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Teaching: Images

• On the fifteenth anniversary of the U.S. Supreme Court decision legalizing abortion, a San Jose area junior high teacher showed three of his classes a graphic anti-abortion film. More than half of his fellow teachers, angered by the showing of unborn fetuses being swept up in suction tubes and vivid shots of bloody parts to seventh and eighth graders, complained to the central administration. The twenty-three teachers said that their colleague had exceeded his authority since the film did not fit into the district curriculum for either language arts or social studies.

Richard Schmidt openly opposed abortion. He claimed that the state law required him to instill in students respect for all living creatures and he had the academic freedom to choose what to teach. He also said that he wanted to show “what is going on and what a young girl goes through, the dangers she faces.” One teacher who supported Schmidt said, “I’m very pro-life and, frankly, I feel abortion on demand is infanticide.” She felt the film to be “very realistic and very appropriate.”¹

• Beginning in the late 1970s, Washington, D.C., teachers received from their superintendent a new curriculum. Designed by experts and tested extensively in hundreds of classrooms across the District, lessons stressing specific objectives (e.g., identifying beginning sounds of words, adding two-digit numbers, recognizing synonyms and antonyms) were written with scripts for teachers to follow detailing what methods they were to use for which content. Teachers tested students either daily or weekly to assess how much students had learned. They recorded each student’s progress indicating when

each student had mastered the prescribed skill before moving on to the next one. Elementary school students who had not achieved levels of performance set for the third and sixth grades were retained.

Sitting on Dorothy Porter's desk is a large red binder that she calls her "bible." In it are daily lessons with precise aims for what the students will cover. What the teacher is expected to do, what the students are expected to achieve, even the quizzes that the teacher must give to determine whether students have mastered the skills rest within the binder. The second-grade teacher at Bruce-Monroe Elementary School in Washington, D.C., consults the "bible" over the course of the day to check if the students are progressing as expected. With thirty-one students in class, Porter, a twenty-five-year veteran in the District schools, organizes the activities of the day around small groups, large group instruction, and seatwork. She has a checklist of which students need help on the skill of recognizing synonyms, which have mastered it and can do other work. Porter believes that the Pupil Progress Plan which tells the teacher what they should teach and allows students to progress at their own rate is "the best thing that I have seen in the system."²

• Mrs. Eleanore J. of Rhode Island describes her teaching in elementary and secondary schools since 1937:

I extend myself intensively in teaching; I do it because I enjoy it and I like the response. . . . There was Jimmy, a 17-year-old who hadn't been working at all, but when I told him in the spring that I would pass him if he could just work hard till the end of the year, he was elated, just beaming. I tried to keep him motivated. Then I had another boy, a 10th grader, who wanted to drop out of school at 16. I had a terrible time trying to motivate him, to get him to appreciate that as long as he was in school he should make something of his time. I got nowhere.³ He was getting bored and became a class disturbance; he wanted my attention. I told him to stay out of school the last two weeks and after marks were in, he came in and said, "You know, I've been thinking of all the things that you told me. I'm going to come back in September," and he went on and talked about how much he appreciated me. And he said, "You know, Mrs. J____, I love you," and he kissed me. The first day of school that next fall I looked over and there was Michael standing in the doorway. . . . I think that as educators we have to know when and how to approach the students.³

Different images of teaching emerge from these descriptions. There is a planned, highly rational view of instructional materials and

techniques constructed by experts and delivered to teachers to use in classrooms. There is a picture of a teacher as a professional drawing from a blend of artistry, science, and personal beliefs to make independent judgments about what should be taught and toward what ends children should be guided. Images of teaching come as much from notions of what teachers *should* do as much as from what they actually do.⁴

There is a history to these images of teaching. Because conceptions of teaching express purpose, guiding and inspiring action rather than determining it, I begin with the dominant images.

