull," he says, "I tell him he is right." It's a rare reader, and an even rarer student, who finds his first experience of *Paradise Lost* or *Moby Dick* an unqualified delight. To savor the classics, one must develop a taste for things sometimes tough and pungent. "For intrinsic and historical reasons," Barzun writes, "the classics are rich fruits encased in thick and bitter rind."

In keeping with his long and active support for the Council for Basic Education—he remains a Director Emeritus—Jacques Barzun gave the talk reprinted here to a gathering of the Friends of CBE at the Folger Library. We believe his wit and wisdom are, as ever, much in evidence. And we remain, as ever, much in need of them.

A. Graham Down
Executive Director
The Council for Basic Education
Television and the Schools
—But Not What You Think
by Jacques Barzun

Education at large and in theory is a simple subject. In application and practice it is complex and elusive. Like government, its actuality is felt and seen only in individuals, which means that in order to generalize with perfect safety one would have to interview millions. And yet one can form judgments about current aims and results only by generalizing: I start from observations old and recent and avoid distortions and corrections. If I state things dogmatically, it is to be clear and to save time.

The title of my remarks refers to a familiar question: is television harming children in their schooling? The answer is yes if the screen keeps children from doing homework. But so would any other abuse of working time—playing in the yard or reading comic books. All these are questions for parents. The deeper question is whether television by its nature disables learning.

It looks as if it did, because its formula is discontinuity. An expert has said that the image on the screen must change every 18 seconds, if not sooner. That's a question for program directors and producers. But we should ask what takes them to that way? And in answer I would venture the paradox that our pitted television is as it is, because of influence from the schools.

This influence has been both direct and indirect. The direct influence is that of men and women who work in television. They are products of the schools, and by what they produce they show how their minds work. The indirect influence is that of the audience. They too have come out of the common school, and if they get bored regularly at 17 1/2 seconds, they are no doubt reproducing the character of their schooling.

Why do I say this? Because during the last 50 years, nearly everything done in school has tended toward the discontinuous, the incoherent, the jiggly. If I go on to remind you of some of these things in detail it is not for the pleasure of recrimination. It is rather to suggest, how the pupils, teachers, and public officials ought to expect and demand of schoolwork.

Have you ever looked into a modern schoolbook—say a text in American history for the 8th grade? Its closest analog is a travel brochure. On a double-page spread in four colors you see a small map, a picture of Benjamin Franklin, a set of dates and figures ranged in black lines, a Wigwam, a view of Philadelphia in the 18th century, a list of questions off in a corner. The design is visually stunning, obviously done by an expert in display advertising. Among these eye-catching items, there is a thin stream of print meandering diagonally from left to right. It probably says something, though its position does not invite reading. But in the list of questions the first is really interesting. It asks: How old do you think B. Franklin was when this engraving was made?

If you do read the text, shutting out the colorful layout, you find that it tries to teach the pupil every kind of history—a jumble of political, social, economic, and cultural fact and opinion. It too tries to teach tolerance, compassion, and global understanding. Naturally, it can do none of these things. It gives bits and pieces of what is thought good.

Such a textbook typifies the attitude of the school toward the mind of the learner at any age. The pupil must be continually lured by bright externals, and during distraction fed in small mouthfuls. Nothing must last long, nothing must look systematic. You recognize at once the principle of a television show or commercial. I think my paradox is correct: television programs are put together by the products of our schools for the products of our schools. Remember that television came later than the modern school.

The next question obviously is: how did the schools get that way? Several causes and purposes contributed. First, the desire to make schooling less stuffy and mechanical than before by bringing it closer to life. Life is always a medley, it is broken up, discontinuous, often colorful—so let's take things up in class the way they look in life. No more memorizing and reciting, no more reading full pages of print and writing essays—break up all this sitting at separate desks and sitting for one continuous period to the teacher and the other pupils. Instead, let's have individual projects, let's have field trips and filmstrips—abolish the monotony. Let the class decide what it does next. Let's form small teams and do research out
of paperback books on the shelf. Remove the desks and seats, put carpeting down, and let us read and write in Nature's way—on the floor, squatting or stretched out chattering about the world. Teacher is there to orchestrate these lifelike activities.

