

~~Anyon~~
Anyon

Social Class and School Knowledge

JEAN ANYON

Rutgers University, Newark, New Jersey

When Max Weber and Karl Marx suggested that there were identifiable and socially meaningful differences in the educational knowledge made available to literati and peasant, aristocrat and laborer, they were of course discussing earlier societies. Recent scholarship in political economy and sociology of knowledge has also argued, however, that in advanced industrial societies such as Canada and the U.S., where the class structure is relatively fluid, students of different social class backgrounds are still likely to be exposed to qualitatively different types of educational knowledge. Students from higher social class backgrounds may be exposed to legal, medical, or managerial knowledge, for example, while those of the working classes may be offered a more "practical" curriculum (e.g., clerical knowledge, vocational training) (Rosenbaum 1976; Karabel 1972; Bowles and Gintis 1976). It is said that such social class differences in secondary and postsecondary education are a conserving force in modern societies, an important aspect of the reproduction of unequal class structures (Karabel and Halsey 1977; Apple 1979; Young and Whitty 1977).

The present article examines data on school knowledge collected in a case study of five elementary schools in contrasting social class settings in two school districts in New Jersey. The data suggest, and the article will argue, that while there were similarities in curriculum topics and materials, there were also subtle as well as dramatic differences in the curriculum and the curriculum-in-use among the schools. The study reveals that even in an elementary school context, where there is a fairly "standardized"

I would like to thank Michael Apple, Stewart Bird, Henry Giroux, Nancy King, James Scott, Roger Simon, Bob Tabachnick, Philip Wexler, and Geoff Whitty for their encouragement, critical comments, and editorial advice during various phases of the work involved in producing this article.

© 1981 by The Ontario Institute for Studies in Education. Published by John Wiley & Sons, Inc.

CURRICULUM INQUIRY 11:1 (1981)

CCC 0362-6784/81 010003-42\$04.20

curriculum, social stratification of knowledge is possible. The differences that were identified among the schools suggest as well that rather than being simply conserving or "reproductive," school knowledge embodies contradictions that have profound implications for social change. The reproductive and nonreproductive possibilities of school knowledge involve theoretical implications of the data and will be delineated after the data have been presented.

Methodology

Data on the nature and distribution of school knowledge were gathered in an investigation of curriculum, pedagogy, and pupil evaluation practices in five elementary schools differentiated by social class.¹ The methods used to gather data were classroom observation; informal and formal interview of students, teachers, principals, and district administrative staff; and assessment of curriculum and other materials in each classroom and school. Classroom data to be reported here are drawn primarily from the fifth and second grades in each school. All schools but one departmentalize at the fifth-grade level, and with the exception of the school that does not, where only one fifth-grade teacher agreed to be observed, in all schools two or three fifth-grade teachers and two second-grade teachers were observed and interviewed. All but one of the teachers in the study had taught for more than four years. The fifth grade in each school was observed by the investigator for ten three-hour periods, and the second grade was observed for two three-hour periods. Formal interviews were carried out during lunchtime, and before and after school. Data were gathered between September 15, 1978, and June 20, 1979.

For purposes of this study, social class is considered as a series of relationships to several aspects of the process in society by which goods, services, and culture are produced. That is, while one's occupational status and income level contribute to one's social class, they do not define it. Contributing as well are one's relationships to the system of ownership of physical and cultural capital, to the structure of authority at work and in society, and to the content and process of one's own work activity. For example, members of the capitalist class participate in ownership of the apparatus of production in society, while many middle-class and most working-class persons do not; capitalists and affluent professional persons have more access to decision-making power in work institutions and in society than do many middle-class and most working-class people; capitalist and professional work activity often involves more creativity, conceptualization, and autonomy than do the jobs of most middle-class and working-class people in, say, civil service (the bureaucracy) or industry. One's relationships to all three of these aspects of production (to the systems of ownership and authority, and to work itself) determine one's social class. All three relationships are necessary and no single one is sufficient for determining a relation to the process of production in society.²

The terminology defining social classes and differentiating the schools in this study is to be understood in a technical sense, as reflected in the process by which the sample of schools was selected. Thus, the schools in this study were differentiated not only by income level as an indicator of parent access to capital, but also by the kind of *work* that characterized the majority of parents in each school.

The first three schools were in a medium-size city district in northern New Jersey, and the final two were in a nearby New Jersey suburban district. In each of the three city schools, approximately 85% of the students were white. In the fourth school, 90% were white, and in the last school, all were white.

The first two schools are designated *working-class schools*, because the majority of the students' fathers (and approximately one-third of their mothers) were in unskilled or semiskilled occupations, with somewhat less than one-third of the fathers being skilled workers. Most family money incomes were at or below \$12,000 during the period of the study, as were 38.6% of all U.S. families (U.S. Bureau of the Census 1979, p. 2, Table A). The third school is designated the *middle-class school*, although because of residence patterns the parents were a mixture of highly skilled, well-paid blue collar and white collar workers, as well as those with traditional middle-class occupations such as public school teachers, social workers, accountants, and middle-managers. There were also several local doctors and town merchants among the parents. Most family money incomes were between \$13,000 and \$25,000 during the period of the study, as were 38.9% of all U.S. families (U.S. Bureau of the Census 1979, p. 2, Table A).

The fourth school is designated the *affluent professional school*, because the bulk of the students' fathers were highly-paid doctors such as cardiologists; television or advertising executives; interior designers; or other affluent professionals. While there were a few families less affluent than the majority (e.g., the families of the superintendent of schools and of several professors at nearby universities, as well as several working-class families), there were also a few families who were more affluent. The majority of family money incomes were between \$40,000 and \$80,000 during the period of the study, as were approximately 7% of all U.S. families.³

The final school is called the *executive elite school*. The majority of pupils' fathers in this school were vice presidents or more advanced corporate executives in U.S.-based multinational corporations or financial firms on Wall Street. Most family money incomes were over \$100,000 during the period of the study, as were less than 1% of U.S. families (see Smith and Franklin 1974).

Social Class and School Knowledge

There were several similarities in curriculum among the schools in this study. (Indeed, all schools were subject to the same state requirements.) All schools used the same math textbook and series throughout the elementary

grades (*Mathematics Around Us*, Scott Foresman, 1978). In language arts, both district courses of study included punctuation, sentence types and structure, grammar, and some writing exercises. In all fifth grades there was at least one box of an individualized reading program available; all classes had a basal reading series available, and two of the five schools (middle-class and executive elite) had the same basal reading series available in several grades of the school (*The Holt Basic Reading System*, Holt, Rinehart and Winston, 1977).

The schools did, however, use different social studies and science textbooks and materials, but there were several curriculum similarities among them. For example, all social studies books exhibited what I have called elsewhere "key ideas" in United States social studies content (Anyon 1979a): a positive and overtly stated valuing of American political democracy and freedom, American "progress," industry, and technology (see also Fox and Hess 1972; FitzGerald 1979; and Anyon 1978, 1979b). The natural science textbooks and program materials in both districts were similar in that they emphasized empirical investigation as the basis of scientific understanding, the use by students of processes of observation and experimentation, and "the scientific method."

Despite curriculum similarities, there were substantial differences in knowledge among the schools. The following sections of this article present and discuss data on these differences. Data from each social setting include significant information on the school, the teachers, and the community; what school personnel said, in interviews, about school knowledge; evidence from the curriculum and the curriculum-in-use in several content areas (e.g., math, science, social studies); and what students expressed concerning school knowledge and its meaning for them. A dominant theme emerged in each social setting, and these are also presented and briefly discussed.

WORKING-CLASS SCHOOLS

On the streets surrounding each school are small wooden frame houses. Many have small front porches and most date from the first decade of this century. The streets are clean, but there are no trees on the streets near either school. A railroad track separates the neighborhoods of each school from the rest of the town. One of the schools was constructed in 1912, the other in 1919. No additions have been built onto either school, but there are two trailers (for the second grades) in one asphalt playground. The rooms in the schools are sparsely furnished. There are no clocks in any of the classrooms. The halls and rooms are clean. The school population is heterogeneous as to white ethnic group composition, and there are small but growing Hispanic and black populations. Neither principal knows the history of his or her school building.

Approximately one-third of the teachers in each school were born in the city and lived there, but most are from "uptown," a different section. Most graduated from local state teachers colleges and were young; many were single. There were more male teachers in the working-class schools than in the other schools of this study.

SOCIAL CLASS AND SCHOOL KNOWLEDGE

One male teacher characterized his school as a "tough" school and said he had been nervous when they told him he would be teaching there. He said he felt better after the principal had told him, "Just do your best. If they learn to add and subtract, that's a bonus. If not, don't worry about it." A second-grade teacher stated to me that she did not mind teaching in this school because it was "easy," compared to many other schools. She said that she would not want to teach in the district's school for the "gifted and talented." "You have to work too hard. I have a friend who teaches there and she goes in early every day. She's always doing something special." Another second-grade teacher said that the children in her school were getting "dumber" as the years went by. She also said, "I would *never* teach in the suburbs. The parents there think their kids are God's gift. Although, some parents *here* are beginning to think they have rights, too." One day a fifth-grade teacher brought into the teachers' room a box of cards labeled "Diacritic Reading." A sixth-grade teacher looked at the box, laughed, and said, "Are you kidding? I can hardly read that!" The face of the woman who had brought the box reddened, and she turned the box over so that the title was not visible.

What School Personnel Said About School Knowledge

I asked the two fifth- and two second-grade teachers in each school what knowledge was most appropriate for the children in their classes. Most spoke of school knowledge in terms of facts and simple skills. One fifth-grade teacher said, for example, "What these children need is the basics." When I asked her what the basics were, she said, "The three Rs—simple skills." When I asked why, she responded, "They're lazy. I hate to categorize them, but they're lazy." Another fifth-grade teacher said, "Take social studies. History is a fact-oriented subject. But I really don't do much. I do map skills, though. It's practical—it's good for measuring and it's math." A fifth-grade teacher in the other school said she did social studies by putting notes on the board which the children then copied. I asked why she did that, and she said, "Because the children in this school don't *know* anything about the U.S., so you can't teach them much." The male fifth-grade teacher in this school said, "You can't teach these kids anything. Their parents don't take care about them, and they're not interested." A second-grade teacher when asked what was important knowledge for her students said, "Well, we keep them *busy*."

Evidence from the Curriculum and the Curriculum-in-Use

Mathematical knowledge was often restricted to the procedures or steps to be followed in order to add, subtract, multiply, or divide. All schools in the district use the same math text. It has numerous pages which are explicitly intended as departures from the mechanics of such skills as adding and subtracting. These pages call for mathematical reasoning, inference, pattern identification, or ratio setup, for example. One of the fifth-grade teachers called these pages "the thinking pages" and said she "rarely" uses them. "They're too hard." She concentrates, she said, "on the basics." That

is, "how you multiply and divide." The fifth-grade math teacher in the other working-class school said, "These pages are for creativity—they're the extras." She uses them "sometimes."

A common feature of classroom mathematics in both working-class schools was that a large portion of what the children were asked to carry out procedures, the purposes of which were often unexplained, and which were seemingly unconnected to thought processes or decision making of their own. An example of this type of instruction was when one of the fifth-grade teachers led the children through a series of steps to make a one-inch grid on their papers without telling them that they were making a one-inch grid or that it would be used to study scale. She said, "Take your ruler. Put it across the top. Make a mark at every number. Then move your ruler down the bottom. Now, put it across the bottom. Now make a mark on top of every number. Now draw a line from . . ." At this point, one student said that she had a faster way to do it and the teacher said, "No, you don't; you don't even know what I'm making yet. Do it this way, or it's wrong." After the students had made the lines up and down and across the page, the teacher said she wanted them to make a figure by connecting some dots, measure the figure, using the scale of one inch equals one mile, and then cut it out. After she had led them through these steps, she said, "Don't cut until I check it."