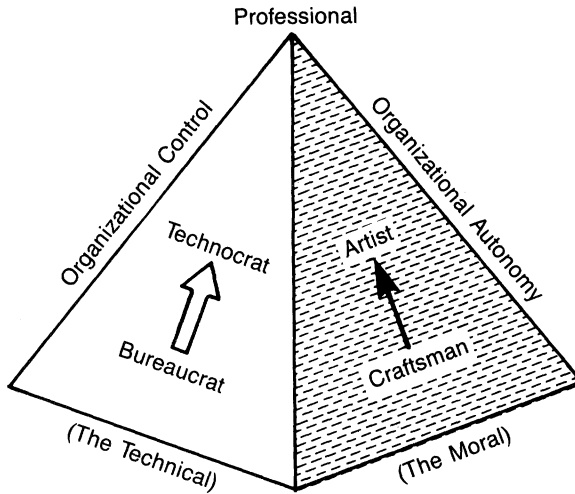
Drawn from an array of historical data on how teachers were expected to teach, how they taught, and reform movements to alter existing practices, I have extracted two dominant conceptions of teaching: teaching as giving knowledge and applying rules (the technical image) and teaching as transforming students (the image of teacher as a moral actor).⁵

The technical conception anchored initially in an early nineteenth century metaphor of a factory and a machine captured those teachers and nonteachers who concentrated upon producing masses of children armed with knowledge and attitudes appropriate to being citizens and workers. Aiming to control what teachers did, policymakers directed practitioners to employ routine procedures in a systematic manner. By the turn of the twentieth century, this bureaucratic conception, spurred by a fascination with corporate efficiency as applied to teaching and administering, gave way to a technocratic conception which emphasized the application of scientifically produced knowledge (“laws of learning”) to the classroom.

The image of a teacher as classroom bureaucrat/technocrat, for example, matches the needs of large organizations impelled to provide standardized services to many students. Instruction concentrates on rationally, systematically and uniformly achieving specific aims. Curriculum is like a staircase, students climbing content step-by-step with no hallways or landings to ease the climb to the top floor. I use the hyphenated term because it captures the essence of the organizational role that teachers are expected to play; that is, the teacher is a subordinate, expected to carry out faithfully instructions from superiors—bureaucrats. But the teacher is also the boss of the students, the executive who is expected to know more than subordinates, possess skills that they lack, and get a product out of the door—technocrat.⁶

The technical conception of teaching continues strongly in the waning years of the twentieth century. Advocates of “direct” or “active”

Figure 1: Conceptions of Teaching in Public Schools, 1800s to Present*



*I make no claim that this figure is empirically or historically valid; it is a device that tries to make sense of the available evidence. I use it to begin organizing existing information about conceptions of teaching.

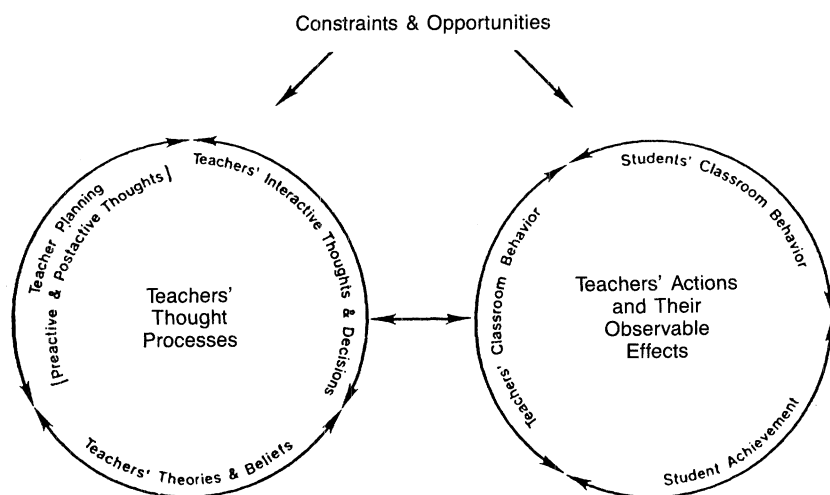
instruction and teacher effectiveness research seek those methods that work for most students. Administrators restlessly pursue those teaching approaches that can be installed in district classrooms. Collective bargaining agreements with grievance procedures and specific clauses on what can and cannot be done in classrooms further fasten a technical perspective upon teaching practice.⁷

The moral view of teaching traces its origins to the establishment of formal schooling in Western culture. This view holds that the aim of teaching is to transform the individual. Teaching is a moral activity that requires skills, knowledge, critical judgment, and an eye cocked on imagining what each person can become. Those who hold this view sweep up the technical, artistic, and scientific findings—anything that can be used to help. Those holding a moral view of teaching use technical skills in classrooms and accommodate the imperatives of organizational life while persistently seeking to turn children into individuals of high moral character.

