Commercial Reading Materials, a Technological Ideology, and the Deskilling of Teachers

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Abstract

The role of commercial materials in reading instruction is examined through analyses of expert opinion and research on reading instruction, a series of investigations concerning teachers' and administrators' conceptions of reading and reading instruction, and a critical evaluation of the language and underlying tenets of recent writing on effective reading instruction. A case is presented that suggests that on the whole reading experts have encouraged the use of commercial reading materials as the method to incorporate scientifically valid procedures and business principles into classroom instruction. To examine the effect of these procedures and principles on reading programs, the results of 4 studies are summarized to suggest that the organization of reading instruction around commercial materials has reduced teachers' and students' roles in that instruction and to explain teachers' reaction to this reduced role. Recent writing about effective reading instruction is discussed in terms of the new skills required in this reduced role. Suggestions are made concerning how individual teachers might channel their reactions to business and scientific principles and their reduced role during reading instruction into action for constructive change.

One way to think about commercial reading materials in elementary classrooms is to consider the array of offerings they present to teachers. For example, these materials include (a) anthologies of stories and essays considered appropriate for students of various reading levels, (b) a scope and sequence of objectives reflecting areas that are often considered necessary for children in order to learn to read, (c) directions for instruction and practice activities to meet the stated objectives, (d) tests to determine whether objectives have been met, and (e) recording systems to keep track
of student progress. Perhaps all of these features could be subsumed under the rubric of time-saving devices because through the use of one or all of them teachers save production and collection time—the time it would take to produce the materials themselves. Since time seems to be a precious commodity in elementary classrooms, in this one vein alone commercial reading materials do seem to be a boon for elementary teachers.

As with most aspects of life, one must give up something in order to get something in return. Another way to look at commercial reading materials, then, is in terms of what teachers must risk to reap these time-gain benefits and whether or not it is a good exchange. This second perspective is the one I intend to take in this paper (Mills, 1959). In this article, I want to explore what teachers give up by using commercial materials by first determining the role of commercial reading materials in American reading instruction and discussing an empirical explanation for that role. Second, I attempt to place this explanation in the larger social context of twentieth-century Western society and then to return to reading programs via the notion that commercial reading materials are considered the technological solutions to the problems of reading instruction. Third, I compare the ascent of commercial reading materials' importance with the decline of teachers' responsibilities during reading instruction and comment on teachers' reactions to this inversion of the subject and object of teaching. Finally, I evaluate the exchange and describe the constructive core of this seemingly negative perspective (Marcuse, 1960) on commercial reading materials in elementary reading programs.

I use the term commercial materials rather than basal materials for two reasons. First, I find it more descriptive of the materials readily available within most elementary classrooms. Basal reading series usually connote the readers, teacher's manuals, workbooks, worksheets, management component, and skill kits developed and produced by one commercial publishing company. For example, Aukerman (1981) lists 15 basal reading series, all labeled by commercial publishing companies. Yet, no mention is made of the plethora of other workbooks, worksheets, or kits that students are asked to complete daily. Commercial reading materials is a more inclusive term. Second, I believe and argue in this paper that it is partly the commercial production of these materials that gives school personnel the mistaken notion that the materials can teach students to read. The distance of the production process from classrooms, the glitter of advertising, and the number available make the materials mysterious to a degree. The term "commercial reading materials," then, also signals this mystification in the way that the label "basal" cannot.

The role of commercial reading materials
As Nila Banton Smith (1965) demonstrated in her historical treatment of American reading instruction, it is often difficult to tell where commercial reading materials end and where teachers' reading instruction begins. Smith devoted half of her 426 pages to detailed descriptions of reading materials and another third to an explanation of how those materials were used from colonial times until 1965, when the updated edition of her book was published by the International Reading Association. Smith's emphasis suggests that American teachers of reading have routinely used commercial materials. Moreover, Smith implies that progress in reading instruction in this century can be related directly to the improvements made in commercial materials based on scientific study of reading and instruction.

In this paper, science is defined as the attempt to discover lawlike generalizations about physical, natural, and social phenomena. The principal assumptions of this science are that these generalizations are
universal, not dependent on situational constraints or values, and that any phenomena can be divided into discrete causal variables that can be measured quantitatively. Popkewitz (1984) labels this definition “empirical-analytical science” and states that it is the definition most often used by both “hard” and “soft” scientists. Mosenthal suggests that most educational scientists use this definition and seek literal definitions of progress by “a conscious attempt to apply definitions of progress in the physical and natural sciences to descriptions of progress in the social sciences” (1985, p. 5). Perhaps the best objective evidence of the association of science and reading instruction is the development in the early 1920s of the teacher’s manual, which was to direct teachers and students in using the materials during reading instruction.

Others were more explicit concerning this putative relationship between science and commercial reading materials. Donovan says, “In these places we find teachers instructing children as they themselves were taught, absolutely ignorant and oblivious that science had discovered for us truths and that little children are entitled to the benefit of these discoveries” (1928, p. 107) and “One of the most potent factors in the spreading of the results of research is through a well prepared set of readers and their manuals” (1928, p. 106). “Furthermore,” Gray states, “prepared materials are, as a rule, more skillfully organized and are technically superior to those developed daily in classrooms. Because they follow a sequential plan, the chance for so called ‘gaps in learning’ is greatly reduced” (1936, pp. 90–91). Finally, “In general, it appears that systematic reading instruction on the differentiated basis can be achieved, for the time being, through carefully prepared teacher’s manuals for basal materials” (Betts, 1943, p. 59).

Early professional books on reading and methods textbooks for training teachers also carried the message that scientific instruction depended on the use of commercial reading material according to the directions in teacher’s manuals. In Silent and Oral Reading: A Practical Handbook of Methods Based on the Most Recent Scientific Investigation, Stone suggested that “the best practice will involve the use of all three types of primers during the first few months of instruction” (1922, p. 45). Dolch (1950) and Durrell (1940) were more forthcoming in their support of the primacy of commercial materials. Durrell writes, “The advantage of orderly procedures in reading instruction is such that few, if any, teachers can serve all pupils well by incidental or improvised reading methods. . . . The well planned basal-reading systems presented by experienced textbook publishers have many advantages. . . . A detailed study of the manuals of basal-reading systems is the first step to learning how to teach reading” (1940, p. 22). Furthermore, Dolch states, “A basic reader is really one part of a ‘system for teaching reading.’ This system includes the basic books themselves, the workbooks that go with them, and the teacher’s manual, which tells what to do with the textbooks, what to do with the workbook, and also tells all the other activities a teacher should go through in order to do a complete job teaching reading” (1950, p. 319).