Teachers in each school in the district are given a choice of the social studies text they want to use. The texts chosen by the fifth-grade teachers in the working-class schools contained less information, fewer inquiry or independent research activities, and more of an emphasis on social studies knowledge as facts to be remembered than the texts used in any other school of this study. In one of the working-class schools the fifth-grade teachers chose *The American Nation: Adventure in Freedom* (Follet 1975). This text is "designed for educationally deficient secondary school students" (teachers guide, p. 3). It is written on a sixth-to-seventh-grade level. It was intended for "low ability students . . . who often exhibit environmental deficiencies . . . and social and emotional problems" (teachers guide, p. 3). A striking characteristic of the textbook is the paucity of information. The book is intended as a year's work; it is divided into 16 "lessons." There are one to four paragraphs of history in each lesson, a vocabulary drill, and a review and skills exercise in each to check "recall and retention." The teacher's guide explains the sparsity of information by saying that an important criterion of teaching materials for "educationally deficient students" is that "[e]xtraneous subject matter and excessive details should be eliminated in order to present subjects and concepts that are important and also within the[ir] comprehension range . . ." (p. 39). The teachers guide also states that "It ought to be said at the outset that students with educational deficiencies are not always able to succeed in an inquiry lesson that places great demands on them" (p. 20). Rather, "The students feel secure in doing routine tasks" (p. 8). "You should follow fairly regular patterns from day to day so that the students do not become confused or distracted" (p. 8). The students should be "conditioned" to make "organized responses" (p. 11). The students should be "trained in the

techniques of assembling information . . ." (p. 16). "Tests should seek to determine the students' retention of factual matter and their reading and comprehension" (p. 23).⁴

The textbook chosen by the fifth-grade teachers in the other working-class school is *Your Country and Mine* (1969 edition) in Ginn's Tiegs Adams series. This textbook is not explicitly designed for any particular type of student. It is not an inquiry text; it is fact oriented. Two of three evaluative activities at the end of each chapter are "Do you know?" (asking for facts in 84% of the cases), and "See if you remember" (asking for recall—filling in the blanks or matching). A third activity involved, in approximately 60% of the cases, reading a map.

The social studies knowledge in these schools was the least "honest" about U.S. society. There was less mention of potentially controversial topics than in other series in other schools. Both texts refer to the economic system as a "free enterprise" system. There are five paragraphs on minority and women's rights and history in one text and ten in the other. (As we will see, this is considerably less than discussions of these topics in books used in other schools in this study.) As in most U.S. history texts, however, (Anyon 1979b; FitzGerald 1979) there is contained in both texts the history of powerful groups—political parties and leaders, military systems, business, technology, industry. There is little information on the working class in either book—four pages in one book and two in the other discuss labor history. Neither text attempts to identify interests workers have in common, nor discusses the situations of economic and social conflict in which workers exist.

Social studies instruction commonly involved carrying out tasks such as copying teacher's notes, answering textbook questions, or coloring and assembling paper cutouts. For example, in the school where the second book was available, the fifth-grade teacher had purchased a supplemental booklet from Instructo entitled *The Fabulous Fifty States*. Each day she put information from the booklet in outline form on the board and the children copied it. The type of information did not vary: the name of the state, its abbreviation, state capital, nickname of the state, its main products, main business, and a "fabulous fact" (e.g., "Idaho grew 27 billion potatoes in one year. That's enough potatoes for each man, woman, and . . ."). As the children finished copying the sentences, the teacher erased them and wrote more. Children would occasionally go to the front of the classroom and pull down the wall map in order to locate the states they were studying, and the teacher did not dissuade them. But I never saw her refer to the map; nor did I hear her make other than perfunctory remarks concerning the information the children were copying. Occasionally, the children colored in a ditto (also from an Instructo booklet) and cut it out to make a stand-up figure of some sort (representing, for example, a man roping a cow in the Southwest). The teacher referred to these cutouts as social studies projects.

There were occasions when the teachers did seem to make attempts to go beyond simple facts and skills and to transmit more elaborate conceptual knowledge. Science instruction was often such a case, and the male

fifth-grade teacher's use of the science textbook (*STEM*, Addison-Wesley, 1977) was in large measure such a symbolic gesture. He assigned the text, did demonstrations and "experiments," but, he said, "I don't do the tests [provided by the manual]. It's too depressing. They never get it, and they'll never use it!"

What Students Said About Knowledge

To get some impression of what the children thought about school knowledge, I interviewed ten students in the fifth grade in each working-class school (and twenty fifth-grade children in each of the other schools). After discussing with them what they did in school, I asked each child to tell me what knowledge is (not school knowledge, just knowledge in the general sense). Most children in the working-class schools had some difficulty interpreting my question. Many asked, "What?" or "What do you mean?" It seemed that my question was not meaningful to them. I said, "What do you think of when I say the word 'knowledge?'" They gave the following answers: "To know stuff?" "The skills to do the work." "A chance to make a better world?" "Skills." "Ability—you have ability to do things." "Doing pages in our books and things." "Worksheets." "The three Rs . . . Miss [P] said if we don't have the three Rs, we can't do anything. . . . Say if you work in a store you gotta add up prices." "You gain facts, like." "He knows his stuff." Two children said, "How to do math. Mr. [T] likes math." "You answer questions." "To remember things?" Six children said they did not know.

I then asked them, "Where does knowledge come from?" Six said, [It comes from] "teachers." Other answers were, "Books." "The Board of Ed." "Scientists." "Dictionary." "Your mind?" "Your personality?" "From learning." Seven said they did not know. I asked if they could *make* knowledge, and if so, how. After some discussion of what I meant, in which I said, "Can you make it, or is it already made?" "Could you make it yourself or could somebody else?" "What would you have to do to make knowledge?" fifteen children said no (you can't make knowledge). One girl said, "No, because the Board of Ed makes knowledge." I asked her how, and she said, "Oh, just by listening to stuff." Four said they did not know. One child said, "Yes, you can make knowledge." When I asked how, he said, "You have to act normal. Don't put on your radio."

It should be noted that during discussions of school knowledge not a single child in either working-class school used words such as "think," or "thinking." Most spoke in terms of behaviors or skills, and only one mentioned the word "mind." About half the children appeared uncomfortable during the interview, even though they knew me and were quite friendly in the playground and in class. Many twisted, blushed, and seemed tense and anxious. Most of their answers were short, and they did not elaborate without prodding, and often not even then. They, more than the children in any other school, seemed to be trying to guess what it was I wanted them to say rather than to reflect on their own experience.

During my interviews with the children, I also asked them if they thought they would go to college. All but three of the children in these

working-class schools said no, they didn't think they would. Two said that they might not have the money, and 11 said their grades wouldn't be good enough. I asked what they wanted to be when they grew up, and then if they could "be anything they wanted"—if, for example, they could "get any type of job" they wanted. Sixteen said no. The reasons they gave were that they weren't "smart enough," or they "didn't have the skills," or "if it's hard I couldn't do it." Three children mentioned there might not be enough jobs. It should be noted that most responses to these last questions suggest that many of these children already "know" that what it takes to get ahead is being smart, and that they themselves, are *not* smart.

Resistance as a Dominant Theme

A dominant theme that emerged in these two schools was student *resistance*. Although some amount of resistance appeared in every school in this study, in the working-class schools it was a dominant characteristic of student-teacher interaction. In the fifth grades there was both active and passive resistance to teachers' attempts to impose the curriculum. Active sabotage sometimes took place: someone put a bug in one student's desk; boys fell out of their chairs; they misplaced books, or forgot them; they engaged in minor theft from each other; sometimes they rudely interrupted the teacher. When I asked the children during interviews why they did these things they said, "To get the teacher mad"; "Because he don't teach us nothin' "; "They give us too many punishments." When I asked them what the teachers *should* do, they said, "Teach us some more"; "Take us alone and help us"; "Help us learn."

The children also engaged in a good deal of resistance that was more passive. They often resisted by withholding their enthusiasm or attention on occasions when the teacher attempted to do something special. For example, on one of my visits a teacher had found something she said was "nice" and "different"; it was a cartoon filmstrip on punctuation. The children, however, watched apathetically and did not respond enthusiastically or with thanks. The teacher then berated them for not "thanking" her and gave them a worksheet on punctuation to do.

Passive resistance can also be seen on some occasions when the children do not respond to the teacher's questions. For example, they sit just staring at the board or the teacher while the teacher tries to get them to say the answer, any answer. On one such occasion, the teacher shouted sarcastically across the room to me, "Just *look* at the motivation on their faces." On occasions when teachers finally explode with impatience because nobody "knows" the answer, one can see fleeting smiles flicker across some of the students' faces: they are pleased to see the teacher get angry, upset.

The teachers often complain that the students "don't care" about anything. For example, one morning before the school day began, several teachers were discussing recent vandalism in the school. It seems that the last several years had seen a sharp rise in expressions of disregard for school property. Fires had been set during the summer in the second-grade trailers, and windows in the school had recently been broken. Several teachers said they were sure the vandals were the fifth and sixth graders. A

teacher remarked on how little these students cared about the school. Another teacher turned to me and said, "You know, a lot of them don't care about anything. And some don't care about America, either. Last year the sixth grade refused to sing patriotic songs at [their] graduation. They said, 'What did America do for me?' Well, I know they're wrong. I lived overseas for a while [as a military wife]."

It seems to be the case that what counts as school knowledge in these two working-class schools is not knowledge as concepts, cognitions, information or ideas about society, language, math, or history, connected by conceptual principles or understandings of some sort. Rather, it seems that what constitutes school knowledge here is (1) fragmented *facts*, isolated from context and connection to each other or to wider bodies of meaning, or to activity or biography of the students; and (2) knowledge of "practical" rule-governed *behaviors*—procedures by which the students carry out tasks that are largely mechanical. Sustained conceptual or "academic" knowledge has only occasional, symbolic presence here.

MIDDLE-CLASS SCHOOL

The streets in the neighborhood of this school are lined with trees. The homes are larger than in the working-class sections. Most are built of brick, have full front porches, lawns in front and back, many of which have flowers. The school building has a yard in front and on two sides, and is enclosed by several large trees. There is an asphalt playground in back. The school building is larger than either of the working-class schools and is built of a light-colored stone. The floors are polished wood. The "old wing" of the school was built in 1888. The "new wing" was constructed in 1924. On the wall in the front hall hangs a plaque with the likeness of Horace Mann and a quote from him: "Knowledge is a possession of which man cannot be robbed."

Approximately one-third of the teachers in the school grew up in the neighborhoods of this and two other nearby schools. Many graduated from a local state teachers college, and a good portion of them now live in the neighborhood of the school. Some are married to other teachers or accountants, one is married to a policeman, another to a nurse, and several to managers of local businesses. Several teachers recently bought their own homes in the neighborhood and just had their first child. Conversations in the teachers' room often revolved around homes, children, television programs, diets, and the fact that "It" was coming (state-ordered desegregation of the city's schools). This school, in contrast to the two working-class schools, has considerable activity surrounding school events such as games of the school's basketball team. (Each school in the district has a team.) One of the fifth-grade teachers I observed was very involved in arranging the activities of the team and its cheerleaders, and raffles, hot dog, and cake sales to augment available funds.

The ethnic background and history of the school are of recent interest to a group of parents and to the principal. Several parents suggested the idea of doing a history of the school, and the principal contacted a "local

university historian" to do oral histories of the school. She spoke enthusiastically about the project.

What School Personnel Said About School Knowledge

When I asked teachers what knowledge was appropriate for their students, most of them directly or indirectly referred to what was in the books they were using. One teacher said, "What they need for high school and maybe college." She nodded at the social studies textbook and said, "It's a little hard for them. It's on a sixth-grade level. But my goal is understanding. I try to help them understand what they read. I think that's more important than the skills, although they're important, too. But if they don't understand what they read, they won't know anything." The language arts teacher said, "You could say knowledge is what they need for daily life." This teacher suggested the major role the textbook played in her instruction. After she had given a homework assignment a child asked, "Is it in the book?" The teacher said, "Of course it's in the book. Did I ever give you anything that's *not* in the book?" "No," said the child. (The English textbook she used is the 1969 edition of *Language for Everyday Life*.) A second-grade teacher said, "The most important thing is comprehension, even in math. I explain, and if they don't understand, they go to the board."

