Educational Implications*

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He received the Governor General's award for his work in literature, the Albert Schweitzer Chair at Fordham for his work in communications, and the Molson Award from the Canada Council as "explorer and interpreter of our age."

He appeared on the covers of Newsweek, Saturday Review and Canada's largest weekend supplement. NBC made a one-hour documentary of his message and later repeated it, and the CBC gave him prime Sunday night viewing time on two occasions.

He is one of the most publicized intellectuals of recent times. Ralph Thomas wrote in the *Toronto Star*: "He has been explained, knocked and praised in just about every magazine in the English, French, German and Italian languages." As to newspaper coverage, which newspapers have *not* written about him?

He has lectured city planners, advertising men, TV executives, university professors, students, and scientists; business men have sought his message from a yacht in the Aegean Sea, a hotel in the Laurentians, a former firehouse in San Francisco, and in the board rooms of IBM, General Electric, and Bell Telephone.

Although "a torrent of criticism" has been heaped upon him by

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the old dogies of academe and the literary establishment, he has been eulogized in dozens of scholarly magazines and studied seriously by thousands of intellectuals.²

The best indication of his worth is the fact that among his followers are to be found people (artists, really) who are part of what Susan Sontag calls "the new sensibility." 3 They are, to use Louis Kronenberger's phrase, "the symbol manipulators," the people who are calling the shots — painters, sculptors, publishers, public relations men, architects, film-makers, musicians, designers, consultants, editors, T.V. producers. The following are examples of this group: John Cage, the composer; Larry Rivers, the painter; John Andrews, the architect of Scarborough College and the African pavilion at Expo; Jonathan Miller, British neurosurgeon and man of the theater; Howard Gossage, author and public relations man; Stanley Vander Beeck, the underground movie maker; Howard Keating, editor of Ramparts; Merce Cunningham, modern dance choreographer; Al Bruner, vice-president of CHCH-TV (Channel 11) in Hamilton, and Don Falun whose book, The Dynamics of Change, gives indication of the shape and structure of the book of the future.

Now, as it happens, his main area of concern is education.

And how does the educational establishment regard Herbert Marshall McLuhan? One of the best indications is the number of references to him in the *Education Index*. Would you believe *five*?

If you accuse me of an argumentum ad hominem at this stage, I would simply ask: Should educationists be that different?

McLuhan's Intellectual Development

There seems to be a widely held belief that McLuhan's ideas sprang forth fully armed in the 1960's with the publication of his The Gutenberg Galaxy (1962) and Understanding Media (1964).

One of the main points I wish to make here is that McLuhan cannot be understood unless one knows his whole intellectual development as well as what Robert Fulford calls his "antecedents." Trying to understand McLuhan without knowing these antecedents, wrote Fulford, is like studying World War II, beginning at D Day. (Incidentally, Fulford is the only person that I can recall having made that point.)

The antecedents make up a rather large library, much of which this writer does not claim to know. Here is a barbarously brief indication of McLuhan's background and antecedents.

The first important clue was the influence exerted on him at Cambridge by scholars like I. A. Richards and F. L. Leavis, an influence referred to as "the Cambridge aesthetic." (In a recent letter to me, McLuhan noted the name of Richards first in a short list of the people who had influenced him.)

This group put out a publication, Scrutiny, which, according to Anthony Burgess,

taught that, in an acceptable work of literature, it was not possible to separate content from form. You couldn't talk about the *meaning* of a poem: to explain it in terms of a prose paraphrase was not merely heretical but destructive of a highly wrought artifact. In a work of art the form was the content.⁶

For his doctoral dissertation McLuhan did a study of the *rhetoric* of Thomas Nashe, an Elizabethan writer, whose prose was written as much for the ear as for the eye. He noted the same oral and colloquial features in other writers of that era such as Lyly and Greene.

McLuhan was fascinated with the idea that oral language affects a culture differently from written language. Accordingly, he made a "massive study of rhetoric from the Greeks on up." ⁷

Following this, he began the study of the form or structure of an incredibly large number of writers and even other art forms. (It helps to keep in mind that McLuhan remembers everything he has read.)⁸

For example, he studied the Symbolists, Rimbaud, Mallarmé and Flaubert and he learned how they broke up the language to recapture the live qualities of speech. By suggesting, but not completing, he believed, they were able to get the reader more involved.