Authors of recent reading methods textbooks seem equally convinced of the advantages of teachers relying on commercial reading materials during reading instruction (Shannon, 1983a). In a systematic analysis of a random sample of six (of 30) methods textbooks in which we analyzed physical characteristics, scope and emphasis, suggestions for use, and language of description, seven reader reviewers concluded that five of the six textbooks presented three reasons for a relatively unqualified endorsement of the use of commercial reading materials: (a) the reading selections are of high quality, (b) the teacher’s manuals offer suggestions for compre-
hensive and systematic instruction, and (c) the materials are based on scientific investigation of the reading process. If space devoted to commercial materials can be taken as one indication of an author’s commitment to teachers’ use of commercial materials, five authors devote between 11 and 36 pages to these materials, accompanied by six to 19 reproductions from the materials themselves. In comparison, they devoted between zero and 1.5 pages to a discussion of perhaps the most important comprehension skill, main idea. In addition, the language these authors used suggested their endorsement. Terms like “best routines,” “developed by teams of reading experts,” “bring children to a higher degree of reading proficiency,” “objective, tightly structured, and logically ordered,” and “with sufficient repetition to insure mastery” appeared frequently in five of the six methods textbooks examined. The author who qualified her endorsement suggested that commercial reading materials were more a product of logic than science and that teachers should be selective in their use of the suggestions in teacher’s manuals. Although she set aside 36 pages for discussion of commercial materials and provided 40 reproductions, she qualified her endorsement with the following: “more a product of convention than research,” “claims and guarantees . . . await . . . verification” and “the perfect materials do not exist.”

In fact, other experts believe that commercial materials recently have become an impediment rather than an impetus to scientific reading instruction (see Anderson, Osborn, & Tierney, 1984): “Currently, there would appear to be a lag as long as 15–20 years in getting research findings into practice” (Anderson et al., 1984, p. x). That is, current reliance on commercial materials precludes teachers’ implementing the findings of the most recent research. Since research on reading has more than doubled in the past decade (Weintraub et al., 1982), this gap between commercial reading materials and what is currently considered scientific reading instruction may indeed be wide. To remedy this situation, the contributors to Learning to Read in American Schools: Basal Readers and Content Texts (Anderson et al., 1984) suggest that a concerted effort be made to bring about appropriate alterations of those materials. “It stands to reason therefore that researchers who wish to have scholarship influence practice ought to give high priority to interacting with publishers” (Anderson et al., 1984, p. ix). Apparently, commercial reading materials are still considered to be the appropriate vehicle for “scientific” reading instruction.

To be sure, not all those concerned with reading instruction in the twentieth century have agreed that commercial reading materials are appropriate. Huey commented that “after all we have thus far been content with trial and error; too often allowing the publishers to be our jury, and a real rationalization of the process of inducing the child into the practice of reading has not been made” (1908/1968, p. 9). Germane and Germane found that “unfortunately too many teachers use only one book—the regular school reader” (1922, p. 92), which precluded teachers from encouraging the “more effective and efficient” practice of silent reading. Boney (1938, 1939) offered three criticisms of the Thirty-sixth Yearbook of the National Society for the Study of Education’s wholehearted support for teachers’ use of commercial reading materials: (1) trade books had better content, (2) commercial materials were expensive, and (3) their use did not ensure thoughtful instruction.

More recently, others have found that teachers’ adherence to the suggestions in teacher’s manuals precludes attention to students’ individual needs (Austin & Morrison, 1963; Durkin, 1974; Goodlad, 1970), that it stymies attempts at instructional innovation (Chall, 1967; Rosecky, 1978; Singer, 1977), and that it defines school-
ing, literacy, and childhood in less than optimal ways (Freebody & Baker, 1985). One researcher went so far as to suggest, in a description of management components of commercial materials, that "literacy in this competency-based, highly structured, empty technology is reduced to a tight sequence of arbitrary skills. The teacher becomes a technician, part of a delivery system" (Goodman, 1979, p. 663).

Despite these frequent objections, teachers' use of commercial reading materials was virtually universal by the 1960s. In the Columbia-Carnegie Study of Reading Research and Its Communication, Barton and Wilder found that over 90% of the teachers in 300 schools they surveyed used commercial reading materials on "all or most days in the year" (1964, p. 162). By 1977, the percentage was over 94% of a sample of 10,000 elementary teachers (Education Product Information Exchange, 1977). Moreover, the teachers in Barton and Wilder's survey suggested that their beliefs concerning reading instruction were formed primarily by the teacher's manual and their practice teaching, and 70% agreed that suggestions in teacher's manuals were based on definite scientific proof. In a series of studies, Durkin (1978-1979, 1981, 1983) found that teachers use commercial materials consistently but that they skip certain parts of suggested lessons to keep their classes running smoothly. Duffy and McIntyre (1980) concluded that teachers typically monitored students' progress through commercial materials, checking the accuracy of their work, and that teachers believe that this monitoring constitutes reading instruction. In their study's conclusion, Barton and Wilder point out an apparent contradiction in teacher thinking: "Teachers think they are professionals—but want to rely on basal readers, graded workbooks, teacher's manuals, and other materials prefabricated by the experts" (1964, p. 382).

Barton and Wilder's (1964) comment suggests that, although teachers may think of themselves as professionals, their heavy reliance on commercial reading materials makes observers of their work skeptical of their professionalism. Professionals control their work and make critical judgments about what procedures and materials are most suitable for specific situations (Lortie, 1975). However, advocates of the use of commercial reading materials, and even the authors of the materials (Chall, 1967), question teachers' judgment concerning their devoted use of the materials "as if they were divinely inspired" (Durkin, 1978, p. 45).

An empirical study of teachers' reliance on commercial reading materials

In an attempt to determine why elementary teachers rely so heavily on commercial reading materials during reading instruction, I sought to identify subjective (Shannon, 1982a) and objective (Shannon, 1982b) factors that might contribute to this dependence in one large school system. To investigate teachers' beliefs (subjective factors), I developed a 20-item forced-choice questionnaire and a follow-up interview schedule. These survey instruments were based on four hypotheses gleaned from previous studies of elementary reading instruction: (1) teachers are not involved with their instruction (Durkin, 1978-1979), (2) teachers believe that commercial reading materials can teach students to read (Austin & Morrison, 1963), (3) teachers believe that the materials embody scientific truth (Barton & Wilder, 1964), and (4) teachers think that they are fulfilling administrative expectations when they use these materials (Chall, 1967). Three open-ended questions that probed why, how, and when teachers used commercial reading materials were the final component of both the questionnaire and the interviews.

Because teachers do not participate in reading instruction uninfluenced by others, I sought to identify contributing factors
beyond teachers' control (objective factors). The investigation of these factors was an attempt to determine the organization and policies of the reading program within the school district. Toward that end, a comparison of classroom teachers', reading teachers', and administrators' perceptions concerning the four hypotheses was made using questionnaire and interview data. I informally observed interactions among these personnel over a 1-year period and made an examination of the school district's printed explanations of the reading program. By placing teachers' subjective opinions among the objective factors, I assumed that I would get a clearer picture of why teachers in this district used commercial reading materials (Shannon, 1983b).