Part of the attitude that knowledge is what is in textbooks seems to be the feeling that knowledge is made by experts and consists of standard rules and "content." This content is perceived as more important or legitimate than what one discovers or attempts to define for oneself. In a second-grade lesson on pluralization, for example, the teacher explained a page in the spelling workbook that had rules for forming plurals.

T: Remember, more than one mouse is called mice. Remember what we said the other day: it's an irregular noun. I'm glad you gave me that one [that example] so you won't use the wrong one.

S: Everybody was going to say that one. (pause) It wouldn't *sound* right if you said mouses.

T: Yes, (pause) but who can give me a better reason [than how it sounds]? Remember what it's called? Remember what we said the other day?

The teacher told me she was trying to elicit the rule that mouse is an irregular noun. She said that the rule is "more important" than the "guess" of the boy for whom it was mice because mouses sounds wrong.⁵

Evidence from the Curriculum and the Curriculum-in-Use

In this school I observed more flexibility regarding procedures in math than in the working-class schools. For example, there is sometimes a choice: one may do two-digit division the long way or the short way, and there are some math problems that can be done "in one's head." Moreover, in contrast to the teacher's explanations in the working-class schools, when this teacher explained how to do math or what to do next, there was usually a recognition that a cognitive process of some sort was involved: rather than simply lead the children through a series of steps, she usually

gave several ways to do a problem, and then said, "I want to make sure you understand what you're doing." She often asked a child to say how he "did" a problem.

Social studies knowledge in this school was more "conceptual" than in the working-class schools in that there was less emphasis on retention of facts and development of simple "skills" and more emphasis on children's *understanding* of the generalizations and other content of the books. The social studies textbook chosen for use in the school is *Let Freedom Ring* (1977), an American history text that is part of Silver Burdett's "discipline centered" social studies series. One purpose of the text is to introduce fundamental concepts from the various disciplines of the social sciences. The authors say, "The curriculum must identify the basic social science concepts and generalizations that are to be developed" (teachers guide, p. 4). At least two "understandings" in either anthropology, economics, history, geography, or political science are listed in the teachers guide for each chapter in the text, and a "unifying generalization" is stated for each chapter.

The following are eight of the 36 understandings listed as *economics* understandings in the (entire) text: "Andrew Carnegie was only one of the many men who went from 'rags to riches' in the age of industrialization." "Industrialization requires not only workers but also people who are willing to invest their surplus capital." "Stockholders are the real owners of a company that is operated by a board of directors who acts in the stockholders' name." "Workers organized into unions to protect their interests." "The slum is visible evidence of a city's inability to solve its problems." "Minority group members often suffer from at least three conditions—social exclusion, economic oppression, political powerlessness—in their relationship with the majority." "To prevent further expansion of communism in western Europe the United States created the Marshall Plan" (teachers guide, pp. 12-24). It should be noted that these basic "understandings" are not particularly analytical of U.S. society, or of the economic system; indeed, one could argue that some of them are not *about* the economy (e.g., the first and last).

The textbook itself contains repeated statements about the value of reform, such as the need for continued improvement in providing civil rights for minorities. In addition, there is an emphasis throughout on cultural pluralism and the value of ethnicity: Indeed, of nine units, one entire unit, "Investigating Cultural Plurality," focuses on pluralism and on various ethnic groups in U.S. society. Its chapter titles are "Immigrants to the United States," "What is an American?" "Civil Rights for all Americans."

Each chapter in the text is followed by activities called "Finding the Facts," "Using the Facts," and "Using the Main Idea." The last one is intended to provide opportunities for creative activities and independent research. It asks the child to "extend the unifying understanding of the chapter" (teachers guide, p. 9). An example is the following: "Using the knowledge you have gotten here, you and your classmates prepare a series of news broadcasts, informing your listeners about each of the develop-

ments listed below (the Boston Massacre, the Battle at Lexington and Concord . . .") (p. 158).

Social studies activity commonly involved reading the text and listening to the teacher's explanations, answering the teacher's questions or those in the text, and occasionally doing a report (e.g., "getting information" on an Indian tribe). Classroom activity rarely involved sustained inquiry into a topic. The fifth-grade social studies teacher said she did not use the text's "Using the Main Idea" activities very often. She said she didn't have time. She said that she has "enough to do to get them to understand the generalizations." "They read it [the text], I explain, and sometimes I give them a quiz." The following are examples of her classroom use of the textbook and a filmstrip that the school bought to accompany the section on American Indian tribes. The teacher introduces the filmstrip by saying, "When you do your report, include any information on your tribe that you see here." After several frames, a student comments, "They [the Indians] look Chinese. The teacher says, "They're from Eurasia, aren't they, so?" Later, the teacher says, "When this tribe died, they _____ (notes undecipherable)." A child asks, "Why did they do that?" The teacher says, "This is the way they wanted to do it." Several days later, when the class is viewing another filmstrip, the teacher reads a frame about the Incas: "There were rich people, nobles, chiefs, and slaves." (To herself, she says, "Now how am I going to explain this?") To the class she then says, "The rich happen to be the chiefs," and she continues reading. Later, a child asks, regarding an Indian tribe, "Why did they kill the bison?" The teacher answers, "I don't know. They had to live. [pause] You eat *hamburgers*, don't you?"

Several days later, reading the text on the Puritan culture the teacher says, "The word was 'economic.' What does that refer to?" A child looks at the page then says, "To make a better living?" The teacher also glances at the page, and says, "Yes, making money."

What Students Said About Knowledge

When I asked the children what knowledge was, seventeen gave me the following responses: "To remember." "You go to a museum." "You learn facts and history." "You study about your ancestors." "To study things we need to know." "It's smartness." "It means you're intelligent." "Remembering." "Knowledge is something you learn." "To know things." "Doing your work in school." "When you study." "It's how you learn in school, what you learn." "Knowing the answers to stuff," "Brains," "Being smart." "It's studying. What you do is store facts in your head like cold storage until you need it later for a test, or your job." Three children said they didn't know what knowledge was; perhaps they did not understand my question.

When I asked where knowledge comes from, I got the following answers: Two said, "From the teacher." "From the old times." "From old books." "From scientists." Two said, "From libraries." Three students said, "From encyclopedias." Three children said, "From books." "From

my mother—she tells me what to do." "From movies or TV?" "From Sesame Street." "Knowledge comes from everywhere." "From Latin?" "You hear other people talk with the big words." It should be noted that these responses have to do mostly with knowledge being "out there," existing in books and libraries, not resulting from one's own activity.

When I asked the children in the middle-class school if they or someone else could make knowledge, nine said no and eleven said yes. The children who said yes gave responses like the following (when I asked them how knowledge would or could be made): Three said, "I'd look it up." (After one of these responses, I asked, "Are you making knowledge when you do a report?" The child said, "No, it's giving yourself knowledge, but not making it. We can't make knowledge, someone has already *made* it!") "You can make knowledge by listening and doing what you're told." Two said, "I'd go to the library." "By doing extra credit." It should be noted that these responses do not suggest a particularly active relationship to the production of knowledge; rather, knowledge is "given" and not made by themselves. Only two boys gave responses that indicated a more active approach to creation of knowledge. One said, "I'd go around and study things. Different countries." The other said, "I'd invent something."

"Possibility" as a Dominant Theme

What emerged as a dominant theme in this school was the sense of *possibility*. While I saw in all schools bulletin boards or lesson plans announcing observance of national holidays such as Columbus Day and Lincoln's Birthday, there was, in the middle-class school, an increased amount of this kind of holiday and patriotic activity, more than in any other school in this study. There were more auditorium plays of a patriotic flavor put on by classes than in any other school (an example was the fifth-grade play, *An All-American Thank You*). The second grades open the day with what is an unusually patriotic introduction to the pledge of allegiance: "We will now pay homage and respect to the flag of our country." Education in particular seems to be accepted as important, indeed vital, to one's ability to get a job or enter college. There was the feeling that if one works *hard* in school (and in life), one will go far. A prominent attitude expressed by the children in interviews and elsewhere was anxiety about tests and grades. All but two said that yes, they were going to go to college, although they did not know where they would go. This sense of possibility also emerged in the children's answers when I asked them if they could be anything that they wanted to be when they grew up; most students (14 of 20) said yes. When I asked what it would depend on, I got the following types of answers: "It depends on how smart you are." "If your grades are good enough." "It's marks—you have to go to college." "Everything is by education." Three of the four who said they might *not* be able to be anything they wanted said it was because "I wouldn't know enough"; "My marks might not be good enough"; and "I wouldn't go to college."

It seems to be the case that knowledge in this school is more conceptual than in the working-class schools in that it is less a matter of facts and skills

and more a matter of traditional bodies of "content." It is, in this sense, understanding and information from socially approved sources. It is also, as Horace Mann said, a possession. Information, facts, and dates can be accumulated and exchanged for good grades and college or a job. Knowledge here, however, is not usually connected to biographies or exploratory activities of the learners, and is thus divorced from processes of personal discovery (as indeed it is in the working-class schools as well). There is, however, in this school, the sense of possibility: school knowledge has real value, if one has "enough" of it.

AFFLUENT PROFESSIONAL SCHOOL

This school in a nearby suburb is surrounded by tall pine trees. Behind it are swings, a playground area, and beyond that two large grassy playing fields. The main building was built in 1911; it has a ranch-style modern wing constructed 15 years ago. The homes along the streets vary in size. Some are set back from the street, with large lawns and long driveways; these are the larger ones and have up to 25 rooms (by count from the street). Others are smaller, with smaller grounds. Inside the school are glass showcases in each hall, with displays of trophies, modern sculpture, children's art work, and, in one, old musical instruments. There are large, overstuffed couches in several corners of the building, in which children often sit and read, or work. The bulletin boards are crowded with children's pictures, charts and writings, and are bright and attractive. Each of the rooms between kindergarten and third grade has a rug in the front. The principal said he wanted his school to have "a family atmosphere," where "we know and nurture every child."

According to several of the teachers, this principal is the only one in the district who "stands up" to the superintendent or the Board of Education. (During the period of the study he resigned—temporarily, as it turned out—because the superintendent denied tenure to a teacher he had recommended highly.) A majority of the teachers in the school are from middle-class or upper-middle-class backgrounds; most are from various parts of the state. All but three are female; most of these are married to professionals or men in business; for example, one fifth-grade teacher was married to a stockbroker, another to a lawyer; one second-grade teacher was married to an "accountant with an M.A. in business," the other to a psychologist.

What School Personnel Said About School Knowledge

Most of the personnel I interviewed in this school referred to school knowledge as involving either individual discovery and creativity, "important ideas," or personal activity on the part of the student (as in the use of science or math equipment).

In response to my question of what knowledge is most appropriate for her students, one of the two fifth-grade teachers said, "My goal is to have the children learn from experience. I want them to think for themselves." She also expressed the wish that they "try to make sense of their experience."

I asked the other fifth-grade teacher (who did not agree to be observed) what was most important in social studies education (her specialty). She told me, "It's learning to think. I use questioning techniques [to get them to think]." The principal said that the students should not just "regurgitate" facts, but should "immerse themselves in ideas." He said that "creativity and personal development" are important goals for the children in his school.

Evidence from the Curriculum and the Curriculum-in-Use

Mathematical knowledge is supposed to come from discovery and direct experience. Activities I observed in the teaching of math included the use of geoboards, making and producing an 8-mm film on the metric system, measuring perimeters of their own drawings and generating questions for others to answer about the drawings, collecting data in surveys, and carrying out other empirical investigations with objects such as cubes and scales. The teacher says she does "all" the pages in the math book which concern mathematical patterns. She told me the publisher has supplemental dittoes for those pages, and she does "a lot of those."

Scientific knowledge in her class is also intended to result from children's experience and attempts to discover for themselves. All fourth, fifth, and sixth grades use the Elementary Science Study (ESS) where typical problems in the fifth grade ask the children to experiment in their own ways with materials such as aluminum and copper and glass rods in order to discover properties of the materials (e.g., which one heats the fastest).⁶ The teacher said the value of the ESS approach to science is that they can "think about what they do." She said, "It gives them a hands-on experience so they can make sense of it. It doesn't matter whether it [what they find] is right or wrong, I bring them together and there's value in discussing their ideas."

