The crucial questions facing education in America are ethical, not methodological: Technology for what, and in whose service? In this paper the author first outlines the state of education as it regards socialization today. He finds the schools primarily a place to limit the freedom of children both physically and psychologically. He argues that there is potential in educational technology to alleviate some of the shortcomings of the schools, if society chooses to use it correctly. However, there must be radical philosophical changes in the minds of educators and change in the administration and structure of the institution of education if there is to be any real improvement in the quality of education in America.
In responding to the question addressed to me, "What are the educational needs of young people in America today, and what relevance might instructional technology have for meeting these needs?" my first responsibility, I believe, is to avoid entrapment in the assumptions on which the question is based. For the crucial questions facing education in America are ethical, not methodological; and there is nothing more American than the practice of concentrating attention on problems of technique in order to evade moral issues. This is what we have done throughout the Vietnam war; it is what we continue to do with reference to most of our difficulties, from air pollution to the character of American political campaigns. We seek devices--procedural, mechanical, electronic--that will help us do what we wish to do, without asking who is using those devices to do what to whom, and by what authority. Our answer to the questions "Cui bono?" and "Quo warranto?" is merely "The impossible may take a little while!"; which, except in a gung-ho teevee drama, is no answer at all.

Educators, especially, evade these questions for which society itself provides official answers that, as its agents, they accept as they cheerfully work toward a final solution of the youth question. "Cui bono?"

The schools are assumed to exist for the benefit of their pupils and of

* Edgar Z. Friedenberg is professor of educational studies in the Department of Social Foundations, State University of New York at Buffalo.
the society that supports them. The question before us, then, is how they can do a better job than they admittedly do now; and this is precisely why an improved instructional technology is sought. "Quo warranto" Society provides the warrant, and will issue one for the apprehension of any youth under 16 who commits the offense of existing--out of school. It is precisely in order to make this constraint more supportable and even profitable to him that we seek to improve instructional technology.

By the mere act of submitting a report to this Commission, one contributes to this evasion unless these questions are examined explicitly. Technology for what, and in whose service--these are surely questions that educators are less free to ignore than generals. Yet, we do ignore them--and, I suspect, for the same reasons that generals do. Not simply because Americans are, as is sometimes said, a practical people impatient of theorizing. Our military policies like our educational system, have not proved very practical judged in terms of results--and that is the only way a practical matter can be judged. Rather, we ignore questions whose answers might undermine our own social roles and undercut our authority. Questions about what devices to use to do our job better cannot do that. Questions about whether our job is worth doing, and for whom; or about who hired us to do it, by what right, and with whose consent; or about the alternatives to doing it at all and what happened to them--such questions as these are more disquieting. To ignore them, however, is to accept the
answers to them implicit in existing social practice, and to accept complicity
with existing social institutions. Like Bartleby the scrivener, I prefer
not to.

---o---

The question "Cui bono?", when applied to the schools, is remarkably
difficult to answer. There are, of course, many conventional answers which
are seldom challenged. But none of these I think, will survive the kind of
rigorous test of causality which is applied in an empirical investigation
of, say, the effectiveness of a pharmaceutical agent in combating a partic-
ular disease. Do the schools contribute to economic opportunity? It can
certainly be demonstrated that the longer one stays in school, up to 20
years at least, the higher one's income is likely to be. But whether this
is due to capacities actually developed through instruction, or the effect
on character and personality of decades of submission to school routines,
or merely the consequence of a complex, interlocking series of credentials
which restrict opportunities to those who have satisfied the authorities
at an earlier stage is not clear. All these processes are involved and
are interrelated. But I have listed them, I think, in ascending order of
their influence, though apologists for the educational system would prefer,
I believe, that the order be reversed. Nevertheless, most of what is
intentionally taught in secondary school is too bland, puerile, and
inconsequential to be of any value; and in a society which refuses to
accord people even the meager autonomy permitted adults until they are about 25, it is likely to be outdated as well. People simply do not turn back to what they have been taught in high school in order to live more sensibly in later life, and they seldom do so even to pursue more advanced study. They are more likely to have to unlearn it if it made any impression at all.

