The Three Curricula That All Schools Teach

Perhaps the greatest of all pedagogical fallacies is the notion that a person learns only the particular thing he is studying at the time.

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The Explicit and Implicit Curricula

In Chapter 3, six curriculum ideologies were described. These six ideologies provide a way of rationalizing what schools teach. But schools teach much more—and much less—than they intend to teach. Although much of what is taught is explicit and public, a great deal is not. Indeed, it is my claim that schools provide not one curriculum to students, but three, regardless of which of the six ideologies a school follows. The aim in this chapter is to examine those three curriculums in order to find out how they function.

One of the most important facts about schooling is that children spend a major portion of their childhood in school. By the time the student has graduated from secondary school, he or she has spent approximately 480 weeks, or 12,000 hours, in school. During this time, the student has been immersed in a culture that is so natural a part of our way of life that it is almost taken for granted. In that culture called schooling there are certain publicly explicit goals: teaching children to read and write, to figure, and to learn something about the history of the country, among them. There are, of course, other aims, many of which are associated with the explicit curriculum that the school offers to the students. There are goals and objec-
tives for the sciences, the arts, physical education, social studies, and foreign language instruction. Not only do these goals appear in school district curriculum guides and the course-planning materials that teachers are asked to prepare; the public also knows that these courses are offered and that students in the district will have the opportunity to achieve these aims, at least to some degree, should they want to do so. In short, the school offers to the community an educational menu of sorts; it advertises what it is prepared to provide. From this advertised list, students have, at least in principle, an array of options from which to choose.

But is this all that schools offer? Does this advertised menu exhaust what schools teach? The answer to these questions is clear: no. Work by Apple (1979), Dreeben (1968), Jackson (1968), Sarason (1971), Vallance (1973–1974), and others have illuminated the ways in which the culture of both the classroom and the school socializes children to values that are a part of the structure of those places. Dreeben attends primarily to the sociological aspects of school learning, relating and contrasting school learning to the type of learning that takes place in the family. Jackson has discussed with great perceptivity how the structure of the classroom and the demands that it makes on teachers, in turn, affect the expectations of students and therefore shape the content of what they learn. For example, the fact that classrooms are crowded places and because teachers need the attention of students whom they teach, children, Jackson argues, must learn how to delay their gratification because teachers cannot satisfy all of the wants and needs of a child when he or she is in a group of 30 or more other children. The child who knows the right answer to a question raised by the teacher does not always—even usually—get an opportunity to provide it. Other children compete for a place in the sun. Hence, a child learns quickly that gratification and successes need to be shared with other members of the class.

Vallance’s research has focused on the covert manner in which text material persuades. Materials as well as the structure of the classroom influence the values that are not recognized by students or teachers. These values are expressed in the kinds of illustrations that textbooks contain, in the language that is employed, and in the emphasis that is given to the characters that constitute the stories that are read. These messages are often numerous, subtle, and consistent. It requires a subtle critical analysis of text materials to discern the kinds of social values that are being promulgated within the materials that students and teachers employ. These investigators have helped us understand how schools socialize children to a set of expectations that some argue are profoundly more powerful and longer lasting than what is intentionally taught or what the explicit curriculum of the school publicly provides. Take, for example, that form of human behavior called initiative. It is possible to create a school environment in which the taking of initiative becomes an increasingly important expectation as children
mature. In such an environment, as children get older, they would be expected to assume greater responsibility for their planning; they would be expected increasingly to define their goals and determine the kinds of resources that they would need to pursue the ends they have formulated. One general goal of such an institution would be to enable children to become the mappers of their educational journey, so that when they leave school they are in a position to pursue goals and interests that are important to them. If this were an important aspiration of schools, schools would make it possible in dozens of ways for initiative to be developed; it would be a part of the culture of schooling.

Critics of schooling point out however, that rather than cultivate initiative, schools foster compliant behavior. One of the first things a student learns—and the lesson is taught throughout his or her school career—is to provide the teacher with what the teacher wants or expects. The most important means for doing this is for the student to study the teacher, to learn just how much effort must be expended for an A, a B, or a C grade. How long should the term paper be is a question heard not only in secondary school; it is heard in graduate school, as well. Of course, such a request for information is not entirely unreasonable; one does want to know something about the general expectations. Yet, too often, the issue becomes the expectation and the need to meet it in the most expeditious way possible. This tendency to foster compliant forms of behavior is often exacerbated by programs that use behavior modification techniques. I was in one third-grade classroom in a wealthy San Francisco suburb where I noticed that on the wall of the room there was a chart on which each student's name was listed. Next to each name was a set of 20 boxes and in every fifth box was a picture of a smiling face. I asked one of the children what the chart was for, and he replied that after they completed reading a book they colored in one of the boxes. I then asked what the smiling faces were for. He replied that when they had read five books and therefore reached a smiling face, they got a goldenrod ticket, three of which were good for leave to go to lunch 5 minutes early.

There are a host of educational issues that could be identified and discussed concerning the use of such a reward system, but for now the point will remain with the fostering of compliant behavior. Such a reward system holds out to children something they apparently want and fosters a willingness to perform. In using such a system, the teacher or the school can, of course, increase or decrease the size or attractiveness of the reward to bring out the desired behavior at the lowest cost. Regardless of the type or size of the reward, the point remains the same: the school seeks to modify the child's behavior to comply with goals that the child had no hand in formulating and that might not have any intrinsic meaning.