An example might help to further distinguish the two conceptions of teaching. A teacher searching for a way of bringing more orderliness to a class marked by frequent outbursts from a few students considers a new system based upon rewards allocated by the teacher for acceptable behavior (e.g., candies, paper money redeemed later for privileges). Careful records of behavior supplemented by increased surveillance and social distance from the students are part of the novel package.

A teacher with a dominant technical view who is determined to reduce the disorderliness of a few students will grasp and implement the behavioral modification materials. A teacher holding a dominant moral image will consider what impact such an instructional approach will have on student relationships with the teacher, a bond sought for both its rewards and links to learning. The teacher will weigh the trade-offs inherent in using this approach or some variation of it and the potential damage to the individual students and the existing relationships. Whether the costs are tolerable if used for a short time would be considered also. In short, the teacher calculates gains and losses as measured against a desired goal. Obviously both images can be held simultaneously by the same teacher in an uneasy equilibrium. I simply offer this example to suggest how images can get translated into practice. Graphically, it would look like this.⁸

Figure 2: A Model of Teacher Thought and Action*



*Christopher Clark and Penelope Peterson, "Teachers' Thought Processes," in E. Wittrock, *Third Handbook of Research in Teaching* (Washington, D.C.: American Educational Research Association, 1986), p. 257.

Both conceptions merge in the image of teacher as a professional, where the technical intersects with the moral. The image of the professional dates from the late nineteenth century with the attempts of teachers and administrators to improve the training and status of both occupations. Further education and stiffer certification requirements nudged salaries upward (as did market forces). Harnessing these efforts to the early twentieth century passion for scientific knowledge applied to schooling fueled the drive for professional status. By the midtwentieth century, the marriage of both conceptions of teaching into the image of teacher as a professional was complete in the minds of many practitioners who viewed teachers as either semiprofessionals or civil servants.⁹

Because both images of the teacher as classroom bureaucrat/technocrat and craftsman/artist date back to the origins of public schooling in this country, I argue that these visions of what teaching should be not only surfaced and submerged throughout the history of formal schooling, often mirroring larger socioeconomic forces, but also gave purpose to what actually occurred in the nation's classrooms. Present today, these images persist in the minds of policymakers, administrators, teachers, and the lay public, still inspiring practice.¹⁰

TEACHER AS CLASSROOM BUREAUCRAT/TECHNOCRAT

Monitorial Schools

By the 1820s, in the midst of spreading industrialization and a growing affection for the productive power of the machine, monitorial schools dominated educational debate over what forms of schooling were best. Based upon their work in British private schools for the poor, Englishmen Andrew Bell and Joseph Lancaster spread word of their work. Lancaster's evangelical fervor and organizational skills in operating schools and training teachers, backed by the substantial financial efforts of the British and Foreign School Society, helped establish the system across Europe and North America.¹¹

By 1818 promoters convinced the Pennsylvania legislature to mandate monitorial schools for the poor. In 1825 the New York Free School Society operated eleven monitorial schools for approximately 20,000 children. By the end of that decade, the peak period for the innovation, monitorial schools for blacks, American Indians, and those wishing to continue their education dotted the countryside.¹²

What happened in such a school? While practice differed among monitorial schools, still common patterns were evident. A master headed the school. Responsible to him were a series of monitors, older boys who carried out his instructions according to a manual. For example, there was a general monitor of order who was responsible for insuring orderly behavior; other deputies of the master were monitors for reading and arithmetic. There were also subordinate monitors, boys in charge of teaching small groups, who inspected pupils' writing, and examined each class of boys (i.e., first through eighth). The master often chose monitors for the younger boys from the fifth and higher classes.¹³

In a large room, along each wall within semicircles carved out on the floor (called "draft stations"), subordinate monitors taught groups of ten to twelve children, spelling, reading, arithmetic, and grammar. Instead of books, large individual lesson cards on each subject hung from the walls around which the monitor and students gathered. Monitored followed a prescribed set of questions and answers drawn from manuals. When a student answered correctly he received a reward (a ticket to be redeemed for a prize) and moved to a higher position within the group; if he moved to the top position ("first boy"), he would then move on to another draft station with a different monitor. Thus, students were not assigned to groups for a year or six months and expected to remain there; they were graded separately for performance and behavior in reading, spelling, writing, and other subjects. Each was promoted, retained, or put back to a more suitable group. Competitiveness (or emulation) and rewards drove the system.