He studied painters from the time of Cezanne and noted the dropping of the point of view and narrative. He saw how Picasso and the Cubists showed several sides of a situation at once.

He saw that writers' styles reflected the culture and technologies of their time. Thomson, Blake, Sterne, Wordsworth and Shelley, he wrote later, used landscape techniques to delineate

mental states. The poems of T. S. Eliot and Ezra Pound were "full of jazz and pop cult forms." 10

And, of course, he studied James Joyce — especially Finnegan's Wake. Joyce's works were not novels in the traditional sense. They were not written in linear fashion and were not structured within the Cartesian views of time and space. Joyce's pages parallel a Picasso painting in that his sentences are "an everyway roundabout with intrusions from above and below. Joyce also gave careful attention to how technologies affect languages and art. He looked at an item from all directions and examined it in depth. This is the "X-ray" or "vivisective" technique. As McLuhan noted somewhere, Joyce put away the lantern of tradition and looked at everything in the light of day.

Mention should be made, too, of Joyce's use of the pun, the deliberate use of contrasts, and the technique of recurring themes.

By the time McLuhan arrived at Toronto his interests had expanded to all modes of communication and to society itself. He began intensive research into a number of disciplines and took classes from his colleagues.

Worthy of mention is the name of Harold A. Innis, the late economic historian, who had arrived at the theory that a major new technology brings with it a major new medium of communication which eventually becomes a monopoly of the way people receive information.

McLuhan opted out of the university climbing game and there was a fairly constant stream of visitors at his office and later at his Centre for Culture and Technology.

McLuhan's Main Ideas

It is extremely difficult to explain McLuhan's ideas in brief form because they do not fit into any kind of structure. They cannot be approached by the method of investigation of any discipline; they are presented not in the form of theses, which can be developed and which subsume lesser ideas, but are stated as themes, and disconnected at that.

Although it is unfair to McLuhan, I will attempt to arrange some of his more important ideas around three meanings of the well-known statement, "The medium is the message," as worked out by John Culkin.¹⁴

One meaning of the statement is that the message is determined in part by the medium; the medium is not just simply the envelope for the message. If you pay attention to the content only you may not know the message.

This means, for one thing, that you cannot do the same thing with different media, not if you expect the same results anyway.

Thus if you pay no attention to the medium you may think that a TV image is like a film image, in spite of the fact that different cameras are used for each, that one reflects off the screen but the other comes through screen, that one is a speeded-up photo but the other is not a photo in any sense, that one favours the panoramic shot but the other the close-up, and that one is of high definition or intensity but the other has much less data. In fact the two images have practically nothing in common.¹⁵

In the early 1950's McLuhan and the American anthropologist Edmund Carpenter persuaded their colleagues from four departments at the University of Toronto to give the same lecture using four different media. The results were startling, the main one being that it could not be done without bias in favour of, or against, the medium used. As Carpenter reported later, the only thing the media had in common was simultaneity of presentation.¹⁶

A second meaning of the epigram is concerned with the effects of the modes of communication on the individual.

At the outset it is important to understand that McLuhan does not belong to the long and honored tradition which holds that technology is neutral. He believes that any technology, or art, is an extension of some human capability — physical or phychic.¹⁷ Some writers refer to this as McLuhan's concept, in spite of the fact that it can be found in such well known works as E. T. Hall's two books, The Silent Language and The Hidden Dimension, Norbert Weiner's Cybernetics, Lewis Mumford's Technics and Civilization, and Tielhard de Chardin's The Phenomenon of Man.

McLuhan believes that different media have different sense preferences. There is only so much sense energy to begin with and thus there will be a different "sense ratio" with print, where the energy is concentrated in the eye, from radio, where it is concentrated in the ear.

Perception is not a passive affair, as scholars in a variety of fields have shown; 18 it is not simply the input of a stimulus, but

is conditioned by factors outside the stimulus. The way we perceive the world, then, depends to a considerable extent on the cultural glasses we happen to be wearing.

Now, according to McLuhan, there have been two major shifts in man's technology — the first being that of writing and print, and the second, the electronic media of the present century.

With respect to the former, McLuhan believes print was responsible for the literate, individualistic, eye-oriented man of the West as contrasted with his predecessors of oral or tribal culture who lived with all of their senses involved.

Contrary to what many of McLuhan's critics believe, a rather large number of scholars support him on this point, although they may not push their views to such exaggerated lengths.