Some interesting and useful research has been done in the hidden cost of reward. Lepper and his colleagues (1978) have found in a number of exper-
iments that the use of extrinsic rewards can create a set of expectations on
the children's part that dampens their future interest in activities if extrinsic
rewards are not provided. In other words, if a group of children are consis-
tently led to expect that they will receive a reward for engaging in an activ-
ity—even an activity that is inherently enjoyable—they are less likely to
engage in that activity if they believe that an extrinsic reward will not be
provided.

What this line of research implies for the use of rewards in schools is sig-
nificant. Do we intentionally habituate children to satisfactions that are not
a part of the process itself when we emphasize an extrinsic reward struc-
ture? Do we create "reward junkies" out of our children by using such a
payoff system?

Now, in some respects, the use of rewards to reinforce or control behavior
is a ubiquitous part of our culture, indeed of all cultures. Insofar as
there are conventions, mores, customs, sanctions, and the like in culture,
there will be forms of behavior that are positively rewarded and others that
are sanctioned negatively. The question is not whether there should or
could be a cultural institution without procedures for monitoring, reward-
ing, and punishing those who are a part of that institution. The major ques-
tion deals with the pervasiveness of such conditions and their appropri-
ateness, given the institution's explicit mission. If an institution uses expedient
means for the management of students that, while doing so, interfere with
the realization of some of its primary purposes, there is reason for question-
ing such "expedient" means.

I would not like to give the impression that the use of such rewards is the
primary way in which compliant behavior is elicited and sustained. The fac-
tors that sustain such behavior are in a significant sense built into the ways
in which roles are defined in schools. Take, for example, the expectation
that students must not speak unless called on, or the expectation that virtu-
ally all of the activities within a course shall be determined by the teacher,
or the fact that schools are organized hierarchically, with the student at the
bottom rung of the ladder, or that communication proceeds largely from
the top down. What does such a system teach the young, who must spend
up to 480 weeks of their childhood there? What does it mean to children to
engage in a wide array of tasks that often have little or no intrinsic meaning
to them in order to cope with school successfully?

For those who have analyzed the implicit curriculum of the school and
what it teaches, these lessons are among the most important ones that chil-
dren learn. It is pointed out that most children will not have jobs in adult
life that are intrinsically interesting. Most jobs do not afford an individual
the opportunity to define his or her purpose. Most jobs depend on the use
of extrinsic motivation to sustain interest. Most jobs do not provide for high
degrees of intellectual flexibility. Most jobs depend on routine. From the
standpoint of the type of work that most Americans will engage in during
the course of their careers, one could argue that schools provide excellent preparation. Schools prepare most people for positions and contexts that in many respects are quite similar to what they experienced in school as students: hierarchical organization, one-way communication, routine—in short, compliance to purposes set by another.

Compliant behavior is only one of several kinds of behavior that schools foster. Some of these might be considered positive. I use compliance here simply for illustrative purposes. Take as another example competitiveness. Do schools teach children to compete, and do they encourage competitiveness? One way, and perhaps the most obvious way in which competitiveness is fostered, is through athletic competition. Athletic leagues engender a need to win by beating the other person or team. The metaphor is apt. One succeeds only at a price paid by another. But there are other forms of competition that are not as obvious that are also at work in schools. One of these is formal grading practices. When students are assigned grades based on the expectation that the distribution of scores or performance will be statistically normal, the relationship students are forced into is one of competition. If only students with the highest 10 percent of scores can receive an A grade, then clearly one student's A is another student's B. Again, one wins only at the cost of beating another. When the stakes are high, as they are when students are seeking admission to universities, medical schools, and law schools, it is not unheard of for some students to destroy the work of others or to check out or mutilate books needed by other students to compete successfully. Knowing well what will count, some students use whatever means necessary to gain an advantage.

Because it is extreme, such behavior is not characteristic in schools and universities and, depending on one's social vision, competitiveness could be viewed as the engine of human progress, something that schools would be well advised to encourage.

Competitiveness is not only fostered by the grading system: it is also fostered by the differentiation of classes into ability groups. For example, most comprehensive secondary schools and even a large percentage of elementary schools differentiate students into three or more ability groups, in, for example, Mathematics or English. Students who successfully compete for grades are rewarded not only by grades, but also by admission to honors classes. This assignment to classes in which one is honored by being in an honors class often becomes something highly valued by parents and students. Yet, why should students whose background or genetic makeup is advantageous be rewarded in this public way? Is it the case that the less able are less honorable or less worthy? This is not far from a cultural truth. The word virtuoso means someone who is good at something. The word virtue means good. The association historically and culturally between being good at something and being good is of long standing. Thus, combined with the Calvinist tradition of associating failure with sin and success with goodness,
it is not surprising that quicker students are honored by being assigned to honors classes. Increasingly, school districts are providing a differential credit system for students who are enrolled in courses in different tracks within the school curriculum. Thus, the student in the highest track is given more credit for a grade than a student who receives the same grade in a lower track. What we do when we employ such a procedure in schools is to convert formally grades into commodities that have different exchange values for different students. We have, of course, been doing this for a long time. Different grades have different values. But this formalized procedure tells the A student in a second-level English class that his or her A grade is worth the price of a B or C for students in the first- or honors-track English course. Perhaps this is the message we want to give students. Perhaps the sooner they learn to cope with the competitiveness of the "real world" the better. Yet, I would hope that the values that animate education were rooted in a soil a bit richer and more humane than those of the marketplace.

Consider as still another example of the implicit curriculum the impact of time on the students' perception of what counts in school. In planning school programs one of the decisions that must be made is when various subjects will be taught and how much time will be devoted to them. Although such decisions are not intended to reflect students value judgments about the significance of various subject areas, in fact, they do. Students learn in school to read the value code that pervades it. One of these coded qualities is the use and location of time. Take as a specific example the location and amount of time devoted to the arts in school programs. Virtually all elementary school programs devote some attention to the arts. But if one asks about how much and compares it to the amount of time devoted to, say, social studies, reading, mathematics, or the sciences, the proportion is quite small. But if one looks further to determine when the arts are taught, one will find that they are generally taught in the afternoon rather than in the morning and often on Friday afternoon.