Punishments also were given within the monitorial group. Idleness, talking, unwashed face or hands, tardiness, inattentiveness, and other "misdemeanors" prompted monitors to give cards to students stating their infractions; the boys then had to present the cards to the schoolmaster. Levels of punishment ranged from carrying a five pound log around their necks, wearing leg shackles, to the worst punishment, sitting in a cage suspended from the ceiling in full view of the other students, who, as Lancaster writes, "frequently smile at the birds in the cage." To late twentieth century sensibilities, such punishments may seem inhumane; however, the alternative, in early nineteenth century America was a birch rod, or the teacher's open palms or fists.¹⁴

At the front of the room the schoolmaster used an elaborate system of written initials to communicate with monitors. When the master, Joseph Lancaster wrote, "wishes to know if every boy is provided

with a pencil, 'show pencils' is the command given, and instantly the whole school hold[s] up their right hand[s] and exhibit[s] pencils. . . ." The more common messages requested of monitors by the teacher were such commands as T.S. (Turn Slates), C.S. (Clean Slates), L.D.S. (Lay Down Slates).¹⁵

The central aim of this hierarchial organization immersed in explicit rules and bent upon regimenting behavior while transmitting both knowledge and skills was to invest the poor with the values of compliance, punctuality, cleanliness, and knowing one's place in society. In doing so the monitor, the person actually engaged in formal instruction, is both a bureaucrat following a manual and a boss. The schoolmaster is also head of the school but is a bureaucrat/technocrat nonetheless since he is the expert exercising managerial authority by following instructions in operating the school. What excited nineteenth century reformers was the systematic organization of a school, the school's capacity to handle many students cheaply, a pedagogy that seemingly instilled basic values and knowledge with admirable machinelike precision, and a clear set of rules for teachers and those planning to enter the occupation.

Within monitorial school can be seen the dreams that drove reformers then and since toward constructing planned, bureaucratic systems of schooling that promised uniformity in both how students were taught and what they were taught, while delivering results efficiently. Organizational success depended upon obedience to the system, not the personality or judgment of an individual teacher. Teacher as classroom bureaucrat/technocrat was an image born in the early decades of the Industrial Revolution when the love affair with the machine and the factory still entranced Americans.

By the 1840s, however, monitorial schools waned. Other pedagogies and systems of organization, swept across the educational terrain burying Joseph Lancaster's innovations. But the Lancasterian legacy of an hierarchial organization processing large numbers of children and the image of the teacher as an efficient agent of that organization persisted in subsequent decades.

Big city schools at the turn of the century

A half century after monitorial schools disappeared, a system of tax-supported compulsory schooling for boys and girls of all social

classes had grown and expanded to become the marvel of the world. Within big cities, in the midst of massive migration, districts with boards of education and superintendents, had principals who administered buildings housing scores of classrooms, each with a teacher and many students.

By 1910 the twin migrations from Europe to America and from farm to city swelled towns into large, inadequately financed and overextended urban school districts coping with the consequences of poverty, unfamiliar cultures, and overcrowded neighborhoods. These large urban districts had come under heavy fire from journalists, academics, civic reformers, and others who saw these large schools as factories inefficiently and mechanically producing regimented and unimaginative instruction.

These critics no longer saw the machine or factory as a proper metaphor for schooling. Francis Parker, John Dewey, and others, building on the work of earlier European reformers such as Pestalozzi and Froebel, saw schools as communities where teachers drew upon children's interests to transform minds, emotions, and bodies, where teachers built a school around children rather than stuffing subject matter into little people. They wanted fundamental changes in the purposes of schooling and the role of teachers. Prior to World War I, they remained a vocal minority. Not until the two decades between the World Wars did they become the mainstream of established educational thought.

Such critics visiting urban schools at the turn of the century saw instruction as mechanical, determined by the rules generated out of administrative convenience and a passion for saving dollars with little relevance to teachers or children. Holding a very different image of what teachers should do, these critics passionately rejected the view of teachers as classroom bureaucrats/technocrats.¹⁶

The published reports of pediatrician turned school reformer Joseph Rice, who visited 1200 classrooms in thirty-six cities between January and June 1892, illustrates this critical voice.