The character and personality traits developed through 12 to 20 years of submission to school routines do certainly play a part in making people marketable, and in developing in them what Fromm calls a "marketing orientation", so much so as to have become a widespread source of embarrassment. The official program of educational leaders now usually includes something about encouraging responsible dissent and the creativity of mavericks. But this, too, is directed toward making the personality more marketable, in an age said to demand greater flexibility—and betokens no greater respect for individuality as such. Moreover, since the school is still interested in turning out a product, it remains practical about problems that occur on its production lines. No doubt it would like to turn out a more sophisticated model this year; but if the teachers or the community rebel because the kids are getting too much freedom, the school administration cracks down on their hair or their speech or their invited speaker or their peace buttons, and calls this democracy in action—which, indeed, is just what it is. Democracy in action notes that the disfranchized, being powerless, have no rights and may be treated like things when the clutch comes and holds that any protest they might make is
illegitimate per se. This is precisely the position of the Superintendent of Schools in sophisticated San Francisco, where all protest demonstrations in the public schools have been forbidden under threat of criminal prosecution, according to a headline story in the San Francisco Chronicle for Tuesday, October 29, 1968.

In view of the kinds of personality structure that facilitate the behaviors schools reward as "high achievement" and the interlocking system of credentials which impede the access of young people who respond in ways the schools condemn to better colleges, it is certainly clear that the schools channel students toward the levels of economic opportunity its staff deem appropriate. Aaron Cicourel and John I. Kitzus, in their classic study of The Educational Decision-Makers\(^1\), detail this process in action, with many quotations to show what it sounds and feels like.

\(^1\)Indianapolis, Bobbs-Merrill, 1963

But again, Qui bono? Who benefits from this? The students who fail certainly do not. Those who succeed gain a competitive advantage, but at great cost to other potentials which the school stultifies as it moulds them into its approved patterns. It has seemed very odd to me for some years now that adults who seem to enjoy worrying about the possible, if undemonstrated, damage that marijuana may do to the mind show no corresponding concern about the demonstrable damage that the schools do;
the destruction of the capacity for intimacy in favor of defining relationships to peers as casual and competitive; the loss of capacity to entertain the idea that any economic system other than capitalism and any form of government other than representative democracy might have certain advantages— even moral advantages; the petty cowardice and cheerful surrender of any claim to privacy or dignity when faced by the demands of an intrusive and often vulgar-minded administration. Schools don't do all these things to every student, of course; but they do enough of them to most to make the total damage to the mind attributable to their action greater than marijuana, or even LSD, could conceivably do. But the damage pot does, if any, is antisocial; the damage schools do is the very stuff of socialization.

The question of whom the schools benefit becomes, then, a very complex one. They may be said to benefit society; they benefit students by preparing them to fill the roles available in society and even inducing them to want to fill them and to forget that other roles, and a different kind of society might be possible. But these are rather ambiguous benefits. Society, moreover, is not a unitary organism with particular needs of its own, but an arena in which genuinely conflicting interests contend. A major social function of the school—I believe the major social function of the school—is to take the edge off this conflict by supporting the more populist, anti-intellectual forces of the society and shaking the confidence and breaking the spirit of the more exuberant—
which is usually also the more privileged--minority of youth. In this way, certain atavistic, elitist components of our society are rendered ineffective. One must teach the Constitution, but 12 years in school are usually enough to teach young people not to rely on the Bill of Rights; one must "transmit our cultural heritage"; but the minds of the staff and the routines of the school deprive it in transit of authority or power to sustain life.

In this way, the schools have played a very significant role in delaying the kind of polarization which has now occurred in our society, but they have done so by undermining the confidence of our more civilized and nobler youth in their right to their own moral choices or to be guided by their own experience of the values of their social class. Into each child, black or white, rich or poor, schooling implants a chill and permanent automatic reminder that in many respects, for all practical purposes Governor Wallace has already won; his victory over the human spirit has been woven into the social fabric of America, whether he or anyone like him succeeds in claiming that victory or not. It is present in the smug racism of the urban schools; in their dress regulations and pre-occupation with sexuality and pornography, their inability to leave anybody alone. The schools, in short, have been the instrumentality through which the middle-classes have thrown their children to the common man as hostages against the possibility that they might become presumptuous. This is a clever means of insuring social stability; for the schools have also been
made the custodians of the cultural instruments by which the young might have delivered themselves. To give the police MACE and put schoolteachers in charge of athletics, poetry and literature is a pretty effective way of preventing the emergence of a responsible elite, especially if the young are prevented by law from seeking the meaning of their lives outside the school, and mistrust and social sanctions deny them contact with adults who might respect them on their own terms.

