Rousing minds to life

Teaching, learning, and schooling in social context

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Introduction

The problem of teaching: its contemporary context in historical perspective

Once again, America has become concerned with its schools. It is only the most recent of the irregular series of national spasms that, from time to time, grip the nation. No less than nine recent national commissions and reports have offered a painful picture of American education (Griesemer & Butler, 1983). The torrent of comment, proposal, dispute, and accusation generated by these reports has become a contemporary version of the "great school debate" (Gross & Gross, 1985).

The last previous round of concern was generated some 30 years ago by the highly publicized Soviet Sputnik success and its rousing of the American competitive spirit (Sarason, 1983). The continuity of issues is revealed in the echoes of the Sputnik crisis that can be heard in the current debate, as in *A Nation at Risk* (National Commission on Excellence in Education, 1983).

In *A Nation at Risk,* and other reports of the same ilk, two themes are common. The first is the theme of standards. In one form or another, all conclude that students must be held to a higher standard, including more homework, better comportment, longer school hours, higher expectations, and a solid academic curriculum.

The second theme is the quality of teaching, which the reports hold to be generally poor. A recognition that teaching must be improved has been, sooner or later, the conclusion of all educational reformers, including the most recent wave (Sarason, 1971, 1983; Warren, 1985).

That this great debate, after some casting about, has found its focus on teachers and teacher education is entirely predictable: This has been the course of earlier debates and "reforms" (Warren, 1985). However, "If the pattern holds, general interest in the ways teachers prepare for their professional roles will be temporary." In the meantime, while the "hyperbole borders on silliness . . . it gives historians something to chew on" (Warren, 1985, p. 5).

To improve teaching, the reports argue, we must provide higher initial salaries and differentiated pay based on merit, thereby bringing more capable individuals into the teaching profession. We must increase the ratio of content courses to method courses for teachers in training and demand that they meet a higher academic standard (Stedman & Smith, 1983). Many would-be reformers are optimistic that these and other reorganizations of policy and power will lead to fundamental changes in schools, in the conduct of teaching, and in the way that individual students experience education – an optimism that can only be based in the mistaken belief that these ideas are new and untried (Sarason, Davidson, & Blatt, 1986). Sarason sometimes despairs that though there may be a voice, there are no ears in the wilderness:

> [Current reformers] fail to realize that everything being said and proposed was said, proposed, and acted upon earlier as a reaction to the narcissistic wound experienced by our society when the Soviet Union orbited the first sputnik in 1957. (Sarason, 1983, p. 4)

> If the book has been widely read [referring to Sarason, 1971], if there has been general agreement that the issues I raised are valid and crucial, there is no evidence whatsoever that those responsible for these commission reports considered any of them. On the contrary, these reports are based on a conception of change by legislative and administrative fiat.... [What] they recommend for improving the preparation of teachers has been recommended countless times in the past without discernable effect, e.g., better grounding in specific subject matter and the arts and sciences generally, better supervision, more in service and continuing education opportunities, stricter and more objective standards for judging teacher performance and competency, and greater and material recognition of superior teachers.... [These] recommendations ... do not speak to the question of how to prepare teachers better for the realities of the classroom, the school, and the school system.... *It has long been obvious that learning their appropriate implementation in a classroom has not been valued.* (Sarason et al., 1986, pp. vii–ix; emphasis added)

Now history girds itself for another repetition. Again, current reform proposals do not directly address the practice of the profession of teaching. What *is* acceptable teaching practice? This is always left to someone else to define. How is acceptable teaching practice to be instantiated? This is always assumed to be a mere technical matter, secondary to the resolution of policy and power wars.

There is cause enough for pessimism about the outcome of the 1980s reform movement, in its neglect of the history of teaching practices, and in its neglect of the history of "reform." Even if more intelligent, motivated, and educated teachers are recruited and retained, there is no reason to think that teaching itself will be improved *pari passu.* In the torrent of reform proposals, too few define how teachers should conduct themselves in the classroom, or the means through which they will learn higher standards of teaching. We did not heed him in 1971, so let us listen again to Sarason describing the fate of the New Math innovation:

> . . . the intended consequences – the basic goals and outcomes – always intended a change in the relationships among those who are in or related to the school setting. But these intended consequences are rarely stated clearly, if at all, and as a result, a means to a goal becomes the goal itself, or it becomes the misleading criterion for judging change. Thus, we have the new math, but we do not have those changes in how teachers and children relate to each other that are necessary if both are to enjoy, persist in, and productively utilize intellectual and interpersonal experience – and if these are not among the intended consequences, then we must conclude that the curriculum reformers have been quite successful in achieving their goal of substituting one set of books for another. (Sarason, 1971, p. 48)

Despite good intentions, hard work, and success in the policy wars, little was gained – unless one was satisfied to see teachers using unfamiliar textbooks to instruct material they did not understand very well, using the same teaching practices that the reformers had proposed to improve.