In the fifth grade I observed, the teacher often responded to children's questions of "I don't get this," or "How should I do this?" or "What does this mean?" with "You decide"; "What do you *think*?" or "Test it to see if it's right"; "Does that make *sense*?" and "You can figure that out for yourself."

The teacher engages the children in creative writing at least once a day. Many children appear interested in these projects, and the teacher reported that some of them write on their own. A black child, one of three students in the class from working-class families, told me that he keeps a journal and writes a "magazine" on the weekend. Another boy, reading a C. S. Lewis book, said, when I asked him how he liked it, "It's very good, but he writes poorly; he uses too many 'ands.'" When the teacher asked the class to decide how to reassemble on cards and punctuate a short story called "Wally the Watermelon," several children said, as the activity began, "Oh, good." "This is fun." One boy said, "Ooh, can't we *change* it [the story] just a little?"

Although knowledge, thus, is intended as resulting from personal activity, thought, and creativity, there are multiple constraints on this. The teacher, for example, often asks for the "right answer" especially in math,

where "right answers" are part of the system of manipulating numbers. And in science and math, one's work must fit empirical reality (e.g., one must measure accurately, and one's answers must lie in the accuracy of the fit between one's own measurements and the physically observable reality—what is measured). Moreover, in this class one must have one's science and math "data" "verified" by a peer before it is handed in.

Another type of constraint appears in the published reading programs for individualized instruction which form the basis of reading programs above fourth grade in this school (and in the executive elite school). A boxed set of each of the following programs was available and used consistently in the fifth grade that I observed: EDL *Listen and Think* series; SRA *Power Builder*; SRA *Reading Laboratory*; *Reading for Concepts*; *The Yearling*.⁷ While most of these reading programs do attempt to engage the children in conceptual thinking of one sort or another (i.e., analyzing stories, reading for main ideas) all of them are highly systematized and there are almost always "right answers." These answers have been decided on by the designers of the program, and not by the children. Indeed, a problem that a fifth-grade teacher reported to me was that some of the children would write answers to the questions on the basis of what they *thought*, without going back to look at the story. She said she had to remind them often to "look back."

The social studies series used in this school (and in the executive elite school) is Allyn and Bacon's *Concepts and Inquiry Program*. It emphasizes what it calls "higher concept" learning. Unlike the series in the working-class and middle-class schools, it discusses at length such topics as social class, the power of dominant ideas, and "competing world views." The district fifth-grade curriculum is intended to cover ancient civilization (e.g., Sumer, ancient Greece and Rome) and Latin America. This fifth grade spent eight of ten months on Sumer and ancient civilization. The teachers' guides to the series emphasize repeatedly that "conceptual learning should never degenerate into rote memorization followed by boring, parrotlike regurgitation of facts" (*Ancient Civilization*, p. 3). This guide lists 30 "performance objectives" for fourth- and fifth-grade social studies. Although called "performance" objectives, almost all are conceptual rather than behavioral.

The following are typical performance objectives for the fourth and fifth grades: "To understand the roles of savings, capital, trade, education, skilled labor, skilled managers, and cultural factors (religious beliefs, attitudes toward change) in the process of economic development." "To understand the power of controlling ideas." "To understand that the controlling ideas of Western culture came largely from two preceding cultures: The Judaic and Greco-Roman." "To know what is meant by the two world views of Western civilization and to perceive their implications." "To distinguish a mixed economy from a totalitarian system and to identify the United States as a nation with a mixed economy and the Soviet Union as a nation with a totalitarian system." "Given a description of class structure and interclass tension, to explain the idea of class struggle or class war as in the Roman Republic (teachers guide, pp. 8-12).

Classroom social studies in the fifth grade that I observed involved some discussion of the text, but the teacher's emphasis was on artistic, graphic, dramatic, and written elucidation of cultural artifacts and ideas of Sumarians and Ancient Greeks. The teacher said she used the books "basically as a resource." She has the children "read it, and outline it," and uses it as a guide for inquiry activities and discussion. But, she said, most of her ideas for craft activities come from other sources. The class baked clay cuneiform replicas, wrote stories and plays, and created murals on the division of labor in ancient societies. Such activities were supported and facilitated when several families took their children to see the Tutankhamen exhibit and when one boy who had seen a different version of this exhibit in Paris brought in catalogues so the class could compare the two exhibits.

The teacher said she spends a lot of time discussing current events, "because they're so opinionated anyway, and they love it." Each table of four desks had a "News Captain" who assigns the topic for the week, and whose job is to bring in examples from the news. The children often write "editorials," and there were news clippings posted on labor strife, inflation, a nuclear power plant accident, and solar power.

During one discussion I observed, the teacher explained that some people think nuclear power is dangerous. Then she said, regarding the use of coal:

T: Yes. It pollutes. It's a vicious cycle, and nobody knows what the solution is. We do know we need alternative sources of energy. What would happen if we *had* no energy? [And then they got into a discussion of what life would be like "if we had no energy"—i.e., no coal, oil, or electricity.]

I asked the teacher later about her view of discussing controversial issues, noting that she had indeed shied away from a discussion of potential social responsibility and alleged suppression of harmful news by the nuclear industry. She said yes. I asked her why. She paused, then said, "One year I had the superintendent's son, the mayor's son, and the daughter of the president of the Board of Education in my room—all at one time! I *really* had to watch what I said. That was quite a year." She then indicated that she did not want to discuss the matter further.

What Students Said About Knowledge

When asked about what knowledge is, the children gave the following responses: "The way you think. Yes, the way you think." "Ideas and, um, smart people can find a lot of problems. They can think about them and they can realize them [sic]. When there is something wrong, they can realize what's wrong with it." "You think up ideas and then find things wrong with those ideas." "I don't know." "Being smart." "Knowing a lot of subjects." "It's when you know something—you can be a great scientist." "When you know something really well. It's . . . you'll never forget it; you got it down pact in your mind [sic]." "A way of learning, of finding out things." "Figuring out stuff." "Brains—I just think of Albert Einstein." "I forgot." "How smart you are—a brain." "Thinking." Three said, "What

personal discovery intended by the science and math programs, and in the principal's and teachers' stated emphasis on personal development and creativity as important goals of education. The emphasis on individual expression was apparent in the play put on by the sixth grade. It was written by several girls in the class and it was extremely funny. To quote from my observation notes:

It's an original play written by some girls in 6A. It amazed me. It's upper-middle-class individualism at its utmost. They're really hamming it up, enjoying it, and it's really very clever and funny. It parodies silly girls who flirt with boys and act "cute," but who do not act intelligently. It is about an Orange King and a Pink Queen who order the children ("peasants") around without telling them why, and who have great power to give the peasants tasks. The peasants were told to go and look for something. But they weren't told what it is they're supposed to be looking for. The problem is solved when a girl decides that they will kill the king and queen, who "would die of hate anyway." Several roles were reversed, with boys playing girls' roles and girls playing boys' roles. As I'm sitting by the fifth-grade teacher watching and laughing, she says, "It'd be even funnier if you *knew* them. Each one has *such* a personality." During lunch in the teachers' room the teacher whose class it was said, "Yes, [it was good]. But, you know, you're always limited when they [the children] write the script."

In addition to the stress in this school on individual development and expression, there was a stress on (or minor theme of) what I will call "humanitarianism" or "liberal ideals." The principal closes the morning intercom announcement each day with "do something nice for someone today." There is a "Good Deed Box" in the office and a certificate distributed on Fridays for a child who has done the nicest thing for "somebody who needs something nice." As in the executive elite school, there are clothing and food drives "for the poor." The social studies series attempts to be honest about society, recognizing, as it does, social classes, controlling ideas, and class conflict. It is also the most "liberal": Because of the recognition of social conflict, for example, there appear to be good reasons for social struggle, labor unions, and civil rights legislation. There is an entire fourth-grade textbook devoted to discussion of (and entitled) *Prejudice and Discrimination*.

Almost half of the children (8 of 20) expressed, in interviews, an attitude of antagonism to "the rich." In each case I had asked the children whether they thought they would be poor, middle class, or rich when they grew up. After they answered, eight volunteered comments such as "Rich people are greedy," and "spoiled." "They get everything they want; I know a kid who gets a new ten-speed bike every two years!" Rich children are "snobby." The girl who said that pointed out another in the hall who "comes to school with her chauffeur," and who "wears little muffs." Another student later pointed out a boy who is "so rich he thinks he can get away with anything! He has two *elevators* in his house!" One girl whose father and mother are both doctors said, "I wouldn't *want* to be rich. You don't have to work then, and I *like* to work."

Many of these children of affluent professionals are not at all sure they can be anything they want when they grow up, and their futures seem less

- UNITED STATES BUREAU OF THE CENSUS. "Money income in 1977 of families and persons in the United States." In *Current population reports, Series P-60*, no. 118. Washington, D.C.: United States Government Printing Office, 1979.
- YOUNG, MICHAEL . and WHITTY, GEOFF. *Society, state and schooling*. Sussex, England: Falmer Press, 1977.
- ZINN, HOWARD. *A people's history of the United States*. New York: Harper and Row, 1980.

than certain to them. Only half of them thought they could be anything they wanted, although all but one were sure they were going to college. Almost all wanted to go to a "good college." They all told me that to be anything you want "You really have to try hard" and "You have to go to the right college." One boy said, "It's luck. You need so much luck, it's incredible." Several spoke of wanting to meet their "potential." Two boys said they wanted to be "known," and spoke of how much hard work that would take. (For example, "You come in and ask the teacher for help even if you don't need it.") A black working-class boy said that what you will be depends on "your marks and if you go to college." He thought he probably *wouldn't* go to college, he wouldn't have the money; "and I'm *broke*, now!" he said.

It seems to be the case that knowledge in the affluent professional school is not only conceptual but is open to discovery, construction, and meaning making; it is not always given. Knowledge is often concepts and ideas that are to be used to make sense, and that thus have personal value. Although knowledge may result from personal creativity and independent thinking, there are constraints and directives on what count as answers. Knowledge has individualistic goals, but it also may be a resource for social good. It is analytical and more realistic about society than knowledge in the middle-class and working-class schools. The children are also getting a good dose of two dominant social ideologies: that the system itself will be made more humane by expressions of concern for the less fortunate, and that individuals, not groups, make history.

EXECUTIVE ELITE SCHOOL

The school is a handsome Colonial-style building, with a large white portico on the front. It was originally built in 1929; an addition was added in 1949; a second in 1956, and a new library in 1972. The school sits back from the street on a broad lawn with several bushes and trees in front of it. The door has shiny brass trim, as do the principal's office and the teachers' lounge. Each classroom has polished oak cabinets with cut-glass doors. The windows of the classrooms sparkle. There is an asphalt play area in back, and beyond that two large grassy playing fields and a running track. The principal is involved, with some of the parents, in building a "tire playground." Most of the homes along the streets near the school are large estates, partially hidden by foliage and long driveways.

A recent state order to integrate the town's schools led to a Board of Education plan to bus students from a school which had the majority of the town's blacks and low-income whites. Some of the students were to be bused to the executive elite school. The plan was dropped after parents at the executive elite school threatened to pull their children out of the school and put them in private schools. As of this writing, all elementary schools in the town will be integrated except the executive elite school: there will be no busing; the school that is predominantly black and low income will be closed, and its students will walk to other schools (the closest is over a mile away). There will be no black or low-income children in the executive elite

school. One of the teachers I was observing offered her reason for the parents' actions. She said, "It was class, not race. They [the parents in this school] didn't want any low-income kids here. They didn't want the discipline problems. And they didn't want the [achievement] scores lowered, to hold back their kids. I taught over there once," she said, referring to the school that would be closed, "and you can't teach them *anything*! They're flying all over the room. And their parents don't care about education. One father, he was a plumber, he said, 'well, if being a plumber is good enough for me, it's good enough for my son. What does he have to go to college for?' "¶

Many of the teachers in the executive elite school are from middle- and upper-middle-class backgrounds. One older teacher spoke of her first year teaching, saying she loved it so much that she never even cashed her paychecks, just threw them in her drawer (she had been living with her parents). All the teachers are female except for the gym teacher. Most are married to professionals or to men in business (e.g., to a doctor, an insurance executive).