What this conveys to the student is that the arts are essentially forms of play that one can engage in only after the real work of schooling has been finished. In the morning, students are fresh; they can cope at this time with the rigors of reading and mathematics. In the afternoon, the arts can be used as a reward, as a break from the demands of thinking. This reinforces the belief that the arts do not require rigorous and demanding thought and that they are really unimportant aspects of the school program. The idea that the arts deal with feeling and that reading and arithmetic deal with thinking is a part of the intellectual belief structure that separates cognition from affect, a structure whose consequences are as deleterious for educational theory as they are for psychology.

The major point I am trying to make here is one of illustrating the fact that schools teach far more than they advertise. Function follows form.
Furthermore, it is important to realize that what schools teach is not simply a function of covert intentions; it is largely unintentional. What schools teach they teach in the fashion that the culture itself teaches, because schools are the kinds of places they are.

The recognition of the impact of the hidden, implicit curriculum is relatively new. Aside from Willard Waller’s *The Sociology of Teaching*, in 1932, there was little interest in the educational consequences of schooling, perse, until the 1960s. It was during that decade that work by Dreeben, Jackson, and Sarason was first published. What students of education began to recognize was what Lewis Mumford was talking about in 1938 in his *Technics and Civilization*. At that time Mumford wrote:

One may define this aspect of the machine as “purposeless materialism.” Its particular defect is that it casts a shadow of reproach upon all the non-material interests and occupations of mankind: in particular, it condemns liberal aesthetic and intellectual interests because “they serve no useful purpose.” One of the blessings of invention, among the naive advocates of the machine, is that it does away with the need for the imagination: instead of holding a conversation with one’s distant friend in reverie, one may pick up a telephone and substitute his voice for one’s fantasy. If stirred by an emotion, instead of singing a song or writing a poem, one may turn on a phonograph record. It is no disparagement of either the phonograph or the telephone to suggest that their special functions do not take the place of a dynamic imaginative life, nor does an extra bathroom, however admirably instrumental, take the place of a picture or a flower-garden. The brute fact of the matter is that our civilization is now weighted in favor of the use of mechanical instruments, because the opportunities for commercial production and for the exercise of power lie there: while all the direct human reactions or the personal arts which require a minimum of mechanical paraphernalia are treated as negligible. The habit of producing goods whether they are needed or not, of utilizing inventions whether they are useful or not, of applying power whether it is effective or not pervades almost every department of our present civilization. The result is that whole areas of the personality have been slighted; the telic, rather than the merely adaptive, spheres of conduct exist on sufferance. This pervasive instrumentalism places a handicap upon vital reactions which cannot be closely tied to the machine, and it magnifies the importance of physical goods as symbols—symbols of intelligence and ability and farsightedness—even as it tends to characterize their absence as a sign of stupidity and failure. And to the extent that this materialism is purposeless, it becomes final: the means are presently converted into an end. If material goods need any other justification, they have it in the fact that the effort to consume them keeps the machines running. (pp. 20–21)

Mumford was concerned with the quality of life that technologically advanced societies were rapidly developing, and he believed that technology would get out of hand, becoming master rather than servant to man. Almost 40 years later we find Ivan Illich expressing a similar concern.
Speaking of the distinction between convivial and anticonvivial tools, Illich (1973) holds that most tools used in industrial societies restrict rather than expand human freedom. He believes their impact on society to be socially devastating and calls therefore for a reconstruction of society in a form that would make convivial life possible.

A convivial society should be designed to allow all its members the most autonomous action by means of tools least controlled by others. People feel joy, as opposed to mere pleasure, to the extent that their activities are creative; while the growth of tools beyond a certain point increases regimentation, dependence, exploitation, and impotence. I use the term “tool” broadly enough to include not only simple hardware such as drills, pots, syringes, brooms, building elements, or motors, and not just large machines like cars or power stations; I also include among tools productive institutions such as factories that produce tangible commodities such as those which produce “education,” “health,” “knowledge,” or “decisions.” I use this term because it allows me to subsume into one category all rationally designed devices, be they artifacts or rules, codes or operators, and to distinguish all these planned and engineered instrumentalities from other things such as basic food or implements, which in a given culture are not deemed to be subject to rationalization. School curricula or marriage laws are no less purposely shaped social devices than road networks. (pp. 20–21)

Illich, a leading critic of formal schooling, is concerned with what he believes are the pervasive use of anticonvivial tools. He believes such tools—and the term tool refers to anything that can be used—impose themselves on the lives of individuals and groups in such a way as to close rather than open options, divide rather than unify the polity. The tool becomes a master that manages the lives of people. Furthermore, tools interlock and reinforce their power to control. If one is caught in a traffic jam, one misses one’s plane at the airport. If this happens, the connection in Denver is also missed, which means that one cannot make an obligatory meeting in New York, which, in turn, will have other consequences.

Although Illich is writing about technological societies at large, the points he makes about them can be applied to schools. We divide time to create schedules that produce a degree of neatness and predictability for the use of school resources. When a school has 2,000 students, as many schools have, it is important to develop an organizational pattern that avoids chaos. The timetable and computerized class schedule regulate operations. At the same time, such procedures impose a kind of rigidity that requires that regardless of what one is doing, regardless of how well it is going, one must stop working and move on to the next class. Another class is waiting to move in. Every 50 minutes, an entire school population of 2,000 students and sundry teachers plays musical chairs.