David Reisman writes that the book "is one of the first, and very possibly the most important, mass-produced products" ¹⁹ and that once books enter an oral culture "it can never be quite the same again — books are, so to speak, the gunpowder of the mind." ²⁰ He continues: "Print... created the silent, compulsive reader, his head bobbing back and forth across the lines like a shuttle... The book, like the door, is an encouragement to isolation: the reader wants to be alone..." ²¹

Walter Gropius, the famous architect wrote: "The transportable printed book brought into existence the solitary, silent reader. The book established the divorce between 'literature and life' which was unknown to ages in which the transmission of wisdom was oral." ²²

Sir James Frazer claimed that, "Two or three generations of literature may do more to change thought than two or three thousand years of traditional life," 23

As to the second shift, McLuhan believes that electronic technology giving global coverage, has brought about the end of the monopoly and a shift in man's sense ratios. The continual bombardment of all of the senses by the new technology means a downgrading of the visual aspect in favour of multi-sensory involvement. He writes:

The slow movement of the eye along lines of type, the slow procession of items organized by the mind into the endless horizontal columns, these procedures can't stand up to the pressures of instantaneous coverage of the earth.²⁵

He says there has been a shift from detachment (Remember when "disinterested" was a complimentary term?) to involvement, from privacy and withdrawal to communal consciousness and participation, from receiving information "one drop at a time, segmented, sequential, fragmented, analytic, abridged, reduced to one sense" ²⁶ to fast-moving electronic patterns.

A third sense of the "medium is the message" aphorism relates to the culture as a whole. The paradox to be kept in mind here is that the most basic things in our lives are the very things of which we are not aware. This is a point that is stressed by William Ivins in the introduction to his *Art and Geometry*.²⁷ It is also the theme of the two brilliantly eloquent books of the anthropologist E. T. Hall. referred to above.

An example of this point was brought to our attention by Alfred North Whitehead. He said that the real invention of the nineteenth century was not the dyes and spinning machines but the invention of the method of invention. In this regard, John Culkin has an apt saying. He says that we don't know who discovered water but it most certainly was not a fish.

Now, these basic, unconscious, unquestioned assumptions, that is, those that are invisible to us, McLuhan calls "environmental." He says that we become aware of the environment only when it becomes the content of a new environment. Thus, as Mumford relates, a film tried to be a novel;28 T.V. tried to be movies — we were not aware of this, but by now the late-show watchers know that movies are not T.V.

The person who sees the environment for what it is, McLuhan calls "anti-environmental." He is the person on the outside; he is the child in "The Emperor's New Clothes." He is the artist. The artist is the DEW line of society but most of us move forward by watching the rear-view mirror.

McLuhan's Critics

The opinions that most people have of McLuhan are probably based more on what his critics have said than on his own writings. In this respect, a lot of underbrush will have to be cleared away before a fair perspective is possible.

Here are some facts that may help a little.

1. Some of McLuhan's earliest critics were from the literary establishment. McLuhan was not well known until 1965, but in July, 1964, Dwight Macdonald castigated McLuhan in an article²⁹ which Stearn ³⁰ was later to select as one of the two articles that brought McLuhan to the attention of Americans. It hardly needs emphasizing that the literate were not favorably disposed to McLuhan's ideas.

- 2. The attitude and tone of the earlier critics were copied by others later on. Stearn writes that, "It is interesting to note that various writers who have become aware of the McLuhan phenomenon more recently owe a great deal to the tone of the Macdonald piece." 31
- 3. The majority of reviews were restricted to a few pages, which prompted Anthony Quinton to say that their authors had only the space for a cursory glance.³²
- 4. Some of the reviews were on one of McLuhan's books, but in fact the authors criticized him in general. One cannot understand McLuhan, much less write a critique on him, by beginning with one of his books.
- 5. An even worse indictment is that some writers took a number of McLuhan statements out of context and then went on a thoroughgoing analysis. (Two examples are the McLuhan metaphors of Heidegger riding the electronic surf and the Pentecostal condition promised by the electronic technology.) A flagrant example of this kind of reporting is an article by Kenneth Melvin.³³ The magazine headed his article with the words, "The McLuhan Cult Exposed." Melvin then took nine separate sentences from one article³⁴ and dismissed McLuhan as a charlatan. In fact the article could not be said to be McLuhan's in that it was written by him and George B. Leonard. This is yellow journalism, and pretty bad journalism at that, but in fact Melvin's criticism was carried in the June, 1967, issue of Phi Delta Kappan.
- 6. Many of McLuhan's critics seem to be unable to differentiate his message from his medium. At times they think they are criticizing the former, but in fact it is his style that is upsetting them. McLuhan writes in the form of mosaics, or disconnected sections. This can be frustrating and confusing to the reader who is condi-