A second influence has been science. I mean science as a cultural force. It suggested that the old way of teaching, being pre-scientific, must be wrong. New and correct methods would be found by educational research and the findings of child psychology. It would be a surefire combination. You could predict and guarantee results. Well, one of the results of research done 45 years ago has been the look-and-say method of teaching reading, a wonderful new method now acknowledged to be a disaster. Under it, even bright boys and girls could not learn to read or spell. They were bored to death by Dick and Jane and its limited vocabulary of 3000 words when the children themselves used and understood 2000. Now, at long last, a second bout of research has shown that the earlier findings were false, and phonics which CBE fought for alone during 30 years, is being reinstated.

In an age when the word context is continually used as a reminder of the way things hang together, people have tolerated schools where context is hourly destroyed.

I needn't point out in what sense look-and-say broke up a desirable continuity. It took up words one by one like Chinese ideograms and through the deadly mantras of Dick and Jane broke up the wholeness of storytelling into blandless bits. Phonics, on the contrary, builds up whole words out of alphabet sounds and makes independent, continuous reading possible.

The whole misadventure of look-and-say was due to a fallacy that I have named prepostension—putting first what ought to come last—pre/post. Because adults who can read barely glance at a word—not even seeing the letters that compose it—it was thought possible to teach small children to do the same. But a word written alphabetically is not a picture; it only becomes one after long practice.

The fallacy of prepostension was repeated with grammar and the new math. Because the geniuses at MIT enjoyed Number Theory, they believed that children would have fun playing with number systems based on 12 or 8 instead of 10 and would be pleasantly introduced to arithmetic. No more memorizing of the multiplication table—and besides, pocket calculators can do all that trivial work for you. In other words, the child attempting to deal for the first time with numbers found the subject broken up into alternatives that he would never use and was denied the solid means of doing operations quickly, systematically and correctly. The graduates of this method have found it hard to keep a job behind the counter when there is a sales tax to compute— or when the customer buys more than one item. The upshot is that cash registers must now show the clerk what change to give.

In these ways the pressure from science and from life joined up in gimmicks, though their principles were opposed. Science said: Never mind common sense; research always brings out surprising novelties worth trying. But these ran counter to judgment based on experience, and the result was that schoolwork became even more mechanical than it had been in the old days. So a still greater dose of life was required to make up for the methods that went against common sense.

Where the two forces were at one was in a common assumption— to what knowledge is and the proper way of testing its presence. Beginning with the small child's workbook what is expected is the rapid filling-in of blanks with disconnected items of information. Knowledge is no longer the ability to summon up an organized view of some topic. It was the ability to recognize separate discontinuous particles. Standardized tests steadily reinforce the lesson that success in school consists in completing the kind of printed forms that future life holds in store. It is odd that in an age when the word context is continually used as a reminder of the way things hang together people should have tolerated schools where context is hourly destroyed.

Science—and please remember that I use the word in quotation marks to mean what is called science in educational circles—science inevitably brought with it the idea of perpetual innovation—new findings—new methods, new gimmicks and gadgets incessantly injected into the system like drugs into a patient that doesn't get well. Schools have been ailing and every nostrum has been tried. I am not making up a joke when I tell you that there was a period when a high school could win an educational award for having laid down wall-to-wall carpeting. With the American love of the bandwagon educational methods, slogans, devices sweep the country, throwing precious ones into the discard and establishing in the school mind only one habit you have guessed at: the habit of discontinuity. School programs, courses and purposes are intellectual transients, and something of that atmosphere is undoubtedly conveyed to the learning child.