All teachers with whom I spoke regarded their students as of higher social status than themselves. One teacher contrasted the part of town she lived in with this one, saying she lived in a section like that of the [affluent professional] school which is "more mixed." Another teacher said, "These people are the successful ones. They know who they are; there is a class structure in this society and these people are at the top. And they know what they want for their kids. And some of them know where they came from—the ones who worked their way up." Another teacher said, "It's in their genes. They're handsome, you should see the fathers. They even *look* like executives!" A third-grade teacher said, "They're the successful ones. And some got that way through marriage." Said a first-grade teacher, "They're at the top, and they have breeding." "Breeding?" I asked. "It's a way of talking, dressing, even the mothers are well educated," she responded. "And they run the town!"

What School Personnel Said About School Knowledge

When I asked the two fifth-grade and two-second grade teachers in this school what knowledge was important for their students, most referred to intellectual processes such as reasoning and problem solving. One said, "They'll go to the best schools, and we have to prepare them." Another said, "It's not just academics; they need to learn to think. They will have important jobs, and they need to be able to think things through." When I asked a second-grade teacher who I was observing what was appropriate knowledge for her students, she said, "They need to learn the basics, we're going back to that now." "The basics?" I asked. "Yes, to think and write properly." Referring to science, a fifth-grade teacher said, "I try to get them to create an environment where they can solve problems—they manipulate variables and solve a problem."

The superintendent of schools, who has an Ed.D. from Harvard University, is attempting to institute a "Philosophy for Children Program" in the school, the purpose of which would be "to teach children to think

and reason correctly, and to come up with valid conclusions."⁹ The fifth-grade teachers in this school said they have been instructed by the superintendent to develop an "Olympics of the Mind"—a competition of "open-ended questions" for which there are no "set answers." (This would accompany the Field Olympics held by the fifth grades [in this and the affluent professional school] at the end of the year, at the end of their study of ancient Greece. The Field Olympics during this particular year included chariot races, a torch-lighting ceremony written by several children, and the culminating races to year-long competition in gym class track and field. Gold and silver medals were awarded.)

Evidence from the Curriculum and the Curriculum-in-Use

The fifth-grade teacher who teaches math said that her goal in this subject is the development of mathematical reasoning. She said the "demands" of "getting through the curriculum" do not leave her time to have the children "explore" with manipulables such as geoboards. She said she also tries to teach math as a "decision-making process." For example, presenting a new type of division problem to her class, she asks, "What's the first decision you'd make if presented with this kind of example? What is the first thing you'd think, Craig?" Craig says, "To find my first partial quotient." She responds, "Yes, that would be your first decision. How would you do that?" Craig explains, and then she says, "OK, we'll see how that works for you." She usually asks the children to explain why their answers are right or wrong, to explain how they know or how they found out an answer. She often says to her classes, "If you think logically [or rationally] about it, you can figure it out." Indeed, in every math class observed, she asked her class questions which required them to manipulate hypothetical variables to solve the problem.

Science is another subject in which intellectual process such as reasoning was stressed. The principal said that all teachers in the school are "required" to use a science program. The fifth- and sixth-grade teachers used the ESS. According to the principal, the rest of the teachers in the school use Science—A Process Approach (SAPA). SAPA was designed to present instruction that is "intellectually stimulating and scientifically authentic." It focuses on the processes involved in scientific reasoning, and there is a "progressive intellectual development with each process category." The children are expected to learn such things as how to infer internal mechanisms of plants, how to make and verify hypotheses about animal behavior, and how to perform experiments on the actions of gases.¹⁰ A second-grade teacher I observed said she likes the program because "it's integrated and organized. And it tells you exactly what to do."

While this school used the same social studies series as the affluent professional school, social studies instruction in the classes I observed here was more academically (rigorously) organized than in the affluent professional school, followed more closely the discussion questions posed by the text, and involved a large amount of independent library research but very little creative or artistic project work. The fifth-grade social studies teacher said she based her instruction on discussion questions in the text and

district study guides, and on activities provided by ten "individual study packets."

The fifth-grade social studies guide for the district was written by the former fifth-grade teacher in this school and the district social studies specialist. The former social studies teacher in this school also wrote the individual study packets of research and writing activities for the fifth-grade topics. (These were not available in the affluent professional school.) The district guide to the fifth-grade units on ancient Greece and Rome states the rationale for the course of study: "By an increased awareness of past problems and the human conditions which cause these problems, maybe we can prevent what Arnold Toynbee has pointed out, 'Nineteen of twenty-one civilizations have died from within and not by conquest from without. There were no bands playing and flags waving when these civilization decayed. It happened slowly, in the quiet and the dark when no one was aware'" (p. 2). The guide takes many of its questions and activities from the Allyn and Bacon series.

Social studies knowledge was more sophisticated, complex, and analytical than in other schools. The social studies teacher I observed said she tried to have the children tackle the "important concepts." The following are examples of questions from the children's text that I heard discussed in class: "Greek comedies often poked fun at popular leaders. Would this be possible in a society that was not free? Can you think of any bad effects this might have? Any good effects?" "Look up the word 'imperialism,' What are some good and bad effects of imperialism?" (p. 41) "Were the Athenians wrong in condemning Socrates for his beliefs? Would you expect a person to be put to death for their ideas in a democracy? Explain" (p. 51). "There were two main classes in the early Roman republic. There were the noble, wealthy *Patricians*. There were the common people, or *plebs*. Would you expect these classes to get into quarrels? . . . Find out about the struggle between plebs and patricians in 494 B.C. The plebs went "on strike." What rights and protections did they get as a result?" (p. 80)

Social studies knowledge in this school also involved an explicit recognition of social class in ancient history. For example, the text identified, and the students discussed, what the text calls a "ruling class" in ancient society. In every chapter but two in the text on Greek and Roman civilization, there is the heading "Classes in Society" (with relevant concepts identified). Questions I heard discussed in the classroom included "What class conflicts occurred?" (*Greek and Roman Civilization*, p. 74) and "How was class structure affected by changes in property ownership after the Punic Wars?" (p. 74).

Not only textbooks but the individual study packets as well included an explicit recognition of social class. There were two fifth-grade packets for independent study of Latin America. One was on geography, and the other was called "Class and Culture." Sample questions follow: "Pretend you are a member of the upper class or lower class of Latin America. Write your 'life story.' Include the history of the group you are in. Where were you born? What were your ancestors and parents like? Will you always belong to this social class? What is your day-to-day life like?"

Scattered throughout the teacher's guide are references to other social classes, for instance, "the lower classes," "the common classes." For example, "Rule by the ignorant and easily swayed lower classes led to grave errors in judgment like the Syracusan expedition" (teachers guide, *Greek and Roman Civilization*, p. 55). "Whatever his political views, Pericles was no imitator of the 'common man.' It was precisely this restraint, control and rationality that made Pericles a valuable leader. Witness the conditions after his death, when 'common men' became leaders of Athens: the rationality, direction, and sensible restraint that had characterized policy in Pericles' day suddenly evaporated, leaving a splintered, chaotic, and impulsive Assembly in charge of formulating policy" (teachers guide, *Greek and Roman Civilization*, p. 39). [Interestingly, however, while the series is quite explicit about classes in ancient Greece and Rome (and Sumer), and a sixth-grade text called *The Challenge of Change* is quite explicit about the social class divisions in European history ("upper classes" were "the gentry, nobles, bishops"; the "middle classes" were "the Bourgeoisie[sic] or merchants, tradesmen, yeoman farmers, lawyers, doctors and clergymen" and the "lower classes were small farmers, laborers, the poor") (p. 29), the textbook series does not discuss class in this fashion in the American history textbook it provides for fourth grade, and there is no division there of U.S. society into social classes.)

While classroom social studies knowledge tends to be *analytical*, neither text nor most social studies discussions were *critical* of the social class structure or distribution of wealth and power; rather, they gave it high value and a "naturalness," or "timelessness," going back, indeed, to ancient Greece. There were occasions, however, in the classroom of the fifth-grade teacher who teaches math, science, and health but not social studies, when class discussions were "almost" critical; that is, the teacher often asked the children *why* things were done or happened in a certain way, when that way appeared to be *irrational*. For example, after showing the class a film on the making of a Morton's "cream" pie almost entirely with chemicals, she asked, "Why do companies put chemicals in food when the natural ingredients are available?" The following excerpt of a discussion in this teacher's class provides a further example of her attempt to have her class give critical thought to a social problem. Strikes of newspaper workers, sanitationmen and truckers had been in the news. The children had just read for homework a story in their *Scholastic News* about a teachers' strike.¹¹

T: OK, suppose I'm the manager and you ask me, and I won't give you a raise. Then what do you do? David?

S: Strikes are *not* a good idea: the public is always affected. Students don't learn if teachers strike.

S: Companies don't make profits if workers strike.

T: I'm asking you question to help you think this through, I'm not saying I'm not agreeing with you.

S: It goes both ways. Take the newspaper strike. A worker may have a family he or she has to support, but without newspapers, we don't know, as David said.

T: But what if you really feel . . .

S: (cuts off the teacher) If you really feel strongly, you should.

- S: No. The students were hurt by the strike of the teachers. (He begins a monologue about how the teachers shouldn't strike because it hurts the public. The teacher finally calls on another student.)
- S: Workers say, "I think I deserve a raise for building really good cars." But the managers are against strikes. They say, "Workers only work eight hours and I work twelve. Why *shouldn't* I get more?"
- T: A lot of you are concerned about the public. But suppose you have a boss who really takes advantage of you. What then?
- S: I'd probably try to find another job. I wouldn't stay with that creep!
- T: I want you to think about this. We won't have time to discuss it; I'm the boss.
- S: You're always the boss. (Laughter, teacher smiles).
- T: I say, "Strike and I'll fire you. I don't need you. . . . I'm going to buy a machine!" Think about that. (They get up for lunch.)

Discussions like this one and indications that such discussions may go on in other rooms (e.g., intricate bulletin board displays of designs for home heating with solar power; school clothing and food drives; stories written about families who are poor and black; and district-run affirmative action and sexism awareness workshops for teachers) indicate that the school may play a politically liberalizing role in the children's upbringing. For example, the discussion the teacher and students had about strikes seems to have made some impression on them. During the discussion only one child came out in favor of strikes. One said to me on the playground at lunch, "Mrs. [B] was for strikes, but we weren't." Several weeks later when I was interviewing the children I asked all interviewees if they thought strikes were right or wrong. Only two children said strikes were wrong; three children said yes, strikes are right; and all the rest but one (14) said "It depends." The children who said it depended gave responses like the following: "They're right *and* wrong; it depends on how you do it. The union figured out a way to make picket lines legal, and that's wrong. But you can't fire all the people; you won't be good in the public eye and your product will go down. Then you'd go bankrupt and have to close the company for a while." "Well, it depends; it's OK if it's really gone too far, but the *idea* doesn't hit me too well. It's just a public disturbance." "They're right and wrong. Mrs. [B] said people *should* strike to get enough money. And most people in the class didn't agree with her. My parents said maybe the company can't give the workers more, and they should try to talk it out."¹²

What Students Said About Knowledge

When I asked them what knowledge was, the children in this executive elite school gave the following answers: "Knowing certain things." "You have to really figure it out." "Thinking." "Knowing something that not too many people know; deep down, that's your knowledge. You have your opinion and then you know inside for sure, but the other person's never heard it before." "What you're *expected* to know." "What you're supposed to know." "It's being able to know and answer questions." One child said, "It depends on how you use it [the word]. There are two kinds of knowing: information knowing and wise knowing. Information knowledge, that's what you learn in school. Wise knowing is moral knowing, it's maturity. You learn that in life. . . ." "It's information that you've gotten, like in

school." "It's like knowing what something is when the teacher is explaining," "It's—you know what it is you understand—that's knowledge: *Understanding!*" (He smiled; he was quite pleased.) "Questions that you try to answer after the teacher has given you an idea. Some questions have only one right answer and some have more than one right answer, like in social studies." (She smiled.) (I asked her to give me an example of a question with more than one right answer. She said, "What did the Athenians do wrong? What mistakes did the great leader Pericles make?") "You have to be able to figure out things sensibly. A mouse wouldn't just walk from here to there; he would only do it for cheese. You don't do things just for the exercise!" "Knowledge is really the confidence that you *got* knowledge." "Knowing more than anybody." "Being the best." Three others said, "Knowing things." "When someone asks you a question you can answer it without any trouble—like I've been answering yours—only thinking for a minute."