The New Math reform is not an isolated case. Other massive efforts at reform of teaching have often produced only superficial change. "Often . . . changes are largely symbolic . . . without changing the quality of teacher or student performance [Berman & McLaughlin, 1978]. Thus schools can at once be innovative and unchanging" (Rosenholtz, 1986, p. 514).

How can that be? Because the preoccupation of the reformers with policy and power redistribution involves matters remote from the practices of teaching and schooling, or the daily experiences of teachers before or after they enter the profession. Ignoring such details and their effective implementation puts even the soundest of reforms at risk.

In the current wave of reform, there are glimmers of attention being paid to the details of training and development of excellent teachers (e.g., Darling-Hammond, 1986; Rosenholtz, 1986). But for the most part, current enthusiasts are as disinterested as their predecessors in the details of teaching and schooling practices, and how they will be changed (cf. Gross & Gross, 1985; Sarason et al., 1986).

What is it about teachers and teaching that reformers have tried to change without success? What is it that the latest effort must also address? What is the problem on which reform must focus if history is not to be repeated? In American classrooms, now and since the 19th century, teachers generally act as if students are supposed to learn on their own. Teachers are not taught to teach, and most often they do not teach. The problem does not lie in individual incompetence or the incompetence of individual institutions. It does not lie in the incompetence or cupidity of teachers or teacher-educators or of educational researchers or theorists. All participants in the educational enterprise have suffered from the same lack of knowledge. Schools have been administered in ways that make teaching unlikely if not impossible. All participants in the educational enterprise have shared an inadequate vision of schooling.

Contemporary critics attribute this miserable condition to one or another recent variation of educational policy, and they tend to argue as though the problem's origin is recent. In fact, contemporary descriptions of impoverished teaching (Goodlad, 1984; Gross & Gross, 1985) differ little from the instructional practices described by Stevens in 1912 and by Rice in 1893 – observations made before the era of colleges of education and the rise of philosophies that some critics blame for contemporary school problems (Oldenquist, 1983). In their review, Hoetker and Ahlbrand (1969) found a "remarkable stability" in the patterns of instruction observed over the past century, patterns that have been condemned as "nonteaching" by successive waves of reform, yet that survive virtually unchanged (p. 163).

Given this history, there is little hope that most of the frequently debated policy proposals will have the impact the reformers seek. We are confronted with this troubling conclusion: It is essential to recruit and retain more able teachers through adequate pay and better working conditions. They must have a liberal education and a substantive knowledge of their subject matter. School curricula must be broad and deep. The school facilities, equipment, and materials must be appropriate. The schools and their surrounding communities must be safe from drugs and violence. But these necessary changes are not sufficient to ensure that teaching will occur. They will not alter the implicit attitude that students are to learn on their own. That attitude is inculcated in teachers throughout their own educational histories, beginning with elementary school and continuing throughout college-level courses.

Professors of arts and sciences faculties may often treat their colleagues and students from schools of education as unworthy of place. Yet three-quarters of U.S. teacher preparation is in the arts and sciences faculties (Kerr, 1983). If teacher education is poor, a good share of the problem is with the curriculum of arts and sciences. Arts and sciences faculties seldom recognize, and even less often acknowledge, the role they play in teacher education. Few critics on university faculties offer much beyond contempt for "methods" courses, and few solutions beyond disempowering the already flaccid methods-oriented teacher-training programs. Although we hold no brief for methods-course orientations, we could all be well reminded that little will be advanced in pedagogy by tossing intended teachers back to the models of the thoughtless "teaching" of the average arts and sciences classroom in which students are expected to learn on their own.

The attitude that individuals must learn from their textbooks on their own, without teaching, will not be altered easily. In the words of Secretary of Education William Bennett, we must have

> a new and rigorous science of pedagogy – not the quasi-academic material now found in "methods" courses, but a discipline that will really teach potential teachers the intellectual roots of their work. A new pedagogy would deal at a profound level with the "knots" that complicate children's understanding, not with the drawing-up of lesson plans. (Bennett, 1986, p. 50)

In the pages to follow, we offer a science and discipline to address the problem. It is a unified theory and practice of teaching, literacy, schooling, and education, distinguished by its roots in developmental, behavioral, and anthropological sciences.