Now clearly, one must weigh the benefits of using time this way against the costs. It might very well be that the benefits outweigh the costs. I am not
arguing now that they do not. The point, however, is not whether such a schedule constitutes an educational vice or virtue; it is that the structure of the school day itself has educational consequences for both students and teachers. The timetable teaches. What the timetable teaches is interesting to speculate about. For one thing, it may teach students to be cognitively flexible, to be able to shift problems and adapt to new demands on schedule. It may teach students not to get too involved in what they do because to become too involved is to court frustration when time runs out. Such a schedule may teach students the importance of punctuality: they need to be where they are supposed to be, on time, eight times a day.

These aspects of the culture of schooling no school district advertises; indeed, there are few teachers or school administrators who conceptualize the latent lessons of school structure this way. The culture one is immersed in is often the most difficult to see. Yet, because these aspects of the life of schooling are so pervasive, their effects might be especially important. After all, the westward movement is studied for only a few weeks in the fall of the fifth grade, but the impact of school structure does not cease until one leaves graduate school.

It is usual to consider the implicit curriculum as having an entirely negative impact as far as education is concerned. But this is not necessarily true. The implicit curriculum of the school can teach a host of intellectual and social virtues: punctuality, a willingness to work hard on tasks that are not immediately enjoyable, and the ability to defer immediate gratification in order to work for distant goals can legitimately be viewed as positive attributes of schooling. They form no formal part of the curriculum, yet they are taught in school. Indeed, I believe that parents know they are taught, not perhaps at a critically conscious level, but more or less intuitively. This is perhaps best illustrated by two examples: the attractiveness of prestigious universities and the recent interest in more structured forms of elementary education.

What is it that makes Princeton, Yale, Harvard, Stanford, Swarthmore, University of California at Berkeley, Smith, and Radcliffe attractive places for so many aspiring middle-class students? A part of the reason might be the perceived excellence of the faculties at such institutions. The extensiveness of the libraries might also play a role. But one cannot easily discount the tacit appreciation of the general culture that pervades these schools. Colleges and universities with lesser reputations also teach most of the courses offered at these institutions. Indeed, the explicit curricula across universities in the United States are very much the same. But what does differ is the recognition that universities also present students with a way of life, a set of standards, a distribution of students coming from particular social classes, and levels of academic achievement that will have an important impact on entering students. If one visits university campuses across the country, one is struck by both their sameness and their differences.
Some universities monitor or attempt to monitor students' behavior in just the same way as some high schools. Others give the impression that within their hallowed walls reside the seeds of social revolution. Still others have a kind of cool intellectual pride, a sense of scholarly self-esteem that sets the institution aside from the more prosaic forms of cultural life. Such environments, developed through tradition, have selection procedures for staff as well as students that provide an implicit curriculum whose specific goals are not articulated and might not even be consciously recognized. It is something one senses. Many parents as well as students recognize such qualities and guide their children to places whose implicit curriculum is compatible with their values and with the levels of social, economic, and academic achievements to which they aspire.

Similar factors are at work in the motivation among parents to create within school districts more structured forms of elementary education. Although the return to the so-called basics movement is a part of this motivation, the back-to-basics movement cannot be easily separated from larger, more general values. For example, in a suburb near Stanford University, a small group of parents petitioned the school board to create a structured elementary school for their children. As a result of this petition and because some school board members were supportive of the proposal, the board offered to make a part of one elementary school a structured school, with a principal who was sympathetic to such a program. However, the board said that parents who did not want their children in such a program would have the option of having them attend parallel, nonstructured classes within the same school. This proposal by the board was not good enough. The parents seeking a more structured elementary school argued that what was necessary was for the entire school to be structured, not just a part of it, because "what happens to students on the playground is as important as what happens in classes." What the parents were correctly pointing out was that in order for the school to be optimally effective, in their terms, the entire environment needed to be taken into account. They did not want the values they thought would be fostered within the classroom vitiated by those that their children would encounter in the schoolyard.

The implicit curriculum of the school is not only carried by the organizational structure of the school and by the pedagogical rules that are established in school—in some high schools students must carry a pass to show hall guards that they have permission to use the washroom—but is also manifested in more subtle ways. Consider for a moment school architecture and the design of school furniture. Most school rooms are designed as cubicles along corridors and have a kind of antiseptic quality to them. They tend to be repetitive and monotonous in the same way that some hospitals and factories are. They speak of efficiency more than they do of comfort. Where, for example, aside from the teacher's lounge, can one find a soft surface in a secondary or junior high school? Schools tend not to be
designed with soft surfaces. They tend to look like most of the furniture that goes into them. Most of the furniture is designed for easy maintenance, is uncomfortable, and is visually sterile. Plastics can be used in attractive ways, but instead wood-grained formica is used to make desks that restrict the ways in which one can sit and that yield to no form of body pressure. Rooms seldom have a soft relief; there are few places for enclosure or for privacy. The point here is not so much to chastise school architects but to point out that the buildings that we build do at least two things: they express the values we cherish, and, once built, they reinforce those values. Schools are educational churches, and our gods, judging from the altars we build, are economy and efficiency. Hardly a nod is given to the spirit.

Thus, the implicit curriculum of the school is what it teaches because of the kind of place it is. And the school is that kind of place through the ancillary consequences of various approaches to teaching, by the kind of reward system that it uses, by the organizational structure it employs to sustain its existence, by the physical characteristics of the school plant, and by the furniture it uses and the surroundings it creates. These characteristics constitute some of the dominant components of the school's implicit curriculum. Although these features are seldom publicly announced, they are intuitively recognized by parents, students, and teachers. And because they are salient and pervasive features of schooling, what they teach may be among the most important lessons a child learns.