The answers of the children in this school seem to speak less to creativity or thinking independently or making "sense," as did the answers given by many affluent professional children. Rather, these children spoke to the need to know *existing* knowledge and to do well, to understand, explain, and answer correctly (and quickly). The answers of many of these children were, without prodding on my part, longer than those of most others in other schools, and some were conceptually more sophisticated. Most of these children were quite tense during the interviews. They listened closely, tried to answer precisely and quickly, and were somewhat stiff, very formal and polite. (Each, when getting up, very carefully pushed his or her chair under the desk in the science room where we had been sitting. Most, as they left the room, said very politely, "Thank you.") One boy came back after lunch to change his answer to the question, "What is knowledge?"

When I asked where knowledge comes from, more than half (13 of 20) said, "from past experience" or from "tradition," or "other people." Only three mentioned that knowledge comes from one's brain or what one does. Several answers that call forth tradition were "How are you using that [the word knowledge]?" I say, "information knowing." He says, "Well, actually it began long ago—as accidents. Like fire, supposedly the Greeks . . . Somebody learned it, say, two pebbles and two stones, that's four. They figured it out, and now it's been passed down and everybody knows it, or most people."

When I asked, "Can you make knowledge?" ten said yes, nine said no, and one said, "That's a ridiculous question!" When I asked, "How could you make knowledge?" five said, "Learning—when other people teach you." "If you find something." "If I do an experiment in school I can find out if something is true or false." "If you invented something." "If you wanted to figure something out—whether if no one knew that two plus two is four, you could go out and figure it out." The rest said, "It depends." For example, "It depends. You could learn *some* stuff by yourself, but you could never learn to *talk* by yourself. Yes, that's a good example." "Not really," said one girl, "you can make computers, and they make knowledge. But you can get it, or have it, and put it in something." These children, as compared to the affluent professional children, took a some-

what more passive attitude toward the creation of knowledge. For many, it comes from tradition, it is "out there," in what is known and expected of you, and you must learn it and know it.

One boy, who said he wants to be "a well-known lawyer like my father," told me, "You don't know you're the best until you've beaten the best." Seventeen of the 20 children said, without hesitation, yes they could be whatever they wanted when they grew up. Most (14), however, did not have any clear idea of what they wanted to be. They spoke of how good they were at soccer, skiing, swimming ("better than most kids my age," said one boy). Another said, "I'm interested in so *many* things that I can make something good out of anything." One boy said, "I could be the president if I wanted, but that doesn't turn me on." A girl offered that she could be the president's wife if she wanted, and then she said, "But I'm not *that* smart" (she was one of three children in the class whose IQ was above 140). When I asked what being anything they wanted to be would depend on, they said, "It depends on how hard you try," "on having self-confidence," and "on going to the right school." The schools they mentioned were (in declining order of number of times mentioned): Harvard, Yale, Princeton, Notre Dame, Lehigh, Columbia, "Harvard graduate school for business," and "MIT graduate school in science."

Excellence as a Dominant Theme

Where resistance appeared as a dominant theme in the working-class schools, "possibility" in the middle-class school, and narcissism in the affluent professional school, what emerged in the executive elite school was a theme of excellence—the necessity of preparation for being the best, for top-quality performance. This does not allow for narcissistic coddling, but demands a great deal of "toeing the line," and self-discipline. (This is not to imply that all the children had such self-discipline, for, indeed, there was a competing subculture in the fifth grade, to be discussed in a following paragraph.) What it does imply, however, is that the exhortation to top-quality performance was a dominant theme in the school and in student-teacher interactions.)¹³ For example, the academic pace was much brisker here than in any other school. The teachers often told the children that they alone were responsible for themselves, for "keeping up," and for their work. This was the only school in the study in which the children were required to be doing schoolwork *before* the late bell rang to start the day. The principal, referring to his teachers, said, "We have no laggards in this school." He issued numerous memos regarding "quality instruction," "making use of every moment," and the importance of high student achievement scores. In April a fifth-grade teacher said to me, "The teachers are panicked. There's so much of the curriculum to get through before the end of the year." Many children in the school, it appeared to me, were more intense in competition and performance than most children in other schools. Indeed, some of them defined school knowledge in terms of their ability to perform well, for example, to answer my questions.

There was a small subculture that runs counter to this theme. There was a group in the fifth grade (and sixth grade as well, according to the

principal) who made a great show of being "cool," being "hip," "not trying too hard," wearing work overalls, carrying "hair picks," hand-slapping each other, and trying to use street talk in the classroom. This group exhibited a bit of cynicism in social studies classes about patriotism, as well. For example, during a discussion of the ancient Greeks in which the class was comparing the Greek polis with the U.S. republic, the teacher mentioned the patriotism and pride that the Athenians had had in their city. One girl then said, "I'm not patriotic anymore." The teacher glanced at me, with a half-smile and a raised brow, and then asked the girl why she wasn't patriotic. The girl began telling how "ticked off" her second-grade class had got when they wrote a letter to President Ford telling him that he had won their mock election. "We copied the letters over and over to make them perfect," she said. "And he only answered one person!" The teacher then said, "Hmm, how *do* we show patriotism?" One child said, "We don't." Another said, "Voting?" A third, "Enlisting in the army?" Another, "We come to *school*!" Someone responded, "But that's a law!" The teacher said, "Let's take a vote. Who is more patriotic—the Greeks . . . or us?" All the children voted for the Greeks. A girl said, "We don't *have* much patriotism. We don't force anyone to do *anything*." The teacher went on to another topic.

The data suggest that knowledge in this executive elite school is academic, intellectual, and rigorous. There is an attempt to teach more, and more difficult, concepts than in any other school. Knowledge results not from personal activity or attempts to make sense, but from following rules of good thought, from rationality and reasoning. In many cases, knowledge involves understanding the internal structure of things: the logic by which systems of numbers, words, or ideas are arranged and may be rearranged. There is a sense and a practice that the rationality of logic and math is the model of correct and ethical thinking, and living. Intimately connected to what counts as knowledge for most children in this school is the perceived pressure to perform, to excel, to get into the "best" schools. Although highly privileged, many of these children are working *very* hard to keep what they have.

Conclusion and Implications

I would conclude that despite similarities in some curriculum topics and materials, there are profound differences in the curriculum and the curriculum-in-use in the sample of schools in this study. What counts as knowledge in the schools differs along dimensions of structure and content. The differences have been identified and discussed briefly in the foregoing sections; now they will be assessed for social and theoretical implications. The assessment will focus on reproductive and nonreproductive aspects of knowledge in each social-class setting. "Reproductive" will refer to aspects of school knowledge that contribute directly to the legitimation and perpetuation of ideologies, practices, and privileges constitutive of present economic and political structures. "Nonreproductive" knowledge is that which facilitates fundamental transformation of ideologies and practices

on the basis of which objects, services, and ideas (and other cultural products) are produced, owned, distributed, and publicly evaluated. The present definition of social change as fundamental transformation transcends the goals of, but does not deny the importance of, humanitarian efforts and practices in institutions such as the school. As we shall see, however, the genesis of truly transformative activity is in the contradictions within and between social settings.

In the working class schools there are two aspects of school knowledge that are reproductive. First, and quite simply, students in these schools were not taught their own history—the history of the American working class and its situation of conflict with powerful business and political groups, e.g., its long history of dissent and struggle for economic dignity. Nor were these students taught to value the interests which they share with others who will be workers. What little social information they were exposed to appears to provide little or no conceptual or critical understanding of the world or of their situation in the world. Indeed, not knowing the history of their own group—its dissent and conflict—may produce a social amnesia or “forgetting” (Jacoby, 1975). Such “forgetting” by the working class has quietistic implications in the social arena and potentially reproductive consequences.

A second reproductive aspect of school knowledge in these working-class schools was the emphasis in curriculum and in classrooms on mechanical behaviors, as opposed to sustained conception. This is important to a reproduction of the division of labor at work and in society between those who plan and manage (e.g., technical professionals, executives) and the increasing percentage of the work force whose jobs entail primarily carrying out the policies, plans, and regulations of others. These working-class children were not offered what for them would be *cultural capital*—knowledge and skill at manipulating ideas and symbols in their own interest, e.g., historical knowledge and analysis that legitimates their dissent and furthers their own class in society and in social transformation.

These aspects of school knowledge in the working-class schools contribute to the reproduction of a group in society who may be without marketable knowledge; a reserve group of workers whose very existence, whose availability for hire, for example, when employed workers strike, serves to keep wages down and the work force disciplined. A reserve group is, of course, essential to capitalism because lower wages permit profit accumulation, which is necessary to the viability of firms, banks, state budgets and other bank-financed budgets of, one could argue, the entire system.

On the other hand, however, there is a major contradiction in school knowledge in these working-class schools, and from this may emerge a situation that is potentially socially transformative. Teacher control of students is a high priority in these schools, as in other schools. What the teachers attempted, in these two working-class schools, however, was *physical* control. There was little attempt to win the hearts and minds of these students. Now, our own era in history is one in which social control is

achieved primarily through the dominant ideology and the perceived lack of ideological alternatives. But the working-class children in the schools studied here were taught very little of the ideology that is central to stable reproduction of the U.S. system, e.g., traditional bodies of knowledge that include the ideologies of an alleged lack of social alternatives to capitalist organization, patriotism and nationalism, faith in one's own chance of "making it big," and belief that the economy and polity are indeed designed in the interests of the average man and woman. In some cases, children in this study gave evidence that they had already rejected the ideologies of patriotism and of equal chances for themselves.

The absence of traditional bodies of knowledge and ideology may make these children vulnerable to alternative ideas; the children may be more open to ideas that support fundamental social change. Indeed, some of the children were already engaged in struggle against what was to them an exploitative group—the school teachers and administrators. They were struggling against the imposition of a foreign curriculum. They had "seen through" that system. The children's struggle, however, was destructive to themselves. Really *useful* knowledge for these students, e.g., honest "citizenship" education, would authenticate students' own meanings and give them skills to identify and analyze their own social class and to transform a situation that some already perceive is not in their own interest.

A social and theoretical implication of the education of the working-class students in this study, then, is that while a reserve pool of marginally employed workers is perhaps assured by modern schooling, ideological hegemony is not. Ideological hegemony is, rather, extremely tenuous, and the working class may be less ideologically secured than some other social groups. What is important is to make available to working-class students the cultural and ideological tools to begin to transform perspicacity into power.¹⁴

In the middle-class school, the children I observed were not taught the history of workers or of dissent, nor were they instructed to unify around common interests they will have as wage earners in a system in which many middle-class jobs are becoming increasingly like industrial and clerical jobs—mechanical and rote (for example, computer, technical, and social work; other service jobs; perhaps teaching; nursing and other formerly professional jobs). There were, however, distinguishing characteristics of knowledge in this middle-class school that are important primarily because of the social-class location of the families. For example, the notion of knowledge as originating in external and externally approved sources, as generated and validated by experts, may yield a passive stance before ideas and ideology and before the creation or legitimation of new ideas. This, of course, has implications of intellectual passivity, and ideological quietude. Moreover, school knowledge in the middle-class school was highly commodified. The reification of ideas and knowledge into given facts and "generalizations" that exist separately from one's biography or discovery contributes to the commodification of knowledge. It is true that knowledge in the working-class schools was reified as well. However, in order to be a commodity, a product must have some value in the market-

place and must be perceived as having some value, or no one would "buy" it. That is, it must have an exchange value. Traditional conceptual or academic knowledge in the working-class schools is not perceived by many teachers or students as having exchange value in the marketplace, or workplace, of working-class jobs. Therefore, it does not have commodity status. In the social class position of the present middle-class school, however, the teachers and students perceive the knowledge to have market value: there is a perceived chance that if one can accumulate facts, information and "generalizations," one can exchange them for college entrance or for a white-collar (perhaps even professional) job. But as is true of all commodities, when one exchanges an object, one gives up its use for oneself. Furthermore, a commodity is useful only in an exchangeable, objectified form. Forms in which knowledge is useful for reflection, critical thought, or making sense do not generate as much value in the competition for college entrance and the majority of U.S. jobs.