The results of the investigation to identify subjective factors suggested that 445 teachers believed foremost that they were fulfilling administrative expectations when they used commercial reading materials (Hypothesis 4). This opinion held across the three types of data collection techniques: forced-choice items, open-ended "why" questions, and interviews. In fact, some teachers ridiculed me for even considering any other hypotheses. This strong belief seemed based primarily on teachers' negative reactions to the district's textbook selection process and its method of monitoring student progress. Twenty-three of the 26 teachers who were interviewed stated that the textbook selection process was controlled too much by administrators. The teachers thought that teachers were underrepresented on the selection committee in comparison with the number of administrators and that the decision to adopt the new edition from the same publisher was made before the committee was even convened. The monitoring system required teachers to record students' criterion-referenced test scores on cards, which reading teachers and principals reviewed biweekly. Most teachers considered this to be pressure to push students through the materials regardless of their reading ability and progress.

However, teachers agreed that basal reading materials can teach reading (Hypothesis 2) and that they are based on science (Hypothesis 3). With the exception of one item, teachers considered themselves involved with their instruction (Hypothesis 1). The exception was that teachers agreed that others could teach reading in the same way as they did, a finding that suggests that teachers devalue the contribution of their individual personalities and intellects to instruction.

The first analysis compared classroom teachers' opinions with those of reading teachers (N = 23) and administrators (N = 18). There was little disagreement concerning Hypotheses 1 and 2. However, administrators were more likely than either teachers or reading teachers to agree strongly that commercial reading materials were based on science (Hypothesis 3). In addition, neither reading teachers nor administrators agreed as strongly as classroom teachers that teachers use the materials in order to meet administrative expectations (Hypothesis 4), although they did agree that administrators expected teachers to use the materials. In response to the open-ended "why" questions on the questionnaire, one-third of the reading teachers and over half of the administrators (10) suggested that commercial reading materials can teach students to read.

The second analysis was an attempt to understand the organization and procedures of the reading program. During interviews, teachers, reading teachers, and administrators related that the reading program was organized hierarchically according to authority, with the board of education and the superintendent at the top, teachers at the bottom, and four levels in between. Both the description of the district program and the results of interviews confirmed that the curriculum for reading instruction was supplied by a set of commercial reading materials and that teach-
ers were not to alter either the scope or the sequence of skills listed in the teacher's manuals. Instruction was to be based on the principles of mastery learning and paced according to students' abilities to reach critical scores on criterion-referenced tests that accompanied the commercial materials. However, 69% of the teachers suggested that the requirements for administering these tests, recording the results on students' records, and submitting the records to reading teachers and administrators on a biweekly basis applied pressure on teachers "to push students through the materials." Because the curriculum and administrators sought instruction consistent among classrooms within schools and across schools within the district, teachers were "limited" to one set of commercial materials, which was selected by an administratively appointed committee.

At first glance, it seems that Hypothesis 4 explains teachers' reliance on commercial reading materials in the district under study. The analyses of subjective and objective factors point toward administrative expectations as the appropriate conclusion. Administrators offered Hypotheses 2 and 3 as justification for their expectations, implying that the materials can teach reading because they are based on scientific investigations of the reading process. Administrators reasoned that, if teachers stick closely to the suggestions in the teacher's manuals, all students will master the basic skills of reading. And, in fact, when I asked teachers to describe what they would do if administrators did not expect them to use the materials, 84% of the teachers offered the same rationales as administrators for their instruction. These teachers said that they would continue their present practice of relying on commercial materials, with one slight deviation—they would include more sets of commercial materials in order to meet students' needs while remaining within the parameters of the original curriculum.

My initial attempt to understand why teachers rely so heavily on commercial reading materials during their reading instruction, then, ended with a question instead of an answer: Why do administrators and teachers believe that commercial reading materials can teach students to read?

**Technological ideology**

In an attempt to answer this question, I sought an explanation that would relate school personnel's thoughts about their reading instruction to the way in which others view their work. After all, as a group, teachers are not that different from other workers in our society. Basing my work loosely on Georg Lukács's theory of reification (1970), I developed a model of reading programs that suggests that school personnel's beliefs can be best interpreted as a natural development of the "rationalization" of everyday life in Western society. Lukács argued that, in order for countries to prosper materially, all parts of their society, both public and private, had to be made or considered predictable in order to reduce the risk of capital investment. Accordingly, along with standard laws, social norms, and other institutions, school became organized and measured by business and scientific principles. For Lukács, the process of rationalization could be explained by the relationship of reification, formal rationality, and alienation, and, in this section, I attempt to show how a dialectic among these three factors explains school personnel's beliefs and actions concerning the relationship between commercial reading materials and reading instruction. My point in this discussion is to demonstrate that school personnel's belief that commercial reading materials can teach is really deeply ingrained in the fabric of American culture.

**Reification**

Reification is the treatment of an abstraction as a concrete object or an immutable procedure. In my study, it seems
that school personnel reified reading instruction as commercial reading materials because, rather than engaging in many of the possible ways of teaching reading, school personnel relied on only one method—the application of commercial materials. An explanation of why this happened is not so straightforward as we would perhaps like. It seems that school personnel have confused the materials’ contribution to students’ reading development in a way similar to the way in which others confuse the contribution of capital to the commercial production of any commodity. In both cases, what are really transactions among people (past and present labor) are understood as transactions among things. In a factory, the machines appear to do the work, rather than the craftsmen who designed the routine and the toolmakers who developed the machine. In my study, rather than a collaboration among author, teacher, and student, reading instruction is understood as an exchange between commercial materials that have the power to teach and students who can absorb that instruction.

This general confusion about commodities, I believe, underlies school personnel’s conceptions of reading instruction. The psychological, intellectual, and physical distance from the production of these materials, coupled with the everyday confusion over the properties of commodities and the dazzle of advertising, leaves school personnel with the illusion that the materials—not the labor of authors, artists, typesetters, and so on—can teach students to read. Of course, no participants in my study used these terms to describe their work, but their actions, the examples they offered from their classroom practice, and their comments on the materials pointed in this direction.

When forced to justify their beliefs on the questionnaire, most respondents offered the scientific nature of the materials as the basis for the materials’ instructional powers. In fact, teachers’ and administra-


tors’ responses were significantly correlated concerning items dealing with the instructional capabilities of the materials (Hypothesis 2) and the scientific nature of the materials (Hypothesis 3); their prose explanations concerning why they used the materials were replete with such associations. This deference to science also fits Lukács’s (1970) explanation of rationalization of Western society because it seems based on two generally accepted ideas: an understanding of science as technology and a use of science as the major form of evaluation of social institutions and customs.

Huxley (1963) and Snow (1959) commented on the gulf between the scientific community and everyday life. They suggested that people who are not directly engaged in scientific investigations do not understand the human process of scientific inquiry. Rather, most people see only the material results of scientific endeavors—increased quantity, standard means, and efficiency (Habermas, 1970). Science does not appear to them as a human activity, but as an object or unalterable procedure. In other words, most people reify science as technology. For my study, this meant that school personnel treated the directions in teacher’s manuals as the science of reading instruction. The reification of reading instruction and of the scientific study of reading instruction as the format and directions of commercial materials has important consequences for school personnel: they become uninformed spectators of the scientific, instructive activity of the commercial materials, and they see no need or way to alter the course or content of their reading instruction except to change the commercial materials used in their classrooms.