As a system of socialization and control this worked remarkably well as long as the schools' ultimate sanction—the denial of access to economic opportunity through credential control—worked; and it still does for most youth and especially for petit-bourgeois youth. But it has failed for black youth, to whom the school system has not delivered the promised rewards; and it has failed for the most sensitive and creative of the more affluent youth, who are not growing up with a sufficient fear of failure to insure that their self-esteem is totally linked to being defined by school and society as successful. Crash programs to induce black people to accept the school as the instrument of their incorporation into the society; and to induce schools to change their technics of instruction to make them more acceptable to black students will, I think, probably succeed. Black people, after all, perceive themselves as excluded and deprived; and will accept inclusion into society if this is offered on terms that are not insulting to them. This, incidentally, is one of the
areas in which applications of new instructional technology to bypass the
bias of existing school personnel are likely to prove most effective. But
it is less likely that the schools can recapture their dissenting or hippy
clientele, except by a series of search-and-destroy missions. Not only do
these youth reject the rewards and resist the punishments administered by
the schools; their humiliation in school is, I am convinced, a part of the
public spectacle which the schools are expected to provide the vast and
malevolent public which most enthusiastically supports them. It is asking
a great deal of liberals—of which, presumably, this Commission is largely
composed—to admit that any large group of people is hateful; but it is
perfectly obvious—popular response to police action at the Chicago
Democratic Convention would have made it so, if it had not been already—
that most American adults loathe and fear young people, and get a great
deal of satisfaction out of seeing them kept in line and beaten—figura-
atively or literally—if they get out of line. This is one of the things
the schools are hired to do, and efforts to make schools more humane or
educationally effective fail for the same reason that efforts to make
prisons more humane and rehabilitative fail. It isn’t that nobody knows
how; we know how very well. It is that this is not what the people who
support them really want—or would tolerate—and the people who run the
prisons know this full well, and knew it when they chose their profession.
Such humaneness as is found in prisons and in schools results less from
either enlightened policy or genuine good will than from the empirical
fact that above a certain very high level, constraint and punishment make the place unmanageable. The level of authoritarian constraint that comes to prevail is that thought optimal to control the inmates, satisfy the public, and preserve the self-image of a staff which is at once sentimental, brutal, and insecure. The formal goals of the institution, whether reform or education, have very little to do with the matter at all.

But the parallel between schools and prisons breaks down in one very crucial respect. Society does not really expect prisons to rehabilitate anyone; and is prepared to support a high level of recidivism; it does not expect to recruit any of its leaders from the ranks of former convicts; and when it nevertheless does, as in the case of Eldridge Cleaver or Malcolm X, it is thrown into paroxysms of hostile confusion. One gathers that the prisons failed in not destroying these men. But the business and industrial leadership of the country, though it does not, I think, care very much about educational failure as such—the failure of the schools to educate black children did not, after all, become a serious issue till their parents made it one—does care about preserving the basic institutions of the country and also about preserving the succession. Even today, only a minority of youth are disaffected with society, and with the schools as the official instrument of that society. But that minority includes many—perhaps most—of the kind of young people who would normally come to occupy positions of leadership in
this country. Their defection is serious, and is coming to be taken seriously. Schooling may or may not have benefitted them in the past; but it certainly played a major part in setting them off along the path most traveled by. Today, its practices and social climate are among the factors that lead to their defection. And that has made all the difference.

A partial answer to the question who benefits from the schools is therefore: (1) Persons who seek economic opportunity by acquiring marketable characteristics; (2) Employers who want to hire the kinds of people the schools find acceptable and give desirable credentials to; (3) Those who wish to minimize social conflict by indoctrinating young people from the beginning with the necessity of acquiescing to the demands of "common-man" standards of taste, behavior, and self-expression, regardless of their putative rights and the violence this may do their inner-life and spirit; (4) Parents who do not want their children around the house or cannot afford to have them there, but want to know where they are; and who want to be sure that they will not come to accidental physical harm and that if any adult touches them, it will not be in the act of loving--an occasional formal beating is, under the law of most states, quite acceptable; (5) The vast number of what William Burroughs has called "control addicts" in our society, who want to be sure youth is being kept in line and off the street and taught to respect
authority. These, of course, are social functions of education; and since I have not so far taken account of economic factors as such, I have neglected two primarily economic functions of schooling which are probably even more fundamental to the maintenance of our present society than those I have noted.¹