Science also introduced into teaching the virus of explicit psychology. It too was like to for, as we all know from personality testing and perpetual psychologizing the various brands of the science pervade business, employment, religion, marriage, the criminal law, friends interchange, the literature of the schools. Psychology has tended to substitute therapy for teaching and made the explanation of failure more important than its correction. It has
drawn away from intelligence and from what intelligence can do even under adverse individual and social conditions.

Meanwhile, it permitted the parents through report cards in jargon that was both incomprehensible and meaningless. Worst of all, it committed the grave fault of making children self-conscious. One of the virtues of learning anything is that it takes one out of oneself and into a subject—something existing in the world—the world of fact or of ideas, usually both. To pull the mind back into self-concern, self-exercise is not only a hindrance to learning, it is also a deprivation of the feeling of community with others. A subject understood in common with other people is a strong social bond, and of a kind most desirable in a democracy. So again by separating little eggs and by taking attention away from the subject to the self one more agent of discontinuity was introduced into the classroom. It was morally culpable besides for children as they grew up have enough internal causes of self-consciousness enough difficulty in coping with it.

Finally, the curriculum itself has been inspired by discontinuity. To begin with, too many subjects of study. A year or so ago I heard a talk by the superintendent of schools of Dallas, Texas, in which he recited a part of the list of subjects required by state laws to be taught between the 1st and 12th grades. There were over 200, including kindness to animals, family living, driver education, sex education, plain cooking, social studies and no sex education. This scatterbrained menu is disregarded of course, but even the leftovers are too much especially since many are offered as electives to young people who cannot possibly know what they are getting or what they should have.

Moreover, most of these subjects—such as kindness to animals—are inherently non-subjects. They have no form and no principles, they are exercises in superficiality. They are attempts at dealing with life through the schools. The prototype is the well-known hash called social studies, which takes real subjects such as economics, sociology, political science, anthropology and picks from each a few bits and pieces without continuity or direction. Its counterpart elsewhere in the curriculum is the course in general science. It is a significant fact that quite often the teachers of social studies are from the physical education department. It means anybody can teach it—not need to know anything special.

Another times, social studies is combined with history and given to a history teacher who has the effect of spotting the subject of history for social studies uses the so-called problem approach and in order to save time history is reduced to it, too. The "th-graders are given not a good slice of American history but the problem of slavery—how to accept civil war. This is propounded in another form, since the genuine discussion of such a topic obviously calls for an immense amount of mature knowledge about every aspect of the period.

Some years ago I was appointed consultant to a commission on the teaching of history which was financed by the National Endowment for the Humanities. Between sittings I visited several schools in New England that were reputed to be good, and I saw the care with which conscientious teachers in problem-mongering used the class time, whether for "th-graders or high school students. In the former group, previously assigned projects were being worked on—at the bookshelf or the slide viewer or with paper and pencil on the floor. This went on for about 15 minutes. Then some sentences on the blackboard about the Stamp Act and other grievances of the American colonies were explained for about five minutes. Out of this the idea of civil disobedience emerged as the root principle of the American nation. This lecture was followed by a description of topics for a project due three weeks later. There were questions from the class about meaning and scope, and then each signed up for a topic. One had to do with the American strategy in the siege of Boston, another more popular, was to write about Thoreau from three points of view—his own, that of his fellow townsmen and that of the writer of a soap opera. What struck me, besides the difficulty of the topic, was the mutual unconcern of the students about their choices. This matched the fact that the topics were also remote from one another and did little to teach the continuities of history, there is a gap of 75 years between the siege of Boston and Thoreau in Concord.

Television programs are put together by the products of our schools for the products of our schools.