tioned to logical, linear prose. Even more infuriating is McLuhan's use of the poetic technique of stress. His ideas are frequently stated in the form of compressed metaphors, concerning which, somebody, I think it was Howard Gossage, said that he wished McLuhan had written 500 words on each of them. The point is that unless the reader is aware of this fact and is also familiar with McLuhan's writings over a considerable period of time, he will probably find McLuhan mystifying and give up on page seven.

7. McLuhan's refusal to moralize about technology really infuriates some members of academe and the literary establishment. Like most artists of this century, McLuhan tries to describe something as it is.

McLuhan believes that moralizing is often an excuse for not innovating — in fact he says it is dishonest and unprofessional.

There is no doubt, though, that he has hit a sensitive nerve here. Consider two facts:

- (a) Of the two main views of technology the conservative, that it dehumanizes man, and the materialistic, that it eases man's burden the great majority of intellectuals and university people subscribe to the first mentioned.
- (b) For a generation or more we have been influenced by a type of literature that is hostile to technology and popular culture in general, a type of writing, christened by Richard Hofstadter as "the paranoid style." Examples are Huxley's Brave New World, Orwell's 1984, Packard's The Hidden Persuaders, and Ellul's The Technological Society.35

The serious student of McLuhan must read his critics with this in mind.

8. Just as infuriating is McLuhan's optimism for the future and his finding joy, life, colour, and meaning in everything — even the most cloacal of items and events. When old dogies like Macdonald berate McLuhan for his lack of standards, they are, in fact, assuming the Matthew Arnold notion of culture, that is, that the model of art is literature, the purpose of which is the criticism of popular culture.

As was pointed out in the first section of the paper, McLuhan

fits in very comfortably with the artists and intellectuals who comprise "the new sensibility," one aspect of which is an affection for popular culture. But, as Miss Sontag points out, this affection is not a new philistinism nor a kind of anti-intellectualism.⁵⁶

9. Many of McLuhan's followers, perhaps the majority, are guilty of emotional bias, superficial treatment, and sloppy research, and can be just as misleading to the unwary student as McLuhan's hysterical critics.

The fact of the matter is that of the hundreds of people who have written about McLuhan, only a few have gone to the trouble to study McLuhan in toto. It must be admitted that such a study is an onerous, one might even say, tortuous, undertaking. Apart from his style, his subject matter cuts across sociology, anthropology, psychology, communications, aesthetics, history of technology, history of art, media study, art criticism, and God knows what else!

What all this adds up to is that a "snow job" has been done on McLuhan. This should not surprise us, for has not this been the fate of all radical, new thought? (McLuhan is new — Boulding says that he is 90 per cent new.³⁷) Such was the case with Buckminster Fuller, John Dewey, Freud, Marx, Rousseau, Darwin, and Jesus.

It should be apparent, then, that by now a number of misconceptions about McLuhan have such hardy roots that they amount to myths. Here are five of the more serious fabrications.

1. McLuhan has pronounced the book to be dead. What he has said, and has said it on dozens of occasions, is that the book will lose its *monopoly*, it will cease to be the primary mode of communication, but it will enjoy a greater circulation and be more useful than ever.³⁸

Indeed, one of McLuhan's forthcoming books is titled *The Future of The Book* and the co-author is William Jovanovich, president of Harcourt, Brace and World.

2. McLuhan cannot communicate. By this it is meant that he cannot write discursive prose. In fact, he has written dozens of articles in the discursive mode. But if the reader doubts this statement he is referred to "Joyce, Mallarmé and the Press" in the 1954, Winter edition of the Sewanee Review, "Knowledge, Ideas, Informa-

tion and Communication" in the 1958 Yearbook of Education, and "We Need a New Picture of Knowledge" in the 1963 ASCD Yearbook.

3. McLuhan values everything that is new and is against everything traditional. Perhaps this misconception can be explained in part by the "either-or" mental set that acts as a charley-horse in so much of modern scholarship. That is, if a man is describing a new cultural gradient, it is taken for granted that he must be for it.