A second consequence of the misunderstanding of science is the increased role that measurement and efficiency have come to play in our daily lives. In earlier times, most social institutions were judged primarily in ethical and moral terms; that is, people wondered if an institution was just
or good. However, with the rise of industrialization, with its requirement that all aspects of life become rationalized, more and more public and private matters have come under the scrutiny of scientific principles (Heilbroner, 1985). Currently, it seems that everything is judged in terms of quantity and efficiency. In fact, science is considered the sole method with which to define and solve the problems we face. For example, the problem of equal opportunity for employment is defined as the numbers of various groups in the workplace, and scientific studies are conducted to isolate factors that impede or encourage achievement of a balance. In a similar manner, the administrators in my study attempted to solve the problem of teaching large numbers of students to read by defining reading as verified competence in the basic skills of reading (i.e., certain achievement and criterion-referenced test scores) and by requiring all teachers to use the technology of reading instruction—one set of commercial reading materials.

Reification, then, explains that three social forces are working when school personnel believe that commercial reading materials can teach. First, when they reify reading instruction, teachers and administrators lose sight of the fact that reading instruction is a human process. Second, their reification of the scientific study of the reading process as the commercial materials means that their knowledge of reading and instruction is frozen in a single technological form. Third, school personnel’s reification of science requires that they define their work in terms of efficiency of delivery and students’ gains in test scores.

**Formal rationality**

This use of science to reorganize reading programs explains in part administrators’ interest in teachers following the commercial reading materials and the recognition by teachers in my study that they were expected to use them. These school personnel were simply describing their respective roles in a scientifically arranged organization in the same way that any worker who is employed in a large modern corporation would. In other words, they have internalized a system of thought that Max Weber (1964) called formal rationality in his attempts to describe the impact of capitalism on everyday life. Formal rationality is distinguished from traditional uses of reason because the former, like science, excludes all consideration of values and moral questions. Thus, reorganization of production processes according to the principles of formal rationality emphasizes the development of the most efficient means with which to maximize the productivity of each worker in a coordinated unit rather than the “qualitative human and individual attributes of the worker” (Weber, 1964, p. 99).

For Lukács (1970), such reorganization meant the segmentation of the production process into standard, easily defined sets of actions in which the worker becomes a specialized part rather than the producer of whole goods, as he was under previous economic systems. The development and coordination of this reorganized system require the separation of planning of production from its execution in order to maximize efficiency and productivity. According to Lukács, few workers would choose such a reduction and organization of their work, and, therefore, a hierarchical arrangement is necessary, with planning becoming purely an administrative function and acting according to that plan becoming the workers’ role. Lukács considered the Taylor System the culmination of this trend. Taylor used time as the hone to develop scientific management procedures by first dismantling the specific process of production as performed by a very able worker to its elemental parts, timing each part to remove nonessential movements and then reassembling the streamlined procedures into subgoals to be performed repeatedly by groups of workers.
In this way, the practices of the best worker could be introduced to all workers, thereby making production and productivity calculable.

Although the reorganization in schools is not a direct parallel of industrial production processes, according to Callahan (1962) and Franklin (1976), the Taylor Scientific Management System had a considerable impact on education. Instead of using time, however, curriculum theorists such as Frank Spaulding and Franklin Bobbitt argued for a three-step approach to the design of instruction: (a) analyze the learning environment during instruction to identify instructional methods, (b) measure the effects of various methods with specifically designed tests, and (c) adopt the means that yield the highest results. To oversee the transition from unscientific to scientific instruction, a hierarchical administration was required to plan, coordinate, and maintain the new organization.

Reading programs in elementary schools were also subject to the principles of formal rationality. At one time, elementary teachers taught students of various ages to read simultaneously from books on many subjects according to the teachers' own directions (Smith, 1965). Over time their role became to teach reading to a certain age group using commercial reading materials according to a teacher's manual under the watchful eyes of administrators. We are currently told that "America will become a nation of readers when verified practices of the best teachers in the best schools can be introduced throughout the country" (Anderson et al., 1985, p. 120). Reading, itself, is also segmented in elementary schools: "Reading, as a complex skill, is comprised of subordinate units that must be mastered and integrated to form higher-order skills. Consequently, to accomplish this developmental task, a variety of subskills thought to be essential are taught to students. The order of progression in these skills is from prerequisite small units to larger units" (Samuels & Schachter, 1978, p. 48).

According to the second analysis of objective factors, the school district that I studied was organized according to the principles of formal rationality: it had a hierarchical administration, a separation of planning of goals from instruction, separate roles for administrators and teachers, a standard technology in the form of the commercial materials, and a monitoring system of production (students' achievement) and productivity (teachers' instruction) through the criterion-referenced tests that directly paralleled the materials. Because it was organized in the name of science and high student achievement, few within the district questioned the organization of the reading program in which teaching became following the lead of those who do not teach because most work seems to be organized this way. Rather, school personnel responded according to their roles—teachers pointed toward administrative plans and administrators toward science.

Alienation

Alienation is the process of separation between people and some quality assumed to be related to them in natural circumstances. This process can be consciously recognized (subjective alienation) or beyond the control of the individual (objective alienation). The organization of the reading program according to the principles of formal rationality and school personnel's responses to questionnaires and during interviews suggested that both forms of alienation were apparent in the school district I studied. First, the fact that school personnel's roles, by their own accounts, did not include goal setting or directions for instruction (both were set by the authors of the commercial materials) means that administrators and teachers were objectively alienated from reading instruction. Of course, I am assuming here that reading instruction is the work of all
school personnel, or that it once was, and that work and people are related in natural circumstances. The separation of teachers from the totality of reading instruction seemed to prevent school personnel from recognizing that the organization of their reading program was but one of many possible arrangements that would accomplish the task of teaching children to read. Like the workers in industry (Noble, 1983) and in offices (Howard, 1985), these school personnel assumed that their present circumstances were "just the way it is."

This sense of fatalism was apparent in many teachers' answers to the open-ended questions on the questionnaires and during interviews. Although teachers complained loudly about the textbook adoption process and the recording system for students' test scores, very few teachers and literally no administrators challenged the separation of the planning of goals from the process of teaching, the definition of reading as the summation of basic isolated skills, or the directions for lessons from teacher's manuals. By accepting their roles with only minor complaint, school personnel acknowledged that they were subjectively alienated from reading instruction.

In summary, my model of reading programs is based on the notion that school personnel understand and describe reading instruction in a manner similar to how workers in other occupations discuss their work because they all are subject to the same societal influence, that is, the process of rationalization. The model suggests that school personnel believe that commercial materials can teach because they have reified reading instruction as commercial materials. This illusion of instructional power is supported by school personnel's reification of the scientific inquiry concerning reading instruction as the directions for lessons in teacher's manuals and by the use of formal rationality in the organization of reading programs. According to the model, this combination of reification and formal rationality alienates school personnel from a central feature of their work in elementary schools—the development of students' literacy. Thus, administrators expect the use and teachers use commercial reading materials because they have internalized the process of rationalization, and, like other workers, they apply its business and scientific principles to the task of teaching reading. From this point of view, it would be more startling if teachers and administrators thought reading instruction was a human transaction rather than an interaction between objects—commercial materials and students.