Commodification of knowledge in the middle-class school is reproductive in part because it helps to legitimate and reproduce the ideology of production for consumption, for example, production of knowledge and other cultural products for the market rather than for personal use or for social transformation. (An actively consuming public is, of course, a material necessity in a capitalist system, and thus legitimation of the ideology of consumption—of production for consumption—has direct economic reproductive consequences as well.)

There is a second aspect of knowledge in the middle-class school that is reproductive. This is also a part of the apparent acceptance or belief in the possibility of success for oneself. It is a social fact of major importance that the U.S. middle class is a group whose recent history has shown rapidly decreasing economic stability for individual families. There is, thus, material reason for the reification of knowledge into accumulatable form and for the anxiety which the children manifest concerning tests, college, and jobs. For example, the amount of attention one must pay to "getting ahead" not only leaves little interest or time for critical attention, but it also actively fosters and strengthens belief in the ideologies of upward mobility and success. For example, "If I do not believe that there is a chance for me, and that I can succeed, why should I try so hard? Why go along?" I must *believe* in order to work hard; and to work hard increases the personal (psychological) necessity of my belief. So, the perception of social possibilities for the middle class hinted at in this study and the ideologized and reified school knowledge found in their schooling contribute not only to some of them "getting ahead," but to the production of a class with perhaps the highest degree of mystification and ideological internalization. This, of course, is reproductive.

There is, however, a potentially nonreproductive contradiction to be foreseen regarding school knowledge and the lives of these children. Many of those whose schooling and families have promised them a high reward for working hard and doing well will actually *not* succeed in the job market. This situation, after years of schooling in ideology and promises, may serve to generate cynicism or, more constructively, a critical view of

achieved primarily through the dominant ideology and the perceived lack of ideological alternatives. But the working-class children in the schools studied here were taught very little of the ideology that is central to stable reproduction of the U.S. system, e.g., traditional bodies of knowledge that include the ideologies of an alleged lack of social alternatives to capitalist organization, patriotism and nationalism, faith in one's own chance of "making it big," and belief that the economy and polity are indeed designed in the interests of the average man and woman. In some cases, children in this study gave evidence that they had already rejected the ideologies of patriotism and of equal chances for themselves.

The absence of traditional bodies of knowledge and ideology may make these children vulnerable to alternative ideas; the children may be more open to ideas that support fundamental social change. Indeed, some of the children were already engaged in struggle against what was to them an exploitative group—the school teachers and administrators. They were struggling against the imposition of a foreign curriculum. They had "seen through" that system. The children's struggle, however, was destructive to themselves. Really *useful* knowledge for these students, e.g., honest "citizenship" education, would authenticate students' own meanings and give them skills to identify and analyze their own social class and to transform a situation that some already perceive is not in their own interest.

A social and theoretical implication of the education of the working-class students in this study, then, is that while a reserve pool of marginally employed workers is perhaps assured by modern schooling, ideological hegemony is not. Ideological hegemony is, rather, extremely tenuous, and the working class may be less ideologically secured than some other social groups. What is important is to make available to working-class students the cultural and ideological tools to begin to transform perspicacity into power.¹⁴

In the middle-class school, the children I observed were not taught the history of workers or of dissent, nor were they instructed to unify around common interests they will have as wage earners in a system in which many middle-class jobs are becoming increasingly like industrial and clerical jobs—mechanical and rote (for example, computer, technical, and social work; other service jobs; perhaps teaching; nursing and other formerly professional jobs). There were, however, distinguishing characteristics of knowledge in this middle-class school that are important primarily because of the social-class location of the families. For example, the notion of knowledge as originating in external and externally approved sources, as generated and validated by experts, may yield a passive stance before ideas and ideology and before the creation or legitimation of new ideas. This, of course, has implications of intellectual passivity, and ideological quietude. Moreover, school knowledge in the middle-class school was highly commodified. The reification of ideas and knowledge into given facts and "generalizations" that exist separately from one's biography or discovery contributes to the commodification of knowledge. It is true that knowledge in the working-class schools was reified as well. However, in order to be a commodity, a product must have some value in the market-

the system. Also, the fact that many of these students will go to college may expose them to alternative ideas. They may be exposed to authors and professors who present alternative views and critical assessments of the social order. From this new knowledge and social perspective, they may, perhaps, be moved to utilize their own curiosity, to begin to use knowledge to question what is. Such questioning is a beginning of any socially transformative activity.

In the affluent professional school there are several aspects of school knowledge that are reproductive. First, the children are taught what is, for most of them, their own history—the history of the wealthy classes. They are taught that the power of their own group is legitimate. They are, as well, taught ways of expressing and using such ideas—that ideology—in their own interests. They are being provided with cultural capital. Indeed, the fact that the knowledge of their own group is socially prestigious knowledge enhances the exchange value of their knowledge as capital. Moreover, because many affluent professional jobs (doctor, lawyer, professor, scientist) still require conception and creativity and independent thought, many of the children in this school will be in the privileged position of having the use value of their knowledge (for personal creativity, for example) be at the same time its *exchange* value (for example, they will get paid for doing creative, conceptual work).

A second aspect of school knowledge that is reproductive here is its nascent empiricism (by empiricism I refer to the emphasis in adult science on basing knowledge on experience and on appearances, on observable data this experience produces.) As the basis for knowledge or explanations, empiricism is socially reproductive when it provides a framework for allegedly independent thought. Empiricism uses characteristics of observable data and characteristics of the observed relationships between data for its explanations; empiricism eschews explanations and analyses which are based on transcendent and nonempirical knowledge (see Bernstein 1978). This mode of inquiry thus uses categories and explanations that are confined to what already exists, to what can be observed. This mitigates against challenges to the necessity or naturalness of these categories and of what exists. School science programs and math manipulables make a small contribution, then, to the legitimation of empiricism as a way of seeking and testing knowledge, and to the acceptance of what is, as opposed to what could be. The programs are, in this case, a potential invisible boundary of the social thought of these children.

Accompanying the nascent empiricism in this affluent professional school is the emphasis on individual development as a primary goal of education (as opposed, for example, to the development of the priority of collective goals). A priority on personal expression, personal “meaning making” and the “construction of reality” mitigates against collectivistic values and meanings and solutions; it is thereby reproductive of values important to an individualistic, privately owned, and competitive economy.

Finally, the emphasis in the curriculum and classrooms on active use of concepts and ideas by students, as opposed to a stress on mechanics or rote behaviors, facilitates the perpetuation of an unequal division of labor in

U.S. society, where some (these children?) will plan and others (working-class and middle-class children?) will have jobs that entail carrying out the plans.

There are, however, basic contradictions apparent in the school knowledge of these affluent professional children. In these conflicts one can see powerful implications for social transformation. For example, the contradiction between attempting as a student, and making sense as an adult, presumably later in one's professional creative labors, in a society where many things do *not* make sense and are irrational is a conflict which may generate political radicalism. Such a conflict may lead to intellectuals who are highly critical of the system and who attempt to persuade others by disseminating their own views. Or, it may lead to political activism, to overt attempts to take physical action against perceived political and economic irrationalities, as, for example, the students in Students for a Democratic Society (SDS)—a radical, anti-Vietnam War group—a majority of whom were from affluent professional families. Indeed, as Alvin Gouldner points out (1979), almost all leaders of social revolutions in the modern era have come from families of comparatively high standing in their society who were exposed to large amounts of cultural capital (e.g., Marx, Engels, the majority of the early Bolsheviks, Mao Tse-tung, Chou En-Lai, Ho Chi Minh, and Fidel Castro).

It is probably true that the conflict inherent in attempting to make sense in a world that is in many ways irrational is present for all children in all schools and social classes. What makes the conflict a potentially powerful force in the affluent professional school, however, is first the social-class position of these children, their cultural capital, and future access to information, power, and further cultural capital afforded to them by their social position. A second factor important here is the nature of their schooling. These children were told, and encouraged, more than the children in any other school to be creative, to think for themselves, and to make sense. It is indeed because of such encouragement to the young that the increasingly ideological notions of freedom and democracy can be turned back upon the economically and politically powerful and made into truly transformative demands.

Another contradiction to the school knowledge of these children that is nonreproductive is the contradiction between the value placed on creativity and personal decision making, and the systematic, increasingly rationalized nature of school and professional work in U.S. society. This conflict, already apparent in the use of science and reading programs in this school, is a contradiction that suggests possible later conflicts between the use and exchange values of knowledge in adult work, for example, between one's own creativity and the increasing rationalization and control of professional work by technology, bureaucratic trends, and centralization. It also suggests class conflict between affluent professionals, with their own interests and skills and relative power in the bureaucracy on one hand, and the capitalists, who are their "bosses" and who hold the purse strings, on the other. Conflict between the educated classes and the ruling class has long been a source of movement for social transformation. Indeed, as

Gouldner (1979) reminds us, it has been this class—the educated, the intellectuals—who have, to date, taken control in periods of revolutionary upheaval, e.g., in the early Soviet Union and China. It is, then, important to provide the children of the affluent professional class with school knowledge that is not just conceptual, analytical, and expressive, but that is also critical and collective. Such knowledge would foster responsiveness not only to the needs of individual “meaning making” and development, but to the development of a wider social collectivity that, not coincidentally, would affirm the needs of the working and middle classes as well.

The executive elite school offers cultural capital to its children, whose families as a class have the major portion of available physical capital in society. These children are taught the history of “ruling” groups, and that rule by the wealthy and aristocratic is rational and natural, going back, for example, to the Ancient Greeks. Such knowledge is, for them, symbolic capital. They are provided with other kinds of symbolic capital as well—practice in manipulating socially prestigious language and concepts in systematic ways. They are told the importance of controlling ideas and given some insight into controlling ideas in their own (Western) culture. The fact that the culture of their social class is the dominant and most prestigious one enhances the exchange value or “worth” of their knowledge in the marketplace.

Some of these children had a fair amount of class consciousness, if this is defined as knowledge of themselves as part of a group in society and in history, and an appreciation of their own group's interests as opposing the interests of other groups in society (e.g., plebs, strikers). While class consciousness among the working classes is likely to be nonreproductive, such a consciousness among the capitalist class is, of course, likely to increase their efforts to win conflicts, to conserve culture, and to maintain their social position, e.g., to prevent what Toynbee said was the “decay of civilization from within.”

School knowledge in the executive elite school was the most “honest” about society, U.S. social problems, and social irrationalities. It was sometimes expressive of liberal concerns, as well. Indeed, it came the closest to being socially critical. The children were given analytical and unsentimental insight into the system. Whereas, for example, middle-class children might see a pluralism of equal or competing ethnic cultures, the children of the executive elite might perceive social class and economic conflict. Thus, these children may be less ideologically mystified than, for example, the middle-class students. The executive elite students—in different and more socially profitable ways than the working-class students—may see more clearly through the rhetoric of nationalism and equal opportunity to the raw facts of class and class conflict.