Be that as it may, McLuhan has been trying hard for a decade or more to avoid moralizing. His ideal in this respect is Poe's Mariner in "The Descent into the Maelstrom." The sailor, by watching the eddies with detached amusement, was able to save himself.

The following reply to a reporter is typical of McLuhan's answer to this charge:

I'm supposed to be in favour of the latest and against the old stuff...Bunk! I'm not. On the other hand, I'm concerned with survival and that involves paying a great deal of attention to what is going on.³⁹

And he told Stearn: "I personally find very little joy in the effects of media. The only satisfaction I derive is learning how they operate." 40

- 4. McLuhan is a one-answer man, a system builder. This criticism is difficult to credit, observing that he abhors systems and that he is changing all the time. One could ask at this stage: Which McLuhan are you talking about? The McLuhan who wrote in the "little" scholarly magazines in the 1940's was a reactionary in the T. S. Eliot and F. R. Leavis tradition; the McLuhan who wrote The Mechanical Bride in 1951 was "hung-up" with moralizing about popular culture; the McLuhan who wrote The Gutenberg Galaxy in 1962 spoke of two dominant modes of communication in the H. A. Innis tradition (but absent was the moralizing); the McLuhan of Understanding Media in 1964 wrote about twenty-six modes of communication; and the McLuhan of The Medium is the Massage, 1967, wrote about society in general.
- 5. A related criticism is that of technological determinism. In this writer's opinion, this is the most ignorant and unkindest criticism of all.

McLuhan's overall purpose is to give us a strategy so that our technology does not act on us subliminally. When he says, "The medium is the message," he means that that is the way it is — that is what empirical evidence turns up. But it does not have to be that way. That is, the medium need not be the message if we can rise above it. A favourite saying of his is that there need be no inevitability as long as there is understanding.

McLuhan is describing reality as it is. This is neither good nor bad — it's just there. Culkin writes that this

can appear to be leading to epistemological skepticism or relativism. As a fact it can induce a healthy reaction capable of making ugly Americans beautiful; the elite culture humble; the Eskimos respectable; and all of us fully human.⁴¹

For those who think that McLuhan has the one answer, a chiliastic vision of the world, and an Olympian note of finality, his own words on his purpose in writing *Understanding Media* may help to provide a better perspective.

Literally Understanding Media is a kit of tools for analysis and perception. It is to begin an operation of discovery. It is not the completed work of discovery. It is intended for practical use. Most of my work in the media is like that of a safe-cracker. In the beginning I don't know what's inside. I just sit down in front of the problem and begin to work. I grope, I probe, I listen, I test — until the tumblers fall in. That's the way I work with all the media.⁴²

However, there are a number of cautions to be remembered in any serious study of McLuhan. Here are some rather obvious reminders.

- 1. McLuhan shows little interest in the social structure; he omits from his writings the hard facts of economics, politics, geography, and so on.
- 2. He gets his tenses mixed up. He describes as present reality what some day may be a technological reality. This planet is not yet a global village. Huge numbers of people do not have television and more than one-half of the world goes to bed every night hungry.

3. He has the annoying habit of turning analogies into identities.

- 4. As Richard Kostelanetz has remarked, "McLuhan's mind is, by nature, more admissive than exclusionary," 43 so that he frequently puts too much into a theme or "probe."
- 5. His omission of content can at times be very upsetting. This is not to say that he is unaware of the importance of content; it is merely to remark that the reader must keep this in mind.
- 6. He exaggerates just to get attention, but the fact is that he exaggerates.
- 7. Since he puts in print everything that comes into his mind, many of his "probes" are silly or frivolous.
- 8. He will not argue with his critics, he will not be pinned down, and he admits that he is inconsistent.
- 9. Finally, a McLuhan cult in education would be a most unwelcome development. Like Dewey, his ideas are so radical and his style is so vague that the uninitiated would attribute to him anything they pleased. The possibility for such a development appears at present to be highly unlikely, but it should be borne in mind nevertheless.

Educational Implications

Many of the educational implications of Marshall McLuhan are implicit in what has already been said; in this section, the writer will attempt to be more specific.