**Tests of the model**

I have tested this model in three separate studies in school districts in different states. In each case, reification, formal rationality, and alienation were apparent, although they combined in different ways in each district, giving each a unique character. However, in these districts, school personnel's views of commercial reading materials remained substantially the same as they were in my original study.

In the first test (Shannon, 1984b), I compared quotes from Chicago administrators and teachers concerning the philosophy and organization of the Chicago Mastery Learning Reading Program (CMLR) with those of administrators and teachers from my original study in order to demonstrate how the organization of a reading program according to the principles of formal rationality contradicted each district's underlying philosophy of reading instruction based on mastery learning. Basically, I argued that mastery learning was adopted as a philosophy as much to assuage managerial concerns as it was for pedagogical reasons. Mastery learning, with its assumption that everyone can learn to read, was acknowledged as a method, perhaps the method, by which these school districts could regain the confidence of their skeptical publics by insuring that all students learned to read at appropriate and verifiable levels of competence before
leaving elementary school, junior high, or high school. However, in order to meet these quotas, instructional time was segmented, which violates a mastery learning assumption of adequate (unlimited) time to learn to read. Furthermore, reading goals were reduced to elemental levels to insure that all students would be considered competent, thereby subverting Bloom's (1976) notion that mastery learning would enable "higher levels" of learning. Finally, instructional methods were reified as commercial reading materials, counteracting the theoretical concern of mastery learning that teachers prepare their own materials and tests to insure that they are clearly aware of the instructional goals and the formats in which those goals will be tested. According to Schmidt (1982), a teacher in the Chicago system, teachers' alienation from their reading instruction using the CMLR program was similar to what I found in my original study.

In the second test of the model (Shannon, 1986), I sought to explain how a merit pay program based on increased test scores (a form of formal rationality) would affect school personnel's thoughts concerning reading and reading instruction. Using questionnaires, interviews, observation, and district printed materials, I found a reading program in which central administrators set specific achievement test scores as goals for average pupil performance for each school in the district, offered merit pay incentives to teachers and administrators of schools that reached those goals, and developed standard methods for the use of the teacher's manuals for commercial reading materials. Although several teachers resented certain aspects of this formal rationality and some rejected the reification of reading as achievement test scores, most teachers and all administrators demonstrated that they accepted their respective roles to apply the materials according to plan and to monitor teachers' instruction closely. However, even when accepting their role, many teachers considered reading instruction less fulfilling within the merit pay program than they had under other circumstances. This alienation is captured best in one teacher's statement.

At my previous school [in another district], I felt no pressure about reading instruction. I felt good at my job and gave 100 percent. At this school, the principal stresses that it is important to teach tested skills. "Adapt your instructional time to raise those scores with your top group," she says. "Worry about your low group, but you need those high scores to bring them up." I do feel pressure from the principal and the other teachers. When the scores came in, we had a faculty meeting and the scores were distributed to all faculty listed by room number... It's quite evident who has done the best. For example, the third-grade teachers felt that the second-grade teachers must have cheated to get scores that high because there was such small growth from second to third grade. All of this is unprofessional... On my Christmas card that my principal sent me she did write, "I know that your [standardized achievement test] scores will be better this year." I swear to God.

In the third investigation (Shannon, in press), I used questionnaires and interviews to investigate school personnel's commitment to the goals and means of their reading program, which was organized according to the principles of formal rationality. Administrators were overwhelming in their support for the rationalized program, with its emphasis on centralized decision making, test scores, and uniform use of commercial reading materials. However, teachers were much less enthusiastic about the goals of the rationalized program, although they were equally convinced that commercial reading materials were the appropriate means for reading instruction. That is, although administrators saw formal rationality and reification of reading instruction as integrally related, teachers saw them as separate issues. In fact, teachers spoke of their re-
sentiment of administrative intervention into their classroom instruction, which they considered "their territory." To avoid this confrontation, administrators developed a monitoring system based on the criterion-referenced tests that accompany commercial reading materials. Since these tests are based closely on the format and vocabulary of their parent materials (Johnson & Pearson, 1975), this monitoring system accomplished administrators' goals indirectly. Teachers, who reified reading instruction as the materials themselves, wholeheartedly backed this system, although they complained about "the pressures of teaching reading."

These three studies, along with the original investigation, suggest that the model of reading programs based on the dialectic among reification, formal rationality, and alienation will account generally for school personnel's actions and beliefs in a variety of situations. The central feature of each reading program was the notion that commercial reading materials were the technology of the scientific study of reading and instruction and that they possessed instructional powers to teach students to read. Reified reading instruction was the foundation on which each program was organized. Standard use of these materials was considered essential for skill mastery, merit pay, and continuity across classrooms, grade levels, and schools. However, in each study, many teachers recognized, at least tacitly, that they had to give up something in order to get the full benefits of the rationalized program and the use of commercial reading materials. Although they were not always certain what they were giving up or to whom or what to affix the blame, these teachers were uneasy about the circumstances of their reading instruction.

The deskilling of teachers
Marcuse (1964) argued that teacher uneasiness should be considered a typical reaction to the control required in the rationalization of an institution or process. In reading programs, as in most institutional work, this control comes in three forms: simple, bureaucratic, and technical (Apple, 1982). Simple control is one person persuading others by whatever means to follow directions concerning their behaviors. The institutionalization of this simple persuasion is called bureaucratic control, wherein the right of control, authority to direct the activities of others, is given to someone or some group. Clearly, both simple and bureaucratic control were apparent in the reading programs I studied, if they are not in most reading programs. Usually, teachers' complaints about "the pressures of teaching reading" were attributed to either of these types of control. However, technical control is more subtle; that is, it seems natural to the definitions and physical realities of the job to be performed. In reading programs, commercial materials supplied the means for the technical control of reading instruction in order to render it more predictable and more productive.

Since both administrators and teachers reified reading instruction as commercial reading materials, few questioned the legitimacy of this form of technical control. In these materials, administrators found an economical and less confrontational means for instructional accountability, and teachers found both the source and the tools of reading instruction. Teachers willingly accepted this technical control as simply "the way to teach reading." Commercial reading materials, then, controlled the program goals, methods of instruction, main source of texts for reading, and evaluation procedures without noticeable objection on the part of teachers. However, teachers were not mere puppets; they did object to what they considered arbitrary exercise of administrative bureaucratic authority (e.g., limitation to one set of commercial materials, restriction of promotion based on skill mastery alone, setting quotas for average pupil perfor-
mance, or requirements of standard pace for instruction).

Yet, it is the technical, not the simple or bureaucratic, control that has the greatest repercussions for teachers. In a very real sense, as commercial reading materials became more pervasive, teachers became less important in the process of reading instruction in America. To understand this inverse relationship—the deskilling of teachers—it is necessary to look once again at the history of reading instruction and of commercial reading materials.