But the high school performance was even more distressing. There I was enlisted to help with the class exercise in research. We all trooped to the school library where we were supposed to look up in the Reader's Guide to Periodical Literature two articles about contemporary figures in some foreign nation. The class was to work in pairs and the teacher and I were to give help in interpreting the symbols in the guide and in assessing the value of the articles from their authorship and place of publication. We had a very hard time. A group around me was keen to have Egypt, as the foreign nation and woman as its representatives. We had the good luck to find something about Cleopatra, though I suspected that the title used the name metaphorically and that was all. To find two names we had to shift to another country. On the way back to class after having disturbed with our chatter the students who had been reading in the library. I was assured by my new young friends that research could be really exciting.
weeks earlier, the class had witnessed a prepared debate between three of their number who expounded respectively the theories of Liberalism, of Anarchism, and of Socialism. My girl informant had been Karl Marx and had enjoyed the experience.

The principle of keep them excited accounts for a good deal of these exercises, dramatizations and interruptions generally. It is thought to be the answer to boredom and from time to time one such performance does relieve it. But it is a great mistake to implant the idea that learning can be steadily exciting, or that excitement is a good frame of mind for acquiring knowledge and overcoming difficulties. Developing a genuine interest in a subject comes only after some drudgery, and only when the learner gets to the point of seeing how it hangs together—as an order and continuity—not its unrelated peaks of excitement.

The whole misadventure of look-and-say was due to a fallacy that I have named preposterism—putting first what ought to come last.

In this light, one would think also of the way in which school programs have been administered. What is offered has long since ceased to be a curriculum, it is a collection of interchangeable units (often called modules), which represent not just subjects but also periods of time, some as short as 25 minutes. The scheme is for flexibility—meaning that frequently it is the students themselves who make up individual programs of long and short modules that will fit the printed timetable. For this purpose, the catalogue of electives is a thick book that describes the offerings with great and for the courses for dedicated students being paired with one or more substitutes certified not to be so heavy on the stomach.

Given this haphazard manner of developing the young mind, it is reassuring to remember that the school is also busy doing many other things besides teaching. Athletics and extra-curricular activities and numerous groupings and gatherings fill in the gaps of the discontinuous and offer the students a few forms of consecutive experience during which they cannot help learning something. Ten years ago, an educational official in Washington estimated that the amount of time the public schools devoted to academic work was 18%.

It is not hard to imagine what the mind of an average boy or girl contains after 12 years of modules, Dick and Jane, film strips, social studies, grade B electives, family living, and research for impersonating Karl Marx. Some information has undoubtedly stuck, thanks to a good teacher, or a self-developed interest in a subject or hobby such as photography or computer manipulation. But anything like a reasonable grasp of any fundamental subject should not be looked for. It would be unjust to these normally bright and inquisitive young people to expect from them what they have been denied.

The worst of it is that they have been left without the means to help themselves. Many cannot read or understand what they do read. A high school teacher in the Northwest covered with that difficulty by having the majors in theatre make tapes of her assignments in English and then sent her classes to listen to the tapes. Some cannot even utter their own ideas, but stumble from one fragment of thought to another over a series of 'you know' and 'like.' Still others cannot write legally; cannot count; cannot be employed without humiliating remedial work. One wonders whether their view of life and of themselves is also marked by incoherence and the clutter of disconnected thoughts.

I said at the outset that my critical description had a positive purpose. It can now be summarized, thanks to the details of what we may call how not to do it. What is the purpose of schooling? To remove ignorance without killing curiosity. It is an everyday fact that all infants want to learn. They put an enormous amount of energy and persistence in finding out how things go and what they mean. Their urge to educate themselves makes them, early in life, learn a difficult foreign language, for whatever they may say to themselves in the womb it is not said in the language they find around them when they are born.

But this headlong drive can be rebuked—by stupid parents and by bad teaching or non-teaching. For in relation to the civilized world, the child's ignorance is encyclopedic and his motive for removing at least a part of that ignorance has to be sustained. The utility of knowing must be shown and the sense of accomplishment must be given. Hence the school must begin with the useful and the indispensable. That is the point enshrined in the name of the Council for Basic Education which started the movement now known as 'Back to Basics.' There is no need here to detail the contents— and differences that characterize this fundamental reform.