The first point to be kept in mind is that it is useless to look to McLuhan for a recipe, for practical answers, for a "philosophy of education," or for specific directions on how to use instructional technology. "If you're looking for a check list [in McLuhan]," writes Barry Day, "you are missing the point. You may as well try to write a thesis from a dictionary." 44

Each person must approach McLuhan on his own: thus John Culkin studies McLuhan to understand the child better; James Feeley at the University of Toronto library reads him to get insights into what the future function of the library might be; and Paul Klein of NBC learned from McLuhan how to use the medium more effectively so that he was able to produce the so-called television movies which received huge ratings.

My own opinion is that McLuhan's main contribution to the

education profession, in general, comes from the fact that he looks at the world with fresh eyes; he is, indeed, "anti-environmental," and he is able to make us look at our work in a new way.

In other words, the trouble in which the educational establishment finds itself will not be ameliorated with more good intentions and more hard work. What is needed is a whole restructuring of our thinking, a challenging of our basic assumptions. If we questioned everything we believe and everything we do, we would accomplish more than by bringing home two brief cases of work every night. We may even agree with Walt Kelly's Pogo who once said, "We have met the enemy and he is us."

So far we have not recognized the real trouble in educational institutions, because we do not appreciate just how different the outside world is from the environment in these institutions. Some of us still believe in the myth that the more things change, the more they are the same. On this basis we can say that the younger generation is merely going through a "phase."

Perhaps we might be roused to action if we recognize that education and politics are the only major institutions in our society that have remained relatively unchanged in recent times. (Look at what has happened to the most conservative of institutions — the Church and banking.) There is no doubt that young people are going to change politics. This means that time is running out for us. The trouble that we have seen at Berkeley, Columbia and Paris is only a mild indication of what's coming.

Dr. G. L. Berry, Head of the Department of Secondary Education at the University of Alberta, speaking at the Banff School of Fine Arts to the Canadian Education Association on May 28, 1968, used the McLuhan idea that high school today interrupts learning and went further to say that it was "a disaster area."

What are we to do? There are no simple answers, and certainly McLuhan offers none, but, as a start, here are two points which might provide a perspective from which to operate.

First, it is worthwhile to remind ourselves that the educational establishment falls out of step whenever advances in the culture are unusually rapid. Thus, McLuhan reminds us, teachers of the manuscript culture fought against the introduction of the printed book. They considered it trivial and vulgar, they said it had no authority

since it did not speak directly to the students, and they said that it would lead to the depersonalization of the scholars. When writing was being introduced into the Greek culture, Plato and others were very upset over it; there's a famous passage in the "Phaedrus" on that point. So, it is to be expected that in our time, when new technologies are being introduced, we might be out of step again.

Second, in spite of the many commendable improvements in education in recent years, McLuhan is essentially right in describing education in North America today with the phrase "mass education." Mass education just happened to come along at that point when Western civilization reached an extreme point in specialization, with the stamping out of mass products on the assembly line. Mass education, then, turned out mass products, and so came the whole rigmarole of tests, marks, schedules, bells, standard curricula, and even pathetic attempts at the efficiency principle. Raymond Callahan's Education and the Cult of $Efficiency^{47}$ is "must reading" in this regard.

And so it is that, while formal education is based on mechanical and mass production concepts, the world outside is becoming more and more characterized by diversity. Diversification will be one of the passwords of the future. This recognition is possible as soon as we learn that the new electronic technology is not mechanistic; it is organic. McLuhan and experts in automation (cybernation) like Sir Leon Bagrit, "the father of British automation," and Buckminster Fuller have long since recognized the fact. Electricity makes almost anything possible everywhere and if the computer can make one custom-made product, it can make a million. There are plenty of signs of diversification in our society right now. It can be seen in fashion, in dancing, and, indeed, in all of the arts.

What this means, of course, is that we have to begin to prepare for tailor-made education. The big "hang-up" here is the fear that if we eliminate grades, marks, schedules, and so on, there will be chaos. This belief, as John McMurty⁵⁰ wrote recently, is based on "an argument by false dilemma," that is, the alternative to control is chaos. The notion that tailor-made education would lead to chaos is based on thinking of education as teaching rather than learning.

Second, formal education is concerned with a who (student), a what (curriculum) and a how (process). During the last decade there has been a considerable bucking up in the second area. True,

there has been too much emphasis on content, on the subject, on the package, but still it is with the other two aspects of the enterprise that our most vigorous efforts must be directed.

With respect to the student, the difficult point to grasp is that he is not a younger version of the people who run the educational establishment. Not only does he know more, but, more significantly, he perceives the world differently. And this is because he has been conditioned by a different environment.