The Null Curriculum

There is something of a paradox involved in writing about a curriculum that does not exist. Yet, if we are concerned with the consequences of school programs and the role of curriculum in shaping those consequences, then it seems to me that we are well advised to consider not only the explicit and implicit curricula of schools but also what schools do not teach. It is my thesis that what schools do not teach may be as important as what they do teach. I argue this position because ignorance is not simply a neutral void; it has important effects on the kinds of options one is able to consider, the alternatives that one can examine, and the perspectives from which one can view a situation or problems. The absence of a set of considerations or perspectives or the inability to use certain processes for appraising a context biases the evidence one is able to take into account. A parochial perspective or simplistic analysis is the inevitable progeny of ignorance.

In arguing this view I am not suggesting that any of us can be without bias or that we can eventually gain a comprehensive view of all problems or issues. I do not believe that is possible, nor do I believe that we would be able to know whether our view was comprehensive, for to know that would require that one know everything that was applicable to the problem. Such
a perspective requires omniscience. Yet if one mission of the school is to foster wisdom, weaken prejudice, and develop the ability to use a wide range of modes of thought, then it seems to me we ought to examine school programs to locate those areas of thought and those perspectives that are now absent in order to reassure ourselves that these omissions were not a result of ignorance but a product of choice.

In identifying the null curriculum there are two major dimensions that can be considered. One is the intellectual processes that schools emphasize and neglect. The other is the content or subject areas that are present and absent in school curricula.

Consider first the intellectual processes that are now emphasized in school programs. Discourse in education, both in the public schools and in university schools and departments of education, has placed a great deal of emphasis on the development of cognitive processes. Cognition is supposed to be contrasted with affect, which in turn is contrasted with psychomotor activity. This trilogy is believed to exhaust the major parameters of mind. Cognition, the story goes, deals with thinking, affect with feeling, and psychomotor activity with acting or skill performance. Once these distinctions are made they tend to become reified, a process that is encouraged by the use of taxonomies for the formulation of behavioral objectives within each of the three “domains”: cognitive, affective, and psychomotor. Aside from the problems inherent in the reification of distinctions among thinking, feeling, and acting, cognition itself has come to mean thinking with words or numbers by using logical procedures for their organization and manipulation and not thinking in its broadest sense. The term cognitive originally meant the process through which the organism becomes aware of the environment. The Dictionary of Psychology (Warren, Howard, & Crosby, 1934) offers this definition: “a generic term used to designate all processes involved in knowing. It begins with immediate awareness of objects in perception and extends to all forms of reasoning.” Yet, in the literature of education the term has been impoverished, and in the process what we consider to be thinking has also been diminished. Thus there is the irony of cognition becoming increasingly important in educational discourse while it is being robbed of its scope and richness.

What school programs tend to emphasize is the development of a restricted conception of thinking. Not all thinking is mediated by words or numbers, nor is all thinking rule-abiding.

Many of the most productive modes of thought are nonverbal and illogical. These modes operate in visual, auditory, metaphor, synesthetic ways and use forms of conception and expression that far exceed the limits of logically prescribed criteria or discursive or mathematical forms of thinking. When attention to such intellectual processes, or forms, of thinking is absent or marginal, they are not likely to be developed within school programs, although their development might take place outside of school. But
the consequences within schools for students when such modes of thought and expression are absent or given low priority are significant. The criteria that are employed for assessing intellectual competence must of necessity focus on the forms of thinking and experience that are available and salient. Thus, not only does the neglect or absence from school programs of nondiscursive forms of knowing skew what can be known and expressed in schools, it also biases the criteria through which human competence and intelligence are appraised.

When we look at school curricula with an eye toward the full range of intellectual processes that human beings can exercise, it quickly becomes apparent that only a slender range of those processes is emphasized. When one also considers the fact that some of the most interesting work going on in the field of brain physiology is pointing out that the hemispheres of the brain are specialized, that the right and left hemispheres perform different intellectual functions, and that those functions can atrophy or strengthen with use or disuse, the neglect of what are erroneously referred to as affective processes is particularly significant. Researchers studying brain functions have demonstrated that the left hemisphere is the seat of speech—a fact known since the 19th century. But they have more recently demonstrated that what in previous years has been regarded as the minor hemisphere is not minor at all. The right hemisphere provides the location for much of the visualization processes; it is the seat of metaphoric and poetic thought, and it is where structure-seeking forms of intellectual activity have their home. Writing cogently about research on hemispheric specialization, Gabrielle Rico (1976) says:

These findings bespeak a partial redundancy in the two halves of the brain, operating to prevent the individual from being totally incapacitated should disaster strike one or the other hemisphere. But beyond redundancy of function, such evidence lends credence to Bogen’s suggestion that a more fundamental distinction between the two hemispheres is not so much a distinction between material or content specificity (speech or faces) as between process specificity. How, then, can these differing capacities best be characterized? A question certainly far from resolved. But there are signs pointing the way:

1. If the left hemisphere is better able to process sequentially ordered information, the right is better at simultaneous patterning. Special tests by Levy-Agresti (1968) show a right hemisphere superiority for matching spatial forms, suggesting to her that it is a synthesis in dealing with information. Furthermore, one of the most obvious symptoms to follow right hemisphere damage is the patient’s inability to copy block designs (Bogen, 1970) or to arrange blocks in a required pattern. There is also evidence that the left hemisphere tends to classify objects according to related linguistic categories, whereas the right tends to connect objects which are structurally isomorphic. Neubes (1975) writes “the left hemisphere tends to choose items which are similar in their use—i.e., if shown a cake on a plate
it might pick out a fork and spoon, while the right selects objects unrelated
in use but structurally similar—a round straw hat with a brim" (p. 16).
2. If the left is better able to cope with familiar, learned, habitual configura-
tions, the right is better able to handle unfamiliar configurations; in tests
those which were unfamiliar and therefore not susceptible to verbal
labels—random shapes, unusual textures—were processed by the right
hemisphere, totally baffling the left. Furthermore, shapes easily catego-
ized by language, such as ☺ or ─ were readily processed by the left
In addition, the right hemisphere is better able to reconstitute the
whole of a figure after being exposed to only a small number of its ele-
ments (Bogen, 1972, p. 52).
3. If the left hemisphere is better able to handle time-ordered stimulus
sequences, the right is superior for processing time-independent stimulus
configurations (Gordon and Bogen, 1975). Carotid amytal injection is a
method in which a drug is injected into one or the other hemisphere to
immobilize it for 3–5 minutes. This method has confirmed that the left is
specialized for time-ordered sentences, paragraphs, phrases which were
retrieved according to grammatical rules and ordered into a specific tem-
poral arrangement. In contrast, the right hemisphere was better able to
retrieve songs and melodies which are remembered and produced as intact
wholes (presentationally), not as units pieced together tone by tone, word
by word. Gordon and Bogen suggest that the ability to store and recall
intact such large units may be an important aspect of those tasks for which
the right hemisphere of most individuals is dominant. (pp. 41–44)

What Rico is pointing out are some of the major conclusions of a body of
research on the functions of the brain that has been going on since the
early 1970s. The research provides a useful perspective for examining what
school programs provide, what they cultivate, and what they neglect. If we
are concerned in schools with the development of productive thought, if we
are interested in strengthening those processes through which invention,
boundary pushing, and boundary breaking occur, then it seems reasonable
that school curriculum should provide children with the opportunities to
use those processes in the course of their work. It is not beyond the realm of
possibility that every course that now occupies a position within schools
could foster such processes. This would, of course, require that the curricu-

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The neglect of such processes within schools, assuming they are not ade-
quately fostered outside of schools, can lead to a kind of literalness in per-
ception and thought that impedes the appreciation of those objects or ideas
that best exemplify metaphorical modes of thinking. Take as an example
the reading of poetry or literature. What will a strictly literal construction of
the following poem by e. e. cummings (1926) render?

you shall above all things be glad and young.
For if you're young, whatever life you wear
it will become you, and if you are glad
whatever's living will yourself become.
Girls boys may nothing more than boy girls need:
i can entirely her only love
whose any mystery makes every man's
flesh put space on, and his mind take off time

that you should ever think, may god forbid
and in his mercy, your true lover spare:
for that way knowledge lies, the foetal grave
called progress, and negation's dead undoom.

I'd rather learn from one bird how to sing
than teach ten thousand stars how not to dance

Now take the last couplet in that poem,

I'd rather learn from one bird how to sing
than teach ten thousand stars how not to dance

To penetrate the meaning of that couplet, to grasp the allusions it contains,
requires one to free oneself from literal perceptions of meaning and to
apprehend the import of the images in the poetry itself. Although these
images are not literally translatable, there are a lot of things we can say
about them.

Learning is a humble thing compared with teaching. To teach puts one
in a superordinate position, to learn in the position of a subordinate.
Learners are seldom philanthropists. But who would the poet rather learn
from: not Einstein, or Marx, or Darwin, but from a bird. And what would he
rather learn: to understand the universe, to be able to turn dross into gold,
to be able to create atomic fission? No. He'd rather learn to sing. He'd
rather learn to do something that gives joy to life from one of the most
fragile of God's creatures than to teach the largest bodies of our universe
itself how not to dance.

But who teaches stars not to dance? How does one teach stars not to do
something? Astronomers do. Astronomers teach us that stars do not dance.
What we see are simply the light waves that flicker as they traverse the
atmosphere. The poet e. e. cummings chooses joy over knowledge. But to
know that, no literal reading will do. An ability to allow one's imagination to
grasp and play with the qualitative aspects of cummings's impression is a
necessary condition for recovering the meaning the poet has created.
Schools have a role, it seems to me, to offer the young an opportunity to develop the kinds of intellectual processes that will be useful for dealing with the likes of e. e. cummings and other poets who have given the world its poetry.

Such processes are not restricted to poetry; they function in any sphere of human activity in which new patterns must be perceived, where literal perception will not do, when multiple meanings must be understood, where intimation, nuance, and analogy are at work. Consider the following passage from Aleksandr Solzhenitsyn’s (1973) *Gulag Archipelago*:

Spring promises everyone happiness—and tenfold to the prisoner. Oh, April sky! It didn’t matter that I was in prison. Evidently, they were not going to shoot me. And in the end I would become wiser here. I would come to understand many things here, Heaven! I would correct my mistakes yet, O Heaven, not for them but for you, Heaven! I had come to understand those mistakes here, and I would correct them!

As if from a pit, from the far-off lower reaches, from Szerzhinsky Square, the hoarse earthly singing of the automobile horns rose to us in a constant refrain. To those who were dashing along to the tune of those honking, they seemed the trumpets of creation, but from here their insignificance was very clear.