¹The economic functions of the school system are fully and insightfully discussed in a recent article by John and Margaret Rowntree, "The Political Economy of American Youth" in OUR GENERATION, 6, 1-2, 1968 (pp. 155-186)

One of the most important, and least stressed consequences of compulsory school attendance is that it both keeps young people off the labor market—and the unemployment rate for those under 25 in America is about three times as high as for those over 25—and totally pre-empts their time in prescribed, unremunerated, labor. Ideologically, this is justified by the presumption that youth is "investing in its future" and that the school is contributing to this investment in lieu of payment. Whether one accepts this explanation as satisfactory is largely a value, rather than an empirical question. In any case, it is clear that, under our kind of capitalist economy, the schools and the armed services, expensive as they are, provide a relatively inexpensive way of disposing of young people and controlling them, as well as of denying them access.
to ordinary due process for their grievances.

The second of these economic functions has to do with the enormity of the educational enterprise itself. When we ask of the schools "Cui bono?" we sometimes forget to include the personnel of the schools themselves in our answer. Yet the educational system is, among other things, an enormous vested interest, as the New York City teachers' strike should have reminded us. On any given day nearly a third of the nation's population is required by law to attend school. There are now some 12,000,000 students in public high schools; and about a million and a half in private, including church-affiliated, secondary schools. There are more than a million elementary school teachers, backed by myriad bureaucracies and sustained by active service staffs. Total public school expenditures for the fiscal year ending June 30, 1967 were 28 billion dollars—about five times as much as in 1950, when enrollments were already a little over half their present size. It is also about twice as much as Vice-President Humphrey's estimate of what it would cost to maintain a totally volunteer army and eliminate the draft. He concluded we couldn't afford it.

Liberal democracy is so firmly committed to the idea that public education is unquestionably good for the individual and society that this enormous expansion of the education industry is assumed to be a notable national achievement and an unalloyed blessing. Education does not share
with the military its access to unlimited funding—bond issues and tax
increases for educational purposes are often quite strongly resisted—but it does share, as no other public venture does, its immunity to
popular radical criticism. There is constant complaint, certainly, that
the schools are not doing as good a job as they might—and this, presum-
ably, is why this Commission has been appointed. But except—again as
with the military—from intellectuals, there is hardly ever a voice
raised to suggest that what the schools are doing may be not only poorly
done but undesirable, and may violate the interests of quite legitimate
minorities in the society—especially those of youth itself—while it
serves others; and that increased efficiency and indefinite expansion of
the educational enterprise may result in a further loss of diversity and
encroachment on civil liberty. Yet, I believe that this is so; and that
in exploring the question "Cui bono?" I have dealt sufficiently with
"Quo warranto?" as well. For the mandate under which the schools operate
is essentially a conservative mandate; a mandate to keep the place of
youth—our last disfranchized minority—in society defined and limited as
it is. And what is expected of new instructional technology, surely, is
primarily that it keeps them happy enough to prevent trouble, but not so
happy as to arouse the envy and suspicion of their elders; and, above all,
that it reach and involve "disadvantaged" children before they abandon
the educational system altogether as a proper channel for their
aspirations and begin, instead, to aspire toward goals which the educational system does not accept and to develop extramural and possibly antisocial means of achieving them.

There are, it seems to me, many ways in which improved instructional technology might help the Commission to discharge this mandate. But I think it is a bad, or at least a highly suspect mandate. Nevertheless, there are also consequences of the use of improved instructional technology that will, I believe, contribute on balance to making education freer, more humane, and less bound to shabby-genteel norms. These consequences are not sought for their own sake and would not arouse the enthusiasm of school personnel if they were fully anticipated. They are rather in the nature of side-effects. But the side-effects of communications technology, as McLuhan has stressed, are often far more significant than the intended consequences; and this is likely to be as true in school as out. Some of these will, I think, be very desirable. I only hope that it is not unwise to call them explicitly to the attention of so respectable, and liberal, a Commission.