The next step is to define a school subject. A school subject must be teachable. That tautology is often forgotten. Many desirable things cannot be taught—for example, how to write great poetry, how to make discoveries in science, how to achieve world peace, and so on. The reason for these impossibilities is this: the only things teachable are facts and principles in some rational order. That is why social studies and family living and kindness to animals are non-subjects for schools. They cannot be made into a scheme of facts and rules. You may say, the same is true of woodworking and piano playing. Just so, and that is why these accomplishments require individual coaching and practice. One might say that such subjects are not taught but shown.
Teachable subjects do not come ready-made, they have to be put into proper form; they are artificial constructions. For example, language as actually spoken and written is chaotic—a vast mess. Grammar, which is about language, is a system artificially neat and compact. Only in that form can it be learned and remembered. It is foolish to say that the grammar we learn is full of exceptions or that even the good history test doesn't tell the whole story, or that high school physics doesn't include the latest discoveries. Those limitations are the very means by which the mind is prepared to grasp, later on, the full scope of the subject as it exists in the world. Once again, life as such has no business in the classroom. The teacher may refer to the greater reality, indeed, must point out again and again the connections between his subject matter and life outside, but must never let life confuse the order he is painfully trying to create in it, the student mind, thanks to the artificial incomplete system. The great merit of Latin is that, its distance from our ways of speech and thought helps to bring out its system of grammatical relations. By the same token, any study of problems is a misguided attempt to bring life indoors; it leads only to error and confusion. And out of confusion, no remembering is possible. So there is no point, no use in trying to teach by reinventing the problems of life, let alone trying to solve them by handing out undigested gob of statistics, theories, and opinions.

**It is absurd to suppose that thinking can be a subject.**

Now, how should subjects be administered? The positive need for unity and continuity in subject matter should be matched by unity and continuity in work. The length of a period of instruction should of course be proportioned to the age of the child, but it should be long enough to make concentration and absorption progressively easier. This implies a few other things—desks and chairs, no reading or research on the floor, no running about. The whole class should attend to the same thing, so that it may learn not only from the teacher but from its own members' errors and successes. It's better that the box in the back row should throw an occasional spitball than that all 30 pupils should continually dash about on separate projects.

The permanent aim should be to increase the span of attention. It can be done. An interesting proof came not long ago from a review in the *New York Times* of an English television comedy program for children. The reviewer made the point that unlike much American comedy, the imported shows don't assume a short attention span. "English schooling has deteriorated like ours, but apparently not as far, since English children can take more than 18 seconds of slapstick and gags without feeling their minds going blank.

Now the one thing that psychology can tell the teacher is that attention comes in lumps, in waves. Good teaching therefore strives to connect these lumps into a steady rhythm; it revives interest by variety emphasis, relevant surprise—just as good writing does. But obviously, nothing is accomplished if variety and mere change of occupation. The change must occur within the subject; it must be about the same purpose—until the pupil develops the ability to keep going by himself. That is what learning to study means.

Right now in its recurrent despair, the school world is taking up another fad. It wants to teach thinking, and not just plain thinking but critical thinking. The school has not taught how to learn; now it wants to climb that lofty Mount Everest of intellect, critical thought. The notion shows how little it understands its own task. It is absurd to suppose that thinking can be a subject. Thinking is learned by thinking about something, some matter or topic wholly apart from the act of putting the mind to work on it. Critical thinking can only be learned by the discussion of an idea or opinion or theory, under the guidance of an able thinker. Thinking is like pantomiming; it is shown, not taught.