There is a potential contradiction here in the “clarity” of understanding the system that may, in the particular context of the social-class position of these children, have transformative possibilities. This is the contradiction for them between the use and exchange values in their knowledge: the contradiction between using knowledge for pleasure and enjoying one's class privilege, for example, and the exchange value of

knowledge when it must be used to maintain that privilege. Two particular characteristics that empower this contradiction for these children (because the contradiction does appear in weaker forms in other schools) are, first, that extreme pressure is necessary, and excruciating struggle is demanded in a capitalist political democracy to actually maintain one's position of economic power and privilege. To grow up in the modern capitalist class is not only to enjoy travel, luxury, good schools, and financial wealth; it is also to have to maintain power in the face of others competing with you, within an irrational economic system that is increasingly difficult to predict, manage, and control—not only in the U.S. but in a rebellious Third World, as well. To be the "best," one must continually "beat the best." This is severe pressure. Second, to be a powerful capitalist, one must cause suffering and actually exploit others. Indeed, one's wealth and power are possible only because there are others (e.g., a reserve "pool" of workers) who do not have power and resource. These two "facts of life" of "being a capitalist" mean that if one is not ideologically secured, one may reject these demands. In contrapuntal fashion, the pressures, the irrationalities, and the exploitative characteristics of one's role in the system may one day cause the system to be perceived as the enemy—to be destroyed, rather than exploited. One thinks, as examples, of ruling class "children" who have rejected their privileges for radical politics and who have attempted to destroy members of their own class (the Baader-Meinhoff Group in Germany, the Red Brigades in Italy, or, indeed, the Weathermen in the U.S.). While such efforts at social transformation are violent and irrational and are not condoned, they must be acknowledged as nonreproductive in intent.

By situating school knowledge in its particular social location, we can see how it may contribute to contradictory social processes of conservation and transformation. We see the schools reproducing the tensions and conflicts of the larger society. It becomes apparent as well that an examination of only one social site may blur the distinctions and subtleties that a comparative study illuminates. That is, a social phenomenon may differ by social class; and indeed similar (or the same) phenomena may have different meanings in different social contexts.

This study has suggested, as well, that there are class conflicts in educational knowledge and its distribution. We can see class conflict in the struggle to impose the knowledge of powerful groups on the working class and in student resistance to this class-based curriculum. We can see class conflict in the contradictions within and between school knowledge and its economic and personal values, and in attempts to impose liberal public attitudes on children of the rich.

Class conflict in education is thus not dormant, nor a relic of an earlier era; nor is the outcome yet determined. No class is certain of victory, and ideological hegemony is not secure. Those who would struggle against ideological hegemony must not confuse working-class powerlessness with apathy, middle-class ideology with its inevitability, or ruling-class power and cultural capital with superior strength or intelligence. Just as blacks

were not the happy-go-lucky fellows of former stereotypes, so the working class is not dull or acquiescent, and the rich are not complacent or secure. Indeed, perhaps the most important implication of the present study is that for those of us who are working to transform society, there is much to do, at all levels, in education.

NOTES

1. The study was funded by two grants from Rutgers University Research Council, whose generous support is hereby acknowledged.

2. For further discussion of social class in these terms, see Anyon (1980).

3. This figure is an estimate. According to the Bureau of the Census, only 2.6% of families in the United States had money incomes of \$50,000 or over in 1977 (U.S. Bureau of the Census 1979, Table A p. 2). For figures on income at these higher levels, see Smith and Franklin (1974).

4. One might assume from the social studies text chosen by these teachers that their students were somewhat retarded. In fact, the mean IQ of the fifth-grade children for whom the book was chosen was 102; the mean IQ of the fifth graders in the other working-class school was 104 (CBT, McGraw Hill, Short Form). [Mean IQ in the middle-class school fifth grades was 105; in the affluent professional, 117; and in the executive elite, 120 (Otis-Lennun).] (Seven fifth graders in the working-class fifth grades combined had IQs that indicated above-average intelligence: 129, 139, 125, 133, 126, 130, 128. One other boy had tested in the second grade as having an IQ of 140; on the fifth grade test his score was 120.)

It is my opinion (contradicted after completion of the study by the two teachers to whom I offered it) that the reasons for choosing this book were first, its assumption of low ability in the students, and second, the fact that this assumption provides a rationale that makes teaching as work much easier: If the students cannot *do* anything but vocabulary drill and skill work, then we, as teachers, do not have to *plan* anything else. The teachers said they chose the book because it was "easy," and stressed "skills the children need."

5. The value attached to socially approved sources of knowledge was apparent in the reactions of school personnel to my presence in this school. The fifth-grade teachers I observed here acted as if I, as a university professor, was an expert who had the correct answers regarding child development, curriculum, and discipline. This can be contrasted with the attitude of other teachers in other schools. For example, both fifth- and second-grade teachers in the working-class schools let me know (albeit, subtly) that I, as a nonpractitioner, "couldn't tell *them* anything!" Teachers in the affluent and executive elite schools had a different attitude. They were receptive to me as a researcher, but they had district "experts" and their own ideas regarding teaching methods. The principal said that all their in-service workshops were done by "nationally known people." The fifth-grade teachers in the middle-class school, on the other hand, asked me lots of questions about what is best in reading, classroom management, and the like. Their tone of voice suggested to me that they wanted and expected me to know what they should do. (The questioning stopped, of course, as I declined to answer, and as I began to make clear to them that I was not there in an advisory capacity.)

6. Stated goals of the *Elementary Science Study* are to encourage children to use science materials to find answers to their own questions in their own ways. The emphasis is not on the teaching of a series of science concepts or on the creation of scientific prodigies, but on relatively unstructured experiences that emphasize "active involvement, freedom to pursue one's own interests, imagination and individuality." The materials are aimed at "developing self-directing, autonomous

and self-actualizing individuals." See accounts by Hal (1972) and also Educational Development Center (1971).

In some second- and third-grade classrooms I noticed *Science—A Process Approach* (SAPA) materials on shelves. Five of the eight teachers in k-3 said that they didn't use these materials, that they did science "on their own," or "informally"; the other three reported that they did use the SAPA materials.

7. Reading in the working-class and middle-class schools was not individualized at any level (they did, however, use a *programmed* reading series (Sullivan Programmed Readers) in the early grades). None of the boxed reading programs mentioned as used in the affluent professional school was in any of the working-class or middle-class schools except for SRA. An SRA kit was available in all classrooms I visited. The teachers in the working-class schools said they did not use it. A teacher in one of the working-class schools said she didn't use it "because the kids cheat." In the middle-class school, one teacher used her SRA *Power Builder* and another skills kit from SRA that she got because she lied, by telling the state "comp ed" person that she had more students eligible than she did. She says she has the kids use the kits once a week because "it's fun, and they like it"; also, "so I don't miss any skills." I asked four other teachers in the fourth and fifth grades in the middle-class school, and they said they did not use their SRAs; one teacher stated, "It's too much trouble."

8. My request to include in this study (i.e., in 1978-1979) the school that had the majority of the town's blacks and most of the low-income whites was denied by the Board of Education.

9. See Hugh Munby's (1979) critique of the program which appeared in *Curriculum Inquiry* 9:3.

10. The quote and descriptions are taken from Mayor's (1972) account. See also American Association for the Advancement of Science (1972).

11. An interesting contrast here is that during the same week, in one working-class fifth grade I saw copies of *My Weekly Reader* in several children's desks. On the cover were striking truck drivers, and the lead story asked, "Do workers have the right to strike?" (The article suggested that they did.) I asked the teacher if he had used that issue with his class and he said, "No, some of them did the puzzle, but they just throw it away."

12. During interviews of children in other schools I asked if they knew what strikes were (practically all did) and if they thought strikes were right or wrong. In the working-class schools 13 of 20 said yes, strikes were right ("people have the right to strike"); five said "strikes are wrong"; two said "sometimes they're right." In the middle-class school seven said strikes were right; eight said strikes were wrong; and three said, "sometimes." In the affluent professional school two said strikes were "OK" and "Yes, they're all right"; eight said strikes were wrong, and nine said, "It depends."

13. It is at this point that I would make sure that it is understood that I do not intend the themes reported in the schools to be monolithic; no theme purports to include every child. There were subcultures or groups in all of the schools (e.g., there were children in the working-class schools who did not resist, and children in the middle-class school who did resist and who were cynical about their "possibilities.") It is not possible here, however, to include all data and all interpretations. I must choose what is most representative, or what appears to be significant for some other reason. The subculture in the executive elite school appears to me to have significance because it was so strong and yet involved a clear minority of children.

14. It is interesting to note (as information that supports my interpretation of a "perspicacious" working class) that several academic surveys in the 1960s (reported in Zinn 1980) showed that in 1964 (before students and intellectuals had discovered

SOCIAL CLASS AND SCHOOL KNOWLEDGE

the Vietnam War) and throughout the war. Americans with only a grade-school education were much stronger for withdrawal from the war than Americans with a college education. Zinn argues that "the regular polls, based on samplings, underestimated the opposition to the war among lower-class people" (p. 482). Just as the earliest anti-Vietnam protests came out of the Civil Rights movement as blacks began being drafted, so opposition was stronger earlier in working-class communities as young men from these communities were drafted.

REFERENCES

- AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. *Science—a process approach: Purposes, accomplishments, expectations*. (AAAS Miscellaneous Publication no. 67-12, September 1967). Lexington, Mass.: American Association for the Advancement of Science, 1972.
- ANYON, JEAN. "Elementary social studies textbooks and legitimating knowledge." *Theory and Research in Social Education* 6, no. 3 (September 1978): 40-55.
- . "Education, social 'structure' and the power of individuals." *Theory and Research in Social Education* 7, no. 1 (Spring 1979): 49-60. (a)
- . "Ideology and United States history textbooks." *Harvard Educational Review* 49, no. 3 (August 1979): 361-386. (b)
- . "Social class and the hidden curriculum of work." *Journal of Education* 162, no. 1 (Winter 1980): 67-92.
- . "Schools as agencies of social legitimation." *Journal of Curriculum Theorizing*, to appear.
- APPLE, MICHAEL. *Ideology and curriculum*. Boston: Routledge and Kegan Paul, 1979.
- BERNSTEIN, RICHARD. *The restructuring of social and political theory*. Philadelphia: University of Pennsylvania Press, 1978.
- BOWLES, SAMUEL, and GINTIS, HERBERT. *Schooling in capitalist America: Educational reform and the contradictions of economic life*. New York: Basic Books, 1976.
- EDUCATIONAL DEVELOPMENT CENTER. *A working guide to the elementary science study*. Newton, Mass.: Educational Development Center, 1971.
- FITZGERALD, FRANCES. *America revised*. Boston: Little, Brown, 1979.
- FOX, THOMAS, and HESS, ROBERT. *An analysis of social conflict in social studies textbooks*. Final Report, Project no. II-116. Washington, D.C.: United States Department of Health, Education and Welfare, 1972.
- GIROUX, HENRY. "Schooling and the culture of positivism: Notes on the 'death' of history." *Educational Theory*, to appear.
- GOULDNER, ALVIN. *The future of intellectuals and the rise of the new class*. New York: Seabury Press, 1979.
- HAL, CHRISTOPHER. "Elementary science study." In *The eighth report of the National Clearinghouse on Science and Mathematics Curricular Development*, edited by David Lockard. Baltimore, Md.: University of Maryland, 1972.
- JACOBY, RUSSELL. *Social amnesia*. Boston: Beacon Press, 1975.
- KARABEL, JEROME. "Community colleges and social stratification." *Harvard Educational Review* 42, no. 4 (November 1972): 521-562.
- , and HALSEY, A.H. *Power and ideology in education*. New York: Oxford University Press, 1977.
- MAYOR, JOHN. "Science—a process approach." In *The eighth report of the National Clearinghouse on Science and Mathematics Curricular Development*, edited by David Lockard. Baltimore, Md.: University of Maryland, 1972.
- MUNBY, HUGH. "Philosophy for children: An example of curriculum review and criticism." *Curriculum Inquiry* 9, no. 3 (Fall 1979): 229-249.
- ROSENBAUM, JAMES. *Making inequality: The hidden curriculum of high school tracking*. New York: Wiley, 1976.
- SMITH, JAMES, and FRANKLIN, STEPHAN. "The concentration of personal wealth, 1922-1969." *American Economic Review* 64, no. 4 (May 1974): 162-167.

- UNITED STATES BUREAU OF THE CENSUS. "Money income in 1977 of families and persons in the United States." In *Current population reports, Series P-60*, no. 118. Washington, D.C.: United States Government Printing Office, 1979.
- YOUNG, MICHAEL . and WHITTY, GEOFF. *Society, state and schooling*. Sussex, England: Falmer Press, 1977.
- ZINN, HOWARD. *A people's history of the United States*. New York: Harper and Row, 1980.