In St. Louis we have an example of how sad the lot of the child may become when the superintendents not only do practically nothing toward raising the standards of the teachers by instructing them in the science of education, but where they do much to depress them by examining their classes and judging them by results alone. . . .

The consequence is that the teachers at all times labor under a high degree of pressure for results. To secure desired results is now their aim, and to secure them the children are ever relentlessly pushed. The fact that a child is a child is entirely forgotten, and the characteristic feature of the St. Louis schools—absolute lack of sympathy for the child—ensues.

During several daily recitation periods, each of which is from twenty to twenty-five minutes in duration, the children are obliged to stand on the line, perfectly motionless, their bodies erect, their knees and feet together, the tips of their shoes touching the edge of a board in the floor. The slightest movement on the part of a child attracts the attention of the teacher. The recitation is repeatedly interrupted with cries of “Stand straight,” “Don’t bend the knees,” “Don’t lean against the wall,” and so on. I heard one teacher ask a little boy: “How can you learn anything with your knees and toes out of order?”¹⁷

Other critics, however, still believing in productivity, saw massive school bureaucracies as inefficient machines in need of scientific retooling. They looked to the managerial revolution that streamlined corporations into efficient profit making machines. They sought standardization through the use of science applied to schooling.¹⁸

As with the other critics, they, too, saw instruction as mechanical, regimented, and unimaginative. What they sought, however, were improved bureaucracies, the use of information rigorously applied to problems, and scientifically derived policies that would produce better instruction for less money. They wanted college educated, state certified professionals to bring to schools and classrooms technical expertise, yet still remain responsive to superiors in terms of what and how to teach. These critics aimed at modernizing organizations. In effect these critics wanted sharper, better-educated classroom technocrats, not simply unthinking clerks implementing procedures. They proved to be far more influential in touching schools and classrooms than their fellow critics who saw the teacher as an artist changing individual children.¹⁹

Stanford professor Ellwood P. Cubberley, an admirer of corporate efficiency and one of the leaders in the movement to apply scientific principles to schooling, visited many districts across the country in the decades before and after World War I to evaluate their performance. His textbooks became standard fare in college courses for teachers and administrators. What Cubberley saw in Portland, Oregon, in 1913

when he and his associates surveyed the district for a committee of taxpayers illustrates this line of criticism.

The influence of the system, rigidly centralized, mechanized and mechanically administered . . . is quite manifest in all the classroom work of the grammar grades—in the attitude of principals, teachers and pupils. In these grades everywhere there is a noticeable absence of any feeling of educational responsibility. Teachers are convinced that many of their efforts are futile, that much that they are attempting is of little or no value to their pupils. But what can they do about it? They have no responsibility, no right to depart from the rigidly uniform prescriptions of the course of study, reinforced by inspection from the central office, and by the important term examinations. . . . Any system that compels, encourages, or permits passivity to become the prevailing attitude in the schools, at once deprives itself of the best powers of teachers and limits the education of pupils. . . . That the Portland system is chiefly responsible for this condition in the grammar schools, there can be no serious doubt.²⁰

Both sets of reformers saw the same mechanical instruction, but they prescribed very different cures. Cubberley and other like-minded reformers wanted science applied to schooling. They wanted to count and categorize. They wanted students placed in appropriate classes taking suitable subjects. They wanted intelligence and achievement testing, curricula matched to student differences, and guidance counseling. They wanted teachers, principals, and superintendents to become trained and certified to become educational experts. The shift from bureaucrat to technocrat to a professional begins with this movement to apply science to schooling.

Rationalizing Instruction in the 1960s and 1970s

While historians are uncertain as to what caused another surge of popular interest in making public schools again more efficient and productive, the civil rights movement, beginning in the South in the 1950s and spreading north and westward in the 1960s, provided the context for rising concern over school results. Publishing of school-by-school test scores in the late 1960s shocked professionals and fueled growing criticism of teachers and administrators' inability to teach effectively minorities and the poor.

Merging with the clamor for desegregation, legal remedies to improve schools' performance, and federally subsidized compensatory programs (e.g., Title I of the Elementary and Secondary Education Act of 1965) were other federal efforts to introduce budgetary accountability and program productivity. Planning, Programming, and Budgeting Systems (PPBS), mandated by President Lyndon Johnson in 1965, spilled forth from Washington to state capitals and, ultimately, to school districts. The notion of rational approaches to increase efficiency and productivity, again, entranced educational policymakers who either anticipating the future or transfixed by public criticism sought means of both controlling what teachers did and converting them into technical experts.