The problem of schooling: its contemporary context in historical perspective

If teachers suffer from lack of preservice opportunity for learning how to teach, they find things no better once the doors of their first classrooms close behind them. As now organized, schools do not provide for professional development or for the introduction of innovations in teaching practices. This is clearly demonstrated in studies of teachers of varying lengths of service showing that

> most experienced teachers who work in isolation from peers continue to do the same thing they did when they first entered teaching 10, 15, or 20 years ago and now find their jobs monotonous and unchallenging. . . . Beginners develop initial skills by trial-and-error learning and begin to deplete their fund of ideas after about the fifth year of teaching [McLaughlin & Marsh, 1978; Rosenholtz, 1985; Summers & Wolfe, 1977]. (Rosenholtz, 1986, p. 524)

Teachers do continue to learn after many years in the profession, but the sources of new learning are extremely limited. More important, the major source of new learning for teachers is the school itself: Rosenholtz (1985) compared relative newcomers who had taught between 1 and 5 years and veteran teachers who had taught 10 to 15 years. She reported that organizational conditions in their schools explained 60% of how much learning beginners reported, but a staggering 72% of how much learning veterans reported (Rosenholtz, 1986, p. 524).

Given these circumstances, the most widely discussed and proposed reforms – higher standards for entry into the field, better salaries, merit pay, and career-ladder plans – will not be enough. As crucial as these reforms are, they will prove disappointing in their impact because they will not change teaching practices, unless at the same time we change the settings in which teachers work – unless we change school culture and redefine schooling. Indeed, efforts that focus exclusively on individuals may simply reinforce the features of contemporary school culture that now hamper development of teachers and teaching. For example, reforms that seek improvements through salary differentials may, in some forms, suppress conditions that would foster better teaching: "Because teachers' skill development depends heavily on collaborative support and exchange, *competitive rewards will thwart efforts to improve*" (Rosenholtz, 1986, p. 518; emphasis added).

Teaching will not be reformed until schools are reformed. Schools will not be reformed until it is understood that schools must be a context for teaching, and that context must itself be a teaching context. To demand that teachers truly teach in existing schools is like demanding that a surgeon achieve asepsis under water in a stagnant pond.

What is needed is a new theory of schooling that will guide organizational and operational decisions toward the correct priorities – achieving an institution that teaches. As we need a new science and discipline of pedagogy, so we must have a new discipline and science of schooling, one that unites analysis of the social circumstances in which educators work to the details of the teaching interactions that schools are intended to create and sustain. Such a unified theory is needed if we are to overcome the barriers to change about which Sarason has written so persuasively and so long.

In the pages that follow, we shall attempt to offer such a science and discipline – one that unifies our understanding of teaching and schooling in terms of both theory and practice.

The basis for a theory of teaching and schooling

Although social and behavioral research has never had much effect on the practice of teaching and schooling, a potential basis to guide change is now discernible. It is an emergent contextualist and interactionist view of human development that draws from the achievements of 20th-century English-speaking social science and from what we refer to as "neo-Vygotskianism" (e.g., Bruner, 1962, 1966, 1984; Fischer & Bullock, 1984; Greenfield, 1984; Minick, 1987; Moll & Diaz, 1985; Ochs, 1982; Rogoff, 1982; Rogoff & Lave, 1984; Tharp, Gallimore, & Calkins, 1984; Vygotsky, 1978; Wertsch, 1985a, 1985b; Wood, 1980). This view has profound implications for teaching, schooling, and education. A key feature of this emergent view of human development is that higher-order functions develop out of social interaction. Vygotsky argued that a child's development cannot be understood by a study of the individual. We must also examine the external social world in which that individual life has developed. Cognitive and communicative skill appears "twice, or in two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category" (Vygotsky, 1978, p. 163). Through participation in activities that require cognitive and communicative functions, children are drawn into the use of these functions in ways that nurture and "scaffold" them.

> In formal and informal instruction, information regarding cultural tools and practices (such as use of calculators, mathematics and writing systems, event scripts, and mnemonic strategies) is transmitted from experienced members to inexperienced members [Vygotsky, 1962, 1978]. Vygotsky proposed that the higher mental functions appear first on the social level, between people, and later on the individual level, inside the child.... This growth occurs in the "zone of proximal development," that phase in the development of a cognitive skill where a child has only partially mastered the skill but can successfully employ it and internalize it with the assistance and supervision of an adult. The adult structures and models the appropriate solution to the problem, engaging the child in this solution, as the adult monitors the child's current level of skill and supports or "scaffolds" the child's extension of current skills and knowledge to a higher level of competence [Wertsch, 1979; Wood, 1980]. Social interaction with people who are more expert in the use of material and conceptual tools of the society is thus an important "cultural amplifier" to extend children's cognitive processes. (Rogoff & Gardener, 1984, p. 97)

An example: A 6-year-old child has lost a toy and asks her father for help. The father asks where she last saw the toy; the child says, "I can't remember." He asks a series of questions: "Did you have it in your room? Outside? Next door?" To each question, the child answers no. When he says, "In the car?" she says "I think so" and goes to retrieve the toy.