---0---

The first of these desirable effects is a greater centralization of resources for curriculum construction, which is likely to have several beneficial consequences—as well as some not so beneficial which in most situations will, I think, be less important. Obviously, the takeover of
the preparation of curricular materials by the mass-media from smaller and more parochial publishing firms which are less able to resist the parochialism of the school-systems themselves, will permit a more costly production-job to be done. This will make the new materials slicker, and the new technologies more elaborate—which is not good. But it will also permit the hiring of more skilled people with a higher level of scholarship and ingenuity to work on their preparation in the first place; and these people, though they must ultimately appeal to their institutional clients, are surely less exposed to local but often violent community pressures to narrow or emasculate their materials.

As the newer instructional technologies prevail more and more, the effect on instruction will probably be comparable to the spread of Howard Johnson's restaurants and motels on the general quality of food and lodging available in the country; or of the establishment of flight kitchens for airlines in major airports. The results will never be either as good or as responsive as a first-rate chef or inn-keeper would provide; local variation will be superficial and whimsical if, indeed, it occurs at all; there can be considerable built-in flexibility in what is offered, but no spontaneity. Nevertheless, in most towns with a Ho-Jo's, the food and accommodation are better than could be obtained anywhere else for miles around; and it would usually be unwise for a first-class passenger in a transcontinental airliner to seek equally
good food and service—poor as he may be getting aloft—in the drive-in immediately beneath him, even if it is very popular with truck-drivers. Ho-Jo's and the airliner have better equipment to work with, both in food preparation and distribution and in cost-accounting; they can deliver a better product per unit of cost. Moreover, they are much less ignorant and slightly less contemptuous of the tradition they work in: Howard Johnson's Beef Bourguignon won't make anybody think of Dijon, but the food technologists who devised it did, I think, have a fair Platonic conception of the real thing and were influenced by it in a civilized direction. You should only have anything as good in a school cafeteria; you better believe it.

The same thing will, I believe, happen with books, films, tapes, extra-sensory irradiations—whatever the medium, the message should be a bit richer; just as network TV, ghastly as it is, is better than what comes on local option time. This will seem a curious statement from a person who favors, as I do, school decentralization. But that is necessary in order to protect the autonomy of the client, which is the first consideration. Decentralization would not, certainly, contribute in the same way to the improvement of the curricular devices and services offered him.

Will this reduce the teacher to the status of a plastic geisha, as it has airline stewardesses—who initially were qualified R.N's with
a quite different conception of their role? It will surely tend in that direction; but is this not also on balance a good thing? Airline stewardesses today come from about the same social class as schoolteachers; they are not notably less well educated; and they do not behave altogether differently. Notice how they handle passengers—especially in the more crowded Y-class section—who don’t want to watch the movie on transcontinental flights; observe how readily they summon an officer from the cockpit to deal with a drunken passenger, and how unenthusiastically they greet the demands of an occasional passenger for a little unscheduled diversion, as of the aircraft to Havana—surely one of the most interesting cities in North America at the present time and one which, in the ordinary course of business, they would never get to visit. What keeps stewardesses from becoming oppressive is neither their elan vital or their devotion to their clients—both are often obviously limited—but the mutual understanding between the stewardess and her client that her role is actually carefully defined and largely limited to supplying him with pre-processed comforts and services to which his ticket, as a contract, entitles him. Granted a minimal civility, then, her personality really doesn’t matter very much; and the occasions when one feels that one is thereby missing something are fewer than those on which one is grateful to be spared. Similarly, if centralized technology limits the scope of the dedicated teacher, it will also limit the effective lethal range of the vulgar-
There is already evidence, indeed, that "teaching machines" prove particularly effective with schizophrenic children who, in the ethnocentric language of the institutions that classify them "cannot relate to other people"; but who must, themselves, surely experience these other people as unbearably threatening or intrusive. We must, to be sure, beware of expecting too much on the strength of observations which may reflect nothing more than the primitive quality of present equipment. It would hardly challenge the art to devise a machine which would respond to wrong answers not by a neutral message but by a painful shock; the unit might even include a photo-electric cell to determine whether or not its pupil was black so that the shock could be diminished or intensified according to the political climate of the school district. Since the introduction of impunitive devices might seriously disrupt the routines of control and lead to the breakdown of law and order, it would perhaps be fruitless even to attempt to sell machines to major urban school districts until these refinements could be incorporated within them. Nevertheless, as of now, seriously disturbed children are less frightened of the machines than they are of teachers; and there must be many more children who, while not so disturbed but that they can relate to school personnel, would find machines more humane and easier to get along with.
The advantages I have attributed to improved educational technology in my discussion so far have been related to the quality of communication which it will help to supply to pupils. But there will be, I think, administrative advantages as well. The engines of contemporary technology are much better at keeping accurate, neat records, than people are; and while such record-keeping adds to their operating costs it does not add to their operating time. For this reason, their widespread introduction into schools will either tend to relieve teachers of their horrible present burden of paperwork or, according to Parkinson's law, require a new rationale for its expansion. While, in any social situation, status factors tend to prevail over technological innovation so that administrators might merely find new kinds of busywork for their staffs, the possibility of eliminating this tedium is still worth taking. A more fundamental administrative advantage of shifting some of the curricular load from teaching staff to programmed devices may be derived from the very casual attitude of Americans to machinery of all kinds. We expect equipment to be quickly obsolescent, and design it for replacement rather than repair. We do not, in short, give it tenure; and can scrap it when it becomes a drag on the enterprise. This is not an irrelevant attraction to a school system.