As applied to schooling, PPBS and similar designs produced schemes that included competency-based curricula, teacher-proof instructional packages containing behavioral objectives and scripts for teachers to follow, minimum competency tests, and the like. One representative experience with accountability in the early 1970s occurred in Oregon. I use it to illustrate the persistent image of teaching as a technical activity.

In 1969 a group of University Oregon researchers persuaded a nearby superintendent to adopt a version of PPBS. Concerned about fiscal and instructional accountability, the superintendent wanted to manage the curriculum more closely. He embraced the researchers' design and the School Planning, Evaluation, and Communication System (SPECS) was born.²¹

The heart of SPECS was material designed for teachers. Teachers received numerous sheets consisting of directions and spaces to write lists of objectives for each class and subject, student names, the outcomes they expected, and the tools they would use to judge student performance.²²

The central role of testing was apparent in the materials. Teachers were expected to test students (and record results) before instruction began; they were expected to indicate when students had mastered the objectives, and they were expected to rate each student's effort as well. An example follows:

D. When interpreting *mastery* on the basis of pre-and/or post-test scores, refer to the specific criteria defined in each objective.

1. If the program or unit is so designed that all students move through it, under the same time constraints, their levels of mastery

will inevitably vary. Therefore, use one of the following to designate the degree to which each student mastered the objective:

MB—The student performed the desired behavior with *mastery before* instruction.

MA—The student performed the desired behavior with *mastery after* instruction.

CP—The student failed to achieve mastery, but made *considerable progress* toward it.

SP—The student failed to achieve mastery, but made *some progress* toward it.

LP—The student failed to achieve mastery, and made *little or no progress* toward it. (emphasis in original)²³

How did teachers react to SPECS? Anthropologist Harry Wolcott listened to teachers in classrooms, lounges, before and after school and recorded the following mix of responses. I have selected an illustrative sample:

I'm now more aware of seeing if I achieved the objectives I set in the beginning of the term. But it's terribly time consuming. I spin a lot of wheels. And in my field, changes occur so fast that I can't write something to last.

I think SPECS helps teachers to plan. Right now the state superintendent of schools is trying to push through some kind of accountability program. In our district it's going to be SPECS; somewhere else it will be a different program.

Regardless of what I turn in, from the department head on up they want to change it. Just the other day they wanted me to combine two objectives that couldn't be further apart. They shouldn't be making those judgments. It's like having vocational education people tell you how to teach art or music.

SPECS doesn't work for my subject. I think it was started from the wrong end. It served administrators' needs, but not teacher needs. And it still doesn't meet student needs. It required a new language and a new sequence. I wish instead they had asked teachers, "what have you already done that's working?" It seems strange that in two years they haven't asked us anything. We are just told to do it or get out. But a teacher's program can't be all set up in advance. It's got to be flexible. I never know for sure what I'm going to do with a class until I get them.²⁴

Ideas about teachers as artists and teachers as professionals emerge in these comments. By 1973, when the professional association presented the option to phase out SPECS, 31 percent of the teachers strongly favored (15 percent simply favored) and 19 percent strongly opposed (12 percent simply opposed) ending the program. One-quarter of the teachers were neutral on the proposal.²⁵

A program designed by university researchers for teacher use and mandated by the superintendent contained within it the image of teacher as bureaucrat/technocrat. The split in teacher opinion over SPECS mirrors both acceptance and rejection of that image. Those teachers rejecting or even partially holding this view, believed that teaching requires autonomy, independent judgment, and the necessity of making decisions tailored to a specific setting.