In the first place, it was very interesting to try to figure out the layout of the entire prison while they were taking you there and back, and to calculate where those tiny hanging courtyards were, so that at some later date, out in freedom, one could walk along the square and spot their location. We made many turns on the way there, and I invented the following system: Starting from the cell itself I would count every turn to the right as plus one, and every turn to the left as minus one. And, no matter how quickly they made us turn, the idea was not to try to picture it hastily to oneself, but to count up the total. If, in addition, through some staircase window, you could catch a glimpse of the backs of the Lubyanks water nymphs, half-reclining against the pillared turret which hovered over the square itself, and you could remember the exact point in your count when this happened, then back in the cell you could orient yourself and figure out what your window looked out on. (p. 212)

To understand this passage requires an ability and willingness to make the connection between spring and promises, to recognize its sense of growing life, and to appreciate how the experience of an April sky can be caught in “Oh, April sky!”—the tempo of the passage, the contrast of life and death, of heaven and prison, of the cacophony and the din of motor cars outside where life bustles and the cool systematic efforts to sustain that life in oneself by counting the turns en route to one’s cell. An educational program that provides little or no opportunity for students to refine the processes that make such understanding possible is likely to yield a population ill prepared to read the world’s great literature. But, perhaps even more importantly, it is likely to withhold from students the joys of intellectual discovery.
The major point I have been trying to make thus far is that schools have consequences not only by virtue of what they do teach, but also by virtue of what they neglect to teach. What students cannot consider, what they don’t know, processes they are unable to use, have consequences for the kinds of lives they lead. I have directed my attention in the preceding section to the schools’ general neglect of particular intellectual processes. Let me now turn to the content or subject matter side of the coin.

Why is it that the vast majority of schools in the United States at both the elementary and secondary levels teach virtually the same subject matters? Let us assume for the moment that basic reading skills, basic arithmetic skills, and basic skills of writing, including spelling, grammar, and punctuation, are necessary parts of virtually all elementary school programs. But even given this assumption, why are time, space, and energy given over to advanced forms of mathematics, history, the sciences, and physical education? Why do most secondary schools require 4 years of English, 2 years of mathematics, and 2 or 3 years of science? Why do they require 2 or 3 years of U.S. history or social studies? Why is it that law, economics, anthropology, psychology, dance, the visual arts, and music are frequently not offered or are not required parts of secondary school programs? Why do so few schools offer work in filmmaking, in the study of communication, in the study of war and revolution? In raising these questions I am not now suggesting that these particular subject matters replace those that now occupy a secure place in school programs. I am trying to point out that certain subject matters have been traditionally taught in schools not because of a careful analysis of the range of other alternatives that could be offered but rather because they have traditionally been taught. We teach what we teach largely out of habit, and in the process neglect areas of study that could prove to be exceedingly useful to students. Take, as an example, economics.

Economics is presently taught in less than 10 percent of all secondary schools in the United States. Now economic theory is not something one is likely to learn simply through the process of socialization. One does not encounter economic theory as one might encounter various forms of social behavior. Yet economics provides one of the frames of reference that enables one to understand how our social system operates. Indeed, to take advantage of the economic opportunities that this nation affords, it is useful to know something of the economic structure of the society, to understand how capital can be used to increase income, to know how to read a stock market report—in short, to have what is needed to make the most out of the resources one has. Yet such problems and the subject matters within which they appear seldom receive attention within schools, say, in comparison to sentential calculus or advanced forms of geometry. The null curriculum includes the study of economics.

Take as another example the study of law. What does a layperson need to know about the law to understand his or her rights, the basic ways in
which our legal systems works, the rights and obligations incurred in the
signing of a contract? What does it mean to be arrested? What is the dif-
cference between a criminal and civil suit? What is a tort and when has a crime
been committed? Although I realize that such seemingly simple questions
are extraordinarily complex, the same holds true for virtually all other
fields in which a student works. Students could be introduced to the study
of law first because the problems that it poses are interesting and rich—
there is much that could be related to their lives in a fairly direct fashion—
and second because it is important for citizens to know something about the
legal system under which they live so that at the very least they will be in a
position to understand the obligations of a contract and the remedies for its
violation. At present, such knowledge is almost entirely within the province
of the legal profession.

Take as still another example the study of what might be called the ver-
nacular arts. In our society, a wide variety of visual forms are used to shape
values, to influence aspirations, and in general to motivate people to do or
not do certain things. The design of shopping centers, the forms of the dis-
plays that are created, the kinds of images that are shown in the mass
media, on television, and on film, those images are, as Vance Packard aptly
called them, the “hidden persuaders” in our culture. They are designed
with skill and serve the interests of the manufacturer and merchant, politi-
cian, industrialist, builder, and salesman. How do these images work? In
what ways do they impose themselves on our consciousness? Are we or can
we become immune to their messages, or do we delude ourselves into think-
ing so? Are there ways students could be helped to become aware of such
forms and how they function? Could they be enabled to learn to “read” the
arts of the vernacular, to understand how they themselves use such arts to
persuade and motivate? Is there a grammar to these images, a syntax that,
although not following the forms of logic used in verbal and written dis-
course, nevertheless exists and can be revealed through analysis?