Just before the turn of the twentieth century, the work of Johann Herbart was translated into English and had a wide impact on American teacher education and reading instruction. In fact, John Dewey, in How We Think stated, “Few attempts have been made to formulate a method, resting on general principles of conducting recitation. One of these is of great importance and has probably had more influence upon the hearing of lessons than all others put together; namely the analysis by Herbart of a recitation into five successive steps” (1910, p. 202). In these five steps teachers (1) prepared students for new information by referring to relevant known information, (2) presented the new information, (3) associated the new information directly with materials and ideas learned in the past, (4) systematically used examples to illustrate these points of connection, and (5) tested students’ ability to apply the new information.

Smith (1965) suggested that “Herbartianism” affected early twentieth-century reading instruction in two ways: first, the recitation steps became commonplace in reading instruction, and, second, Herbart’s notion of the effects of literature and history on moral development influenced the reading selections in commercial reading materials. At the time, these materials consisted of a graded set of textbooks, and, although teachers used them frequently, they had to devise their own procedures for using them. To be sure, professional books concerning how to teach reading began to appear in the early 1900s, but commercial reading materials did not include teacher’s manuals, workbooks, or tests until the 1920s. Thus, teachers were responsible for the goals of reading, the methods of instruction, designation of practice activities, and procedures for evaluation.

Compare those expectations and responsibilities with the teachers’ role in present-day rationalized reading programs. Just as happened to the craftsman in manufacturing, teachers lost much of their responsibility and, over time, their skills to the technology. With the advent of teacher’s manuals, teachers began to lose control of the goals and methods of instruction. Today, some experts on teacher effectiveness recommend teacher’s manuals in the form of scripts for teachers to perform (Carnine & Becker, 1980; Rosenshine, 1981). The development of workbooks relieved teachers of the responsibility and soon the skill for developing practice activities. Today, Durkin (1978-1979) suggests that workbook and other practice activities (worksheets, skill boxes, etc.) account for most of the time designated for reading instruction, to the detriment of children learning to read. Criterion-referenced tests that accompany virtually all sets of commercial reading materials have become substitutes for teachers’ judgment concerning students’ reading ability (Johnson & Pearson, 1975). In each case, skills that Dewey (1910) and Smith (1965) described as being in the repertoires of classroom teachers are now considered to be in the domain of commercial reading materials.

The rise of commercial reading materials as technical control was and is fueled by at least two sources. First, each of the parts of commercial reading materials was originally introduced as an improvement over the reliance on teachers’ subjectivity because the teacher’s manuals, workbooks, and tests would standardize reading instruction, improve teachers’ productivity,
and extend scientific reading instruction to all students. Second, this standardization of teachers' instructions and their subsequent loss of instructional skills rendered teachers dependent on the materials and thus created a market for this technological solution. Teachers and administrators expect commercial reading materials to provide complete programs that specify goals, means, and evaluation for reading instruction. Recognizing this expansion of their market, publishers supply the commodities to fulfill these expectations. This commercialization of reading instruction has produced a highly lucrative, highly competitive, and highly conservative market. In fact, when Scott, Foresman and Company published reading materials that required more teacher judgment in the early 1970s, they lost 65% of their school market (Tierney, 1984). Thus, technical control and the deskilling of teachers find support in science and the economy. And, of late, some teacher education experts have begun to acknowledge teachers' fate in this process: "Teacher education programs are often designed as if teachers were responsible for establishing appropriate educational objectives for their students, preparing appropriate curriculum materials, conducting and evaluating the outcomes of instruction, and making whatever adjustments should prove necessary in these activities. Teachers may have done all of these things in the distant past, but at present, most of these functions are performed by school boards, school administrators, and commercial publishers" (Brophy, 1982, p. 11).

*The reskilling of teachers*

If the technical control of reading programs (the commercial reading materials) deskills teachers by supplying the goals, means, and evaluation of their reading instruction and the bureaucratic control (state education departments, school boards, and centralized administration) limits teachers' access to choices among these materials, what then are the new skills of teaching reading? For a "state of the art" perspective, I turn to the *Handbook of Reading Research* (Pearson, 1984).

In chapter 23, "Classroom Instruction in Reading," and chapter 24, "Managing Instruction," the authors explain the new skills of reading instruction. Identified in a manner reminiscent of Spaulding and Bobbitt's three-step adaptation of scientific management, these new skills "seek a universal system of managing instruction ... evaluated in terms of standardized achievement tests" (Otto, Wolf, & Eldridge, 1984, p. 820). In chapter 23, Rosenshine and Stevens (1984) divide these new skills into three categories: (1) general instructional procedures, (2) specific instructional procedures, and (3) indexes of effective instruction. Generally, teachers are encouraged to lead instruction, to teach to small groups, and to project an academic focus. Specifically, teachers should follow a variation of Herbart's five steps while maintaining a swift pace, students' attention, and high student success. These last three variables are considered indexes of effective instruction. Conspicuous by its absence is a discussion of teachers' knowledge of the content of reading instruction, the reading process, their students, and the source of instructional goals and means in elementary classrooms.

Ironically, Otto et al. (1984) highlight Rosenshine and Stevens's omission in the first sentence of chapter 24—"Reading instruction involves not only selecting and presenting a curriculum to students, but also structuring a context in which teaching and learning can occur" (1984, p. 799). However, Otto et al. then proceed only to elaborate on specifics from Rosenshine and Stevens's argument (e.g., grouping, delivery systems, and feedback cycles). Apparently, in the reskilling of teachers of reading according to the *Handbook on Reading Research*, it is not who is teaching, what is taught, or to whom it is taught that is important; rather, effective instruction is a
matter of how students are guided through commercial reading materials.

The technical control of reading instruction through the required use of commercial reading materials, with its deskilling and reskilling of teachers, should not be overemphasized—teachers are not factory workers and students' reading is not easily understood as a commodity—but the technical control's effect on elementary teachers and students should not be underestimated either. Depending on the type of materials and administrative perspective, teachers and students relinquish some or most of the control over their actions during lessons (Cuban, 1984; Shannon, 1984a): they are asked to routinize their lessons, eliminating nonacademic comments and content, asking primarily low-level questions to monitor student success, and maintaining a "businesslike" but not cold atmosphere (Rosenshine & Stevens, 1984, p. 752). Because the materials supply the goals, directions, practices, and evaluation and because instruction is defined as managing students through the materials, teachers may see little incentive to improve their knowledge of reading, instruction, their students, or appropriate literature. Additionally, in the reification of reading instruction, with all but management predetermined, teachers have little need to reconsider goals of instruction, to reflect on the meaning of their work, or to interact with one another concerning curricular or instructional matters, all of which exacerbate the isolation of elementary school teaching. Moreover, the reskilling of teachers according to which behaviors raise achievement test scores elevates the role of testing to a point at which students' reading becomes reified as test scores and the primary focus of teachers' attention becomes narrowed to this one part of students' literacy development—in other words, test scores become the bottom line of the reading instruction tally sheet.