Take TV. Just about all of the kids in school today have spent more time watching TV than the total time spent in school. But the more important fact is that the student acquires his information from television in a different way from school. From the former he receives information in fast-moving electronic patterns but in school he learns at a slow, point-after-point, one-thing-at-a-time pace. Furthermore, information in school is presented in a linear, sequential manner, whereas the television presentation is characterized by discontinuity. Film director Richard Lister said that, "TV is best at those sudden shifts of reality," e.g. a Viet Nam War item, then a toothpaste ad. and then Gomer Pyle, ⁵¹

Where is the logic, the sequential development, the story line, (the introduction, development, and conclusion, which are the characteristics of literature culture) in programs like "I Spy," "The Monkees," "Mission Impossible," "Rowan and Martin's Laugh-In," and, in one of the most significant songs of the decade, "I Am the Walrus?" Or, for that matter, in the new so-called television-movies? Or in the new trend in advertising?

That's just television. Then there is the ubiquitous transistor, and the phonograph, and the tape recorder, and so on.

But a more instructive point is that the whole urban environment is a source of information. McLuhan says that such an environment has an "information-overload." To an adult a billboard, for example, is an eye-sore, but to a child it is a source of information.

The slow, and different pace of the classroom is frustrating and confusing to urban students. More of them are dropping out every year, either physically or psychologically, and more of them are becoming antagonistic. The obvious implication, then, is that we must try to see the younger generation in a new light — before it is too late.

Now, with respect to the third element, the most obvious im-

plication is that there must be less reliance on the book, on print in general. Robert Schafer of Teachers College recommends that the school be considered as a laboratory of mixed media - print and the new media, the oral and written traditions.⁵³

There are several big obstacles here, the most troublesome being, according to almost all the experts, the fear that technology dehumanizes. The school is the only major institution that has made little use of technology and it is this fear, apparently, which accounts for that fact.

A related myth is that the new technology (instructional) is expensive. Expensive in relation to what? META has come in for a lot of criticism, but did you know Elwy Yost has been operating with a budget of about two-bits per student per year?

Another misconception is that the new media are diversionary and for entertainment. An even worse misconception is that they are "audio-visual aids" and "mass media."

A further point is that we in education are almost totally illiterate in reading these media. This fact was emphasized in the first-rate effort by the Ontario Curriculum Institute.⁵³

Several points are pertinent here:

- 1. Teachers and students have to be instructed to read these media in just as rigorous a fashion as in the reading of print.
- 2. These media are art forms and must be treated as such. They must be as regular a feature of school life as texts.
- 3. These media must not be placed in a hierarchy. Surely, the proper approach is to use that medium which would be the most effective in any given situation.
- 4. Children are more educated in these media than we are, and so we can learn from them.
- 5. One of the best ways to learn the "grammars" of these media is to produce them. Adults in Toronto were surprised recently when a Grade 6 class made a film but to the children this was almost a "natural" activity.

Summarily, we need a new imaginative picture of the whole educational enterprise. For this we need the help of "artists"—and on a large scale. Here again there are all kinds of problems, not the least of which is the hostility and suspicion that exists between them and us. But time is running out.

As for Marshall McLuhan, it is no use to wish that he would go away; we have to adopt, adapt or eliminate his idea before we can get on with our work. Margaret Gillett had the last word in this respect. She wrote: "McLuhan throws down a challenge which no educator should ignore."⁵⁴

And if his ideas seem uncomprehensible, his style frustrating, his ideas exaggerated, and his writing viscous, let us recall four names, two of whom could hardly write at all, the third wrote outrageous exaggerations, and the fourth wrote with the most viscous style of all. They were, respectively, Heinrich Pestalozzi, Frederick Froebel, Jean Jacques Rousseau, and John Dewey. And they are still near, or at, the top of the educational hit parade.

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And Communication Is

A report is to hand from an Australian girl's school, a private, "exclusive" establishment, well-known for its excellence in team sports and examination results. Even in this genteel environment, the word is out about protest, drug-taking and the other current concerns of today's young. Recently, one of the mistresses, rather weary of teen-age affectation of boredom and show of slight resentment whenever corrected, remonstrated gently with her class, ending with: "And I am very tired of Barbara's taking umbrage on every occasion."

At recess, a deputation approached her seriously and said: "We are Barbara's friends and we know for certain she has never taken umbrage or anything else . . ."