In this mundane interaction are the roots of higher mental functions. When the father organizes the strategic aspects of this simple recall task by a series of questions, it becomes clear that the child has the relevant information stored in memory. Without the father's assistance, she is able to recall only (as is typical for her age) isolated bits of information; she is unable to choose a strategy to organize the information toward a particular goal-oriented purpose. But with his assistance, her performance reveals a level of development to come. To ask oneself questions as a strategy for organizing recall of information is a well-researched example of a metamemorial "tool" (Brown, 1978; Brown & Campione, 1986); it is an "internally mediated cognitive tool" characteristic of literate societies (Brown, 1978). It is part of a sociocultural heritage transmitted to children through "teaching," in that zone of performance that "reveals a level of development to come."

The collaboration of the father and daughter reveals the social interactional origins of higher mental functioning, the idea that gave name to the well-known collection of Vygotsky's writings: *Mind in Society* (Vygotsky, 1978). Through this small domestic collaboration, the father is rousing to life significant cognitive functions. Such teaching – understood as assisted performance of apprentices in joint activity with experts – becomes the vehicle through which the interactions of society are internalized and become mind. Such a definition of teaching can guide training and practice and yet remain firmly rooted in theory.

This contextualist/cognitive view of human development provides a basis for understanding and correcting teaching and schooling. As yet, neither Vygotsky nor his followers have attended adequately to the processes by which assistance is achieved. Adequate understanding of the processes of assisted performance requires that the achievements of Western behavioral science of this century, achievements that have detailed the processes of learning in social interactions, be brought into conjunction with the new cognitive/contextualist understanding now being developed. It is our purpose to unite behavioral science with neo-Vygotskianism and thereby illuminate the full issue of teaching, schooling, and literacy development. To the extent that we are successful, there will be available for discussion a unified, integrated theory of education that is based on a culture-sensitive theory of human learning and development.

Plan of the book

In developing this argument, we treat the current state of teaching and schooling in Chapter 1. In Chapter 2 we present the interactionist theory of development that has emerged from Vygotsky's ideas and discuss examples from the natural teaching and learning that characterize everyday life in most cultures. After establishing those general patterns by which cognitive development is fostered, we articulate in Chapter 3 the theory of teaching. That theory also requires an understanding of the means by which assistance can be provided. A review of those means, as discovered by the Western behavioral science of this century, will be articulated with examples drawn from transcripts of a single reading lesson.

In Chapter 4, we return to the contextual level to consider the organization of schools and to develop a general theory of schooling in which all members of the organization are seen as learners and teachers.

In Chapter 5, we present the third leg of our theoretical structure – a theory of what is developed through interaction in social context, a theory of literacy, understood as the patterns of language and cognitive development that can develop through teaching and schooling.

In Part II of this book, the idea of the school as an institution for assisting performance is presented in practical terms, replete with examples. In 1969, we were given the opportunity to design and build a school. For the next 10 years we had authority to select the student population, hire teachers, design curricula, conduct research, learn from mistakes, and test alternatives. That small demonstration school grew into the Kamehameha Elementary Education Program (KEEP), a system of related educational development activities that spanned three states, 3,000 students, many cultures, many languages, and many more corrections and alternatives. Chapter 6 gives an overview of that program, which serves in this book as the major "good example" for teaching, classroom and school organization, teacher training, and research and development.

In Chapters 7 and 8, we discuss the principal activity settings of schooling and examine the teaching, learning, and patterns of assisted performance that emerge in each setting.

We then turn to an examination of systems for assisting teacher performance, through training, consultation, and support. Chapter 9 details the interpersonal plane of the activity settings that assist teacher performance. Chapter 10 presents a detailed case study of a single teacher, who, by having her own performance assisted, becomes competent in assisting the performance of students. Chapter 11 follows the processes of internalization, as teacher competency moves from the stage of assisted performance into the stages of self-assistance and automaticity.

Finally, Chapter 12 discusses the broader social context in which schooling is nested and returns to the question of how – and indeed whether or not – teaching, schooling, and literacy can be reformed. Throughout the volume, we examine the contextual conditions for our "good example" – KEEP – that have allowed such thoroughgoing innovation; in the final chapter we examine the conditions that led to its decline. From both its rise and fall there are lessons to be learned for educational reform.