Although students' test scores usually rise under prescribed conditions of reskilling and sometimes their self-esteem scores rise also (Rosenshine & Stevens, 1984), students are expected to forfeit much of their control over their learning to read in typical school lessons (Shannon, 1984a). Just as with teachers, commercial reading materials as technical control means that students lose any control over the content to be learned. Still, they are expected to attend to task religiously, to participate in every lesson, and to be successful (Otto et al., 1984, p. 814). Yet several writers have recently challenged the putative social, emotional, and intellectual benefits for students attending, participating in, and being successful in lessons based on commercial reading materials. For instance, Freebody and Baker (1985) suggest that socialization into the culture of literacy through the language of primary-grade reading textbooks promotes sexism and subservience; Bettelheim and Zelan (1981) argue that the content of stories in these textbooks stifles children's imaginations and stunts their emotional attachment to reading; and Anderson (1984) reports that seatwork directed by commercial workbooks and worksheets usually emphasizes completion over understanding.

It is in this individual, segmented practice that the effects of teachers' reliance on commercial reading materials for students may be most readily apparent: students may be most easily apparent: students are separated from reading and writing on topics that they consider important, they are kept from reflecting on the potential meaning of literacy in their lives because they are busy completing assignments, and, finally, they are denied the social aspects of literacy because they work alone. In fact, all of the acts typically included in definitions of mature reading (Purves, 1984) seem absent from reading instruction in American elementary schools.

I began this article with two questions. First, I asked what teachers must give up
in order to enjoy the benefits of commercial reading materials. At least under present rationalized conditions, teachers give up control over the means and ends of their work, subjectivity in their teaching, ability concerning construction of reading lessons and tests and knowledge about scientific investigations of reading and instruction, the respect due professionals that comes from outside observers, authority over their classroom activities, working relationships with other teachers and students concerning student literacy development, and, in fact, the history of teaching reading. Second, I asked whether or not this is a good exchange. For teachers and students, I think not.

**Constructive change**

Max Weber (1964) called the rationalization of everyday life and social institutions an “iron cage” from which there was no escape except to return to preindustrial society and to give up its considerable material benefits. Recently, several educational critics have reiterated Weber’s conclusion, suggesting that schooling in America cannot be just or equitable for students or teachers because schools are designed and function in order to reproduce contemporary social structure (Bourdieu & Passeron, 1977; Bowles & Gintis, 1976; Jencks, 1972). Although my analysis of elementary school reading instruction may appear equally bleak (if all of society is fragmented and appears unchangeable, how can reading instruction be any different?), I do not accept this pessimistic conclusion that leaves teachers and teacher-educators impotent. In other words, I do not think that reading instruction must be rationalized, and I believe there are teachers and teacher-educators who have reached the same conclusion.

Simply because students and teachers are controlled in rationalized reading programs does not mean that they totally acquiesce to the directives of commercial reading materials. Anyone familiar with classroom reading instruction recognizes that students find both positive (reading a book behind an elevated desk top) and negative (refusal to participate) ways to subvert the classroom routine of reading group and seatwork. Furthermore, teachers also resist the simple translation of the directives into practice. For example, Durkin (1983) and Shake and Allington (1985) have found that, although teacher’s manuals direct activities during reading instruction, teacher quasi decisions about which parts of packaged lessons to emphasize are not always improvements on the information included in the manuals. However, many teachers do find some time outside the reading lesson proper for so-called enrichment activities—sustained silent reading, oral reading to children, library time—that take students beyond the skills emphasized in commercial reading materials.

Moreover, my third test of the proposed model of reading programs found that the majority of teachers in a rationalized reading program rejected the assumptions of rationalized instruction—the separation of planning from instruction, the centralization of decision making, and the primacy of test scores—even if they did accept commercial reading materials as the appropriate means of instruction. These teachers sought to reemphasize their subjectivity during reading instruction: to know their students and to form cordial relationships in order to share the joys, not just the skills, of reading; to decide which reading goals were worth pursuing for their students; and to judge students’ reading competence for themselves. Most of these teachers were unaware that other teachers, even ones in their building, felt the same way, and they closed their classroom doors and “made do.” Few were satisfied with the status quo; many expressed frustration. How, then, can these incidents of resistance to the rationalization of reading instruction be coordinated in order to affect reading programs? How can teachers’
subjectivity (their knowledge, understanding, and emotions) regain its status in American reading instruction?

Although I do not have any quick and ready-made answers for these questions, I think there are three places where we can start to redirect reading instruction from its current course: (1) reconsider the foundations of reading instruction, (2) separate business principles from reading programs, and (3) develop a notion of science that appreciates teachers' contributions to children’s literacy development.

Currently, most people interested in reading instruction consider it in psychological and technical terms. That is, they think primarily about the cognitive effects of teachers’ actions and material’s content on students and how modification of these factors based on experimental research can increase or decrease those effects. Because they do not question the basic assumptions and organization of school reading programs, they subscribe to the illusion that reading programs have always been and will always remain as they are right now. However, a view of reading instruction early in this century and Mosenthal’s (1984) and Giroux’s (1984) work on evaluation of reading programs and their ideological bases suggest that reading programs are not immutable givens, but rather that they are historically constructed entities that people brought into existence and maintain for various reasons. If we begin to reconsider the foundations of reading instruction in historical and philosophical terms rather than psychological and technical ones, we can begin to see through the curious and conservative reasoning of the following passage on nonformally rationalized reading instruction (whole language approaches, in this example): “It is noteworthy that these approaches are used to teach children to read in New Zealand, the most literate country in the world, a country that experiences very low rates of reading failure. However, studies of whole language approaches in the United States have produced results that are best characterized as inconsistent. In the hands of very skillful teachers, the results can be excellent. But the average result is indifferent when compared to approaches typical in American classrooms, at least as gauged by performance on first- and second-grade standardized reading achievement tests” (Anderson et al., 1985, p. 45). To think historically and philosophically about this quote, consider what is left unsaid. First, an industrialized, albeit smaller and somewhat socialist, nation has a non-rationalized basis for reading instruction in its schools. Why then must U.S. reading instruction be rationalized? Second, skillful New Zealand teachers do not have the proposed reskills of rationalized “effective” instruction, yet they contribute to the development of the most literate population and prevent most reading failures. Why do the authors of this quote imply that the average New Zealand teacher "is very skillful" but the average American teacher is not? Finally, why is New Zealand society willing to trust its teachers' subjectivity and the United States apparently is not?

These questions cannot be answered in psychological and technical terms, yet they are fundamental to reading instruction in the United States. As an initial concrete step toward the redirection of the foundations of reading instruction, those interested in change might write letters to editors of journals and authors of statements like the one just quoted, asking them to explain the historical and philosophical consequences of their work. Such questions might also be asked of administrators, teacher-educators, and conference speakers. Unfortunately, little help can be expected from colleges of education because historical and philosophical considerations are often relegated to one course and usually isolated from subject matter altogether in that environment. However, it does not really take formal training to
wonder about and to ask questions concerning why things are the way they are.

Second, perhaps one of the reasons reading instruction is different in New Zealand than in the United States is that New Zealanders seem to have been able to separate reading instruction from the rationalization pervasive in most social institutions in Western society. That is, they have not used business or scientific principles to measure the effectiveness of reading instruction. In the United States, the process/product metaphor from business has led to a separation of planning from instruction, a perseverance on standardization, and the primacy of the educational bottom line—achievement test scores (Cuban, 1984). Although each of these changes in reading instruction was originally made to save teachers time and to increase their productivity, in fact, each change now confronts teachers, often placing external expectations on them and giving them little time to reflect on the meaning or the potential of their work.