But in coming to this new gimmick, the school is repeating one of its old mistakes, which I am sorry to say was originally due to John Dewey. Dewey is often made responsible for all the errors and follies of the modern school which is the heir of his so-called "progressive school" of the 1920s. This total blame is unjust. He never intended that schoolwork should be the same as play, he did not subordinate intellect to moral attitudes, and he did not advocate gadgetry and bits and pieces. In my view, only one item in his program—and in his philosophy—was wrong. That was his belief that all thinking is problem-solving. In his influential little book *How We Think*, he described the five steps by which the mind solves a problem. The thinker meets a difficulty, defines it, makes a hypothesis gathers facts, and verifies—or disproves—the hypothesis. The truth is, this pattern applies to the way scientific solutions are reported on; not how they are found. A good many scientists and mathematicians have told us how they struggle with problems, their ways are not alike, and none follow Dewey's steps. The mind never proceeds like a marcher in a parade, as Dewey supposed. It is much more like a squirrel looking for nuts. Quite often, it is the unconscious mind that pops out a solution after sleeping on the problem.

What is even more important, the greater part of thought does not deal with problems. We have all got into the habit of calling every purpose or difficulty a problem, to the point where some people on hearing 'Thank you; you're welcome; they say' no problem.' A problem is a definable difficulty, it falls within certain limits and the right answer gets rid of it. But the difficulty—not the problem—the difficulty of staying friends with a jealous, cantankerous person cannot be got rid of in the same way it has no solution.
It calls, you might say, for endless creativity. So we come to the conclusion that the mind, at its best, thinks not like Dewey's imaginary scientist, but like an artist. Art is achieved not by problem-solving but by invention, trial, and error, and compromise among desired ends—just like good government. We may thereby gauge how far from practical is the option that we teach problem-solving, or thinking in the abstract. We shall equip young minds for all of life's purposes and predicaments.

By this foray into thinking we have come back to psychology. I have said that it has little or nothing to offer the teacher. I am referring to formal psychology, including child psychology. The reason science is of little help is that it delivers only general truths, and statistical probabilities. There is no such thing as the child, each individual is different, and does not act as the book says he will at this age or that. Indeed, a child does not even stay of the same mental age from day to day. If a teacher works according to rule, instead of observing and instinctively adapting means and ways to the live situation the child presents, he or she is in the wrong profession. Any true teacher knows that one must often do the very opposite of the usual, or the obvious, or the recommended. One has the care and the difficulties of a particular mind, not of a type.

In other words, the teacher must be, not a psychologist or scientist, but a politician or statesman, a diplomat, an artist. The art is that of understanding and of persuasion, so as to carry the listener toward the same understanding. This is done by constant awareness of other persons and instant response to their concerns—all this without losing sight of the goal to be achieved. It is a demanding task, which is why there are relatively few born teachers.

How the others ought to be trained is a large subject for another day. But if you should be skeptical on these last few points, let me refer you to the best authority, that of William James, himself a master psychologist. In his delightful book, *Talks to Teachers*, which is still in print after 87 years, he points to some of the facts that I have mentioned and expresses his belief that a knowledge of "the ordinary workings of the mind" is enough for the teacher. He adds that the hopes that were current even then about educational research and the "new psychology" were unlikely to be of use in the classroom, for (he says) the vital thing about the pupil, his emotional and moral energy, becomes known only in the total results in the long run. He also makes it clear that there is no possibility of making schoolwork always easy and natural. Much of it is hard and unnatural until it has become a habit. Effort is always needed, and the utmost the teacher can do to supply interest is to let loose the effort.

If we must have slogans for schools, let loose the effort strikes me as the one we need right now. The young in this country are uncommonly intelligent and vigorous, thanks to being healthier and better fed than past generations. They are worldly beyond their years, thanks perhaps to television and the new ways of parenthood. Their energies outside of the classroom are certainly impressive, including their harmful energies. If schoolwork were restored so as to recapture their minds, with teachers teaching instead of innovating and distracting, the results might well seem to us miraculous. These conditions may sound hard to reach after nearly 80 years of folly and failure, but unless their spirit and practice return, we cannot hope to let loose the effort.