---o---

Most of the arguments I have read for the adoption of advanced instructional technology rest primarily on the expectation that the new
media will permit the curriculum to be enriched by bringing a wider range of phenomena into the classroom and help the school to transcend its boundaries and its students to transcend their provincialism and limited social and geographical mobility—especially if they are "culturally disadvantaged." The new technology is expected, that is, to give them broader and higher horizons. I doubt this very much. It is more likely to add to their passivity by making even more of their experience of life either into a show that one watches or a game that one plays with a friendly computer. The life of the American masses is like that already in relation to the events that affect it; there must be very widespread resentment that the sponsor of our political assassinations, if there is one, has not managed to schedule these events more regularly, and on prime evening time; so that one might plan one's viewing. Moreover, McLuhan is right; the medium, not its content, is the message. There is no such thing as being present at an event through the medium of TV though there are many events to which TV gives an observer more intimate access than he could gain by being present. What one learns, instead, is that intimacy can be—and is at best—vicarious. One of the many comforts that Truman Capote must have afforded to poor Richard Hickok and Perry Smith during their last hours was the implication—inescapable from the very nature of his participation in social reality—that what they were really doing was working on a script for a movie the young men
had begun, which they would all see together later.

There are severe limits, moreover—though educators are, as a profession, reluctant to acknowledge them—on the degree to which education, however technically ingenious, can impinge on the experience of persons who find it cognitively dissonant, whether because its idiom or its format is inappropriate to persons of their social class, or for more idiosyncratic reasons. Reality, itself, does not work much better. Foreign travel, notoriously, does not broaden the horizons of soldiers; it usually antagonizes them by showing them that the world is even more full of gooks than they had supposed, all of whom, in President Johnson's deathless phrase, "want what we've got; and we aren't gonna give it to 'em!"

So I am not going to rest any claim for the desirability of improved instructional technology on the imputation that it offers improved communication. I'm not so sure; and, in any case, the curriculum of the school has always seemed to me largely the pretext on which students were obliged to submit to its routines, which are the real educative experience; and their function is not benign. The fundamental function of the schools is not to liberate; but to extinguish alternatives to socialization; and a lively, vital, probing curriculum would do this less effectively. From the point of view of a conservative, mass society, the ideal school functions like a domineering and unattractive wife who derives her authority from her stupidity; who would never acknowledge that she even
comprehended that she might be abandoned if she did not become more loving—or at least more tactful; and who punished infidelity by suspension of the dubious privileges of the bedchamber but never -- no, never -- by divorce. Its relationship to the evolving potential of its students is, roughly, that of Lucy to the evolving potential of Charlie Brown.

Technological improvement in education cannot induce school authorities to do a better job than they want to do, though it may enable them to do their present job more effectively, for it is concerned with means, not ends. For this reason, it is to be feared. Yet, it is also a source of hope for administrative and structural change which will alter the locus of decision and simply by-pass the dingiest and most pettily provincial forces that affect curriculum.