Some progress can be made on each of these fronts. In Michigan, for example, a group of teacher-educators has been successful in changing the official state definition of reading and student competence (Wixson & Peters, 1984). Because of this change, teachers’ groups have been able to obtain state funding to reeducate themselves and other teachers concerning this new definition (e.g., Plymouth, Michigan’s Strategic Ongoing Application of Reading Research [SOARR] program). Although this is certainly not a grass-roots movement, and it seems likely at this point to end with the substitution of one test for another, it is a modest example of individuals from outside and lower levels of the educational bureaucracy attempting to reunite planning and instruction.

An example of resistance to the standardization of reading instruction comes from Substitutes United for Better Schools (SUBS) in Chicago. From 1980–1985, this teachers’ group carried on a running battle with the Chicago School Board over the Chicago Mastery Learning Reading Program (CMLR), which I studied in the first test of my model of reading programs. By attending each school board meeting, scrutinizing each written communiqué from the district office, and carefully analyzing the social, political, and psychological principles on which the program was designed, SUBS (along with other teacher and parent groups) was instrumental in prompting a reduction in the number of skills required in the program, the redesign of the materials, and, finally, a total abandonment of the program. In the words of one teacher, “[CMLR] has made robots out of imaginative teachers. I have been teaching the same stuff for years, but in my own way” (Johnson, 1981, p. 7).

The problem of achievement test scores was recently highlighted in a report sponsored by the National Academy of Education and the National Institute of Education, Becoming a Nation of Readers (Anderson et al., 1985). After advocating one instructional method over others based solely on its superior effects on students’ achievement test scores (e.g., the statement dismissing whole language instruction for American classrooms cited earlier), the authors state, “The strength of a standardized test is not that it can provide a deep assessment of reading proficiency, but rather that it can provide a fairly reliable, partial assessment cheaply and quickly” (p. 98). Here we have the catch-22 that confronts teachers—they are told to adopt reskilling practices because they boost test scores, but then the same experts denigrate improving test scores as a goal for instruction. However, the authors of Becoming a Nation of Readers unconsciously suggest a way out of this paradox: “A more valid assessment of basic reading proficiency than that provided by standardized tests could be obtained by ascertaining whether students can and will do the following: Read aloud unfamiliar but grade-appropriate materials with accepta-
ble fluency; write satisfactory summaries of unfamiliar selections from grade-appropriate social studies and science textbooks; explain the plots and motivations of the characters in unfamiliar grade-appropriate fiction; read extensively from books, magazines, and newspapers during leisure time” (Anderson et al., 1985, p. 99). Underlying this more valid assessment of basic reading proficiency are teachers’ subjective views concerning appropriate materials, acceptable fluency, satisfactory summaries, and extensive leisure-time reading. Yet, the reskilling of teachers of reading ignores teachers’ knowledge and understanding. Indeed, the rationalization of reading instruction is founded on the principle that teachers’ subjectivity is to be neutralized by standardized, more efficient practices. Clearly, there is contradiction at the heart of the rationalization of reading instruction in the United States, and, therefore, there is opportunity for change.

Third, this movement away from the unambiguous ends of cheap and fairly reliable achievement test scores toward the ambiguous, messy conceptualization of more valid assessment of reading calls for a different type of science than the currently popular formal rationality. Within formal rationality, general theoretical principles are considered the highest level of knowledge and concrete problem solving is considered the lowest. From this view, the real knowledge of reading instruction lies in the theories and techniques of basic and applied sciences that university-based scientists and scholars create and then translate for teachers into the technology of commercial reading materials. These theoretically correct routines may work well in the pursuit of unambiguous goals like test scores within controlled experiments of limited duration, but for the problematic goals mentioned as more valid means of assessing reading in the uncertainty of real world classrooms, teachers cannot rely on formal rationality or university experts for solutions.

Rather, what is needed is a new type of science—what Schon (1983) calls “reflection in action”—in which practice is recognized for its theory generation rather than its theory reception. Schon argues that “with the emphasis on problem solving (in formal rationality), we ignore problem setting, the process by which we define the decisions to be made, the ends to be achieved, the means which may be chosen. In real world practice, problems do not present themselves to practitioners as givens. They must be constructed from the materials of problematic situations which are puzzling, troubling, and uncertain” (1983, p. 40). And although problem setting is probably necessary for problem solving, it is not a formally rational problem. To describe this ability for problem setting, Schon contrasts knowledge of practice—the application of set routines in attempts to solve problems—with reflection in action with a statement about how Leo Tolstoy taught children to read in Russia during the nineteenth century: “Tolstoy thinks of each of his pupils as an individual with ways of learning and imperfections peculiar to himself. The teachers are astonished by the sense behind a student’s mistake. In each instance, the practitioner allows himself to experience surprise, puzzlement, or confusion in a situation which he finds uncertain and unique. He reflects on the phenomena before him, and on the prior understandings which have been implicit in his behavior. He carries out an experiment which serves to generate both a new understanding of the phenomena and a change in the situation” (Schon, 1983, p. 68).

Perhaps the clearest illustration of attempts to change American reading instruction through the development of reflective practitioners is the teacher development projects that Jane Hansen and Donald Graves conduct in New Hampshire. There, teacher-educators act as facilitators for the development and maintenance of small teacher cadres who reflect
on instruction through group discussions and close analysis of their own writing. Similar reliance on teachers to reflect on their work and to find their own way toward more valid instructional practices has also been documented in Meeks's (1983) *Achieving Literacy* and in the second half of Heath's (1983) *Ways with Words*. In each case, teachers’ practice, their subjectivity, and their careful analysis of their subjective practice were the basis on which reading programs could be developed.

Some may argue that many teachers are not prepared for the freedom to use their subjectivity during reading instruction—that, at least, we must set alternatives between which teachers may choose. This strikes me as logic akin to Mary McCarthy’s observation that Americans find the poverty of others romantic. Would reading researchers, policymakers, or administrators sit still while others choose the objectives, methods, materials, and intended outcomes of their work? I think not. Why, then, do the majority of these groups condone the rationalization of reading programs? What should be done, it seems to me, is to provide teachers with information and allow them (not require, prescribe, or legislate) the opportunity to formulate the available choices, to argue over them, and then to choose for themselves. Perhaps it is unwise to underestimate teachers’ capabilities outside their alienated circumstances of rationalized present practice, even if it elevates the importance of the positions of reading researchers, policymakers, or administrators to do so.

I close with a quote from Bertolt Brecht’s “A Worker Questions History” because I believe it shows that we can learn as much about reading, reading instruction, and ourselves from the subjectivity of literature as we can from the “objectivity” of science.

Who built Thebes, with its seven gates?
In books we find the names of Kings.
Did the kings drag along the lumps of rock?

And Babylon, many times destroyed—
Who rebuilt it so many times?
Where did the builders of glittering Lima live?
On the evening, when the Chinese Wall was finished,
Where did the masons go?

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