The study of popular images, the arts of the vernacular, could of course
be offered as part of the school’s program. The study of such arts would, at
least in principle, help develop a level of critical consciousness that is now
generally absent in our culture. Yet, as ubiquitous and as powerful as such
popular images are, there are hardly any schools in the country that pay
serious attention to them or help students learn to read the messages they
carry at a level that subjects them to critical scrutiny. Writing about these
images, Edmund Feldman (1976) says:

One reason for this difference between the perception of visual and verbal
imagery lies in the fundamentally sequential structure of speech and writing
as opposed to the almost simultaneous perception of visual forms. Second,
because of our phylogenetic heritage, the visual image established connection
with different—one might say “older”—portions of the brain than verbal
structures. The feelings experienced in the presence of visual images are more
difficult to control or resist than those dependent on language. Because lan-
guage (especially the complex linguistic forms of modern man) evolved after
the development of visual perception in the phylogeny of our species, we are
equipped with older, possibly less sophisticated, biological equipment for the
apprehension of images. We cannot so readily defend against what a picture
seems to tell us to do or feel. Third, our knowledge systems and our educa-
tional institutions have been organized almost exclusively for the transmis-
sions and reception of linear structures. It is obvious that these institutions
find themselves in crisis when nonlinear, that is, visual, sources of imagery are
perfected and made cheaply and instantly available. To complicate the prob-
lem further, it is possible that the most technically sophisticated mental oper-
ations on which an advanced civilization depends cannot be learned except
through linear, sequentially organized meaning structures. But for the engi-
eering of public assent, the encouragement of nonreflective behavior, visual
imagery is ideal.

If visual images are relatively invulnerable to logical and semantic scrutiny,
how can we account for the extraordinary influence of verbal slogans in reli-
gion, politics, and advertising? The explanation is simple, and it reinforces
our argument concerning the compelling power of the visual image: the effec-
tiveness of a slogan depends on repetition, and the function of repetition is to
convert a logical sequence into an image. In fact, the repeated slogan becomes
a motor image—one that we find difficult to forget, like the lyrics of a bad
song or a frequently heard advertising jingle. So long as a slogan can be anal-
alyzed semantically it can be resisted. But once it has been drilled into the pop-
ular consciousness in the form of a patterned reenactment, there is no way
to prevent many compelling transactions, that is, automatic acquiescence,
from taking place. Thus the slogan becomes part of our involuntary behavior.
(pp. 137–138)

It becomes clear that what we teach in schools is not always determined
by a set of decisions that have entertained alternatives; rather, the subjects
that are now taught are a part of a tradition, and traditions create expecta-
tions, they create predictability, and they sustain stability. The subjects that
are now taught are also protected by the interests of teachers who view
themselves as specialists in particular fields. There is no national lobby of
teachers of law, or of communications, or of anthropology. Indeed, in the
words of one individual (Hanvey, 1971) who tried to bring an anthropology
curriculum into secondary schools, it was necessary to fly under false colors.
In order for anthropology to be taught, it has to come disguised as history,
a field already established and serving a well-defined professional interest
group.

The strategy that we finally elected was chosen because it looked as though it
might work, because it was consistent with our definition of the faults of the
traditional social studies, and because it made sense in terms of what anthro-
pology as a discipline had to offer. We decided to subvert a course very com-
monly taught in the ninth or tenth grade—the world history course. More
specifically, we intended to offer materials that could be rationalized as world
history and which would, in effect, substitute for a substantial segment of the
traditional course. Many supporters of anthropology in the high schools
urged us to design a high school-level anthropology course. We resisted this
advice; we knew that such a program would never become a required course
and we knew what happened to elective courses. The elective route was no way
to bring large numbers of students into a meaningful encounter with anthro-
pology. (pp. 145)

Take as still another example the general neglect of the arts in element-
ary and secondary schools. Although elementary schools are generally sup-
posed to provide programs in the arts, few well-thought-out and compet-
tently taught art programs exist at this level. Elementary school teachers
have little background in the arts and, in general, are not well prepared to
teach them.

At the secondary level, where there are art specialists, the arts are taught
in about half of all secondary schools and only 20 percent of the school
population enrolls for as little as 1 year. This neglect of the arts, compared
with, say, the sciences, leaves students unable, by and large, to deal mean-
ingly with sophisticated forms of the serious arts. One need not have spe-
cial tuition to appreciate prime time T.V. When it comes to the music of
Stravinsky, the films of Bergman, the paintings of Matisse, the architecture
of Corbusier, the sculpture of Brancusi, the dance of Cunningham, tuition
is needed. Yet, schools do not provide programs that develop such abilities,
and, because such abilities do not develop on their own, millions of students
leave schools each year without access to what such artists have contributed
to the world. If in hundreds of years some archeologist wanted to under-
stand something of the aesthetic level our culture had achieved, no more
representative artifacts could be dug up than the Sears Roebuck catalogue
and the TV Guide.

Law, anthropology, the arts, communication, economics: these are just a
few of the fields that constitute the null curriculum. I am not here making a
brief for these particular fields or subject matters, for in fact I believe that
there can be no adequate conception of appropriate curriculum content
without consideration of the context in which it is to be provided and the
students for whom it is intended. I identify these fields and subject matters
for purposes of exemplification and to highlight the point that what we
offer the young in schools is largely bound by tradition. One could hope for
more.

When we ask, therefore, about the means through which schools teach,
we can recognize that one of the major means is through the explicit cur-
riculum that is offered to students. But that is not all. Schools also teach,
through the implicit curriculum, that pervasive and ubiquitous set of expec-
tations and rules that defines schooling as a cultural system that itself
 teaches important lessons. And we can identify the null curriculum—the
options students are not afforded, the perspectives they may never know about, much less be able to use, the concepts and skills that are not a part of their intellectual repertoire. Surely, in the deliberations that constitute the course of living, their absence will have important consequences on the kind of life that students can choose to lead.

Thus far, we have examined not only the major orientations that have guided thinking about what shall be taught in school, but we have also examined what schools teach that teachers do not realize they are teaching and what they neglect teaching, as well. The consequences of school programs emanate from values that are explicit and operational as well as those that are tacit and covert.

In the following chapter, we will deal with the problem of how curriculum objectives can be formulated, a problem that has been the center of great controversy since the late 1970s.

References


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