In the waning years of the twentieth century, the bureaucrat/technocrat image persists. Concern over the nation's eroding economic primacy and foreign success in what had been American markets turned attention anew to public school performance. National reports became a growth industry. Recommendations for holding schools accountable for academic achievement as measured by standardized test scores, wedded to efforts at improving teacher performance, triggered state reforms. State after state mandated tests for both teachers and students; stiffer graduation requirements; curriculum that specified what content was to be taught; and new procedures for educating, recruiting, evaluating, and rewarding teachers. Buried within these national reports and state laws to improve schooling was an image of the teacher. The National Commission on Excellence in Education's report, "A Nation at Risk," offered a glimpse of that image when it called teachers "the tools at hand."²⁶

The effective schools movement, another effort to improve schooling for low-income, minority students, also contains within it an image of the teacher as bureaucrat/technocrat. Mastery learning, direct instruction, competency-based curricula (staples of the movement) lean heavily upon instructional materials that have behavioral objectives, pre- and post-tests, frequent monitoring of student performance, and, in some cases, scripts for teachers to follow. Recall District of Columbia teacher Dorothy Porter's "bible."²⁷ Yet, within the effective schools movement and elsewhere in the nation's schools are individual classrooms where teachers use small group instruction, encourage student choice, and nourish creativity. These classrooms offer much play

for both teacher and student decision making. Similarly, there are alternative schools where special curricula aimed at cultivating students' talents draw teachers who seek opportunities to express their artistry, their professionalism. The images endure.

TEACHER AS CRAFTSMAN/ARTIST

If bureaucratic/technocratic images permeated what both non-teachers and teachers saw as appropriate for classrooms since the late eighteenth century, then similarly, images of the teacher as craftsman/artist, drawing out from pupils the finest they have to offer, has a long history.

Socrates, Buddha, Jesus of Nazareth, Rabbi Hillel are often cited as exemplars of great teaching in the artistic tradition.²⁸ While each had what today would be called schools with pupils as disciples and while each had qualities that went far beyond communicating knowledge and skills—indeed, they transformed those that came to learn—I will concentrate on teaching in formal settings (i.e., classrooms, where public authorities determined that the young must be schooled prior to entering adult society). My point is to show that if the innovative monitorial schools of the early nineteenth century contained the bureaucratic/technocratic view of teaching, other views also competed for attention at the same time and since.

In combining the terms *craftsman/artist*, I go beyond notions of teaching as a trial-and-error search for specific solutions to practical problems or what some writers have labeled the routine application of particular procedures to classroom problems. Instead, the conception of teacher as craftsman/artist (I use *gender* generically) means a repertoire of skills organized around a body of knowledge that aims to transform children into better human beings. Reflection, systematic thinking, and imagination occur among teachers seeking desired ends. A craft image, then, includes technical skills drawn from experience and reflection independently applied in both prosaic and creative ways to develop content and character in children.²⁹

The image of the artist has a long, esteemed history although few writers distinguish between the practical arts with a scientific basis (e.g., medicine, engineering, weather forecasting) or those that draw

from folk experience (e.g., cooking, coaching, fishing, law) and fine arts (e.g., music, art, and drama) where aesthetics and performance dominate. I combine the fine and practical arts because both involve ideas of craft within artistic practice and the need for teacher invention, analysis, and improvisation.³⁰

The merging of craftsman and artist acknowledges the importance of experience, technique, reflection in action, and autonomy in pursuing goals. This conception of teaching is embedded deeply in the image of the teacher as professional. Professionals render independent judgments based on a repertoire of skills, accumulated formal knowledge, and direct experience. Yet in judging, professionals know full well that invention and imagination and timing and tempo are critical in coping with the unknown and the unpredictable.³¹

The interplay in teaching between science and artistry, between technique and feeling, opens the window for independent judgment, personal autonomy, and professional expertise. The notion of teacher as decision maker, determining what to teach and how to communicate content and skills to students, becomes central to instruction. Transforming the young into mature youth of substantial character inspired the artistic vision. These images of craftsman/artist within public schools date back to the early decades of the nineteenth century.

NINETEENTH CENTURY EDUCATORS. Evangelist for public schools, Horace Mann, appointed secretary in 1837 to the newly created State Board of Education in Massachusetts, frequently included his ideas of what teaching is and what teachers should do in his annual reports on schooling in the state. Writing in the waning years of the Lancasterian enthusiasm, Mann offered his views of teaching:

He imparts vigor; he supplies knowledge; he ripens judgment; he establishes principle; and he then bends them on their way to fulfill the great duties of earth, and to be more and more prepared for another life.

He cannot impart, unless the child consents to receive. What, then, is the state of mind most receptive of knowledge and most cooperative in acquiring it? Surely, it is a state of confidence, of trustfulness, of respect, of affection. Hence it follows that the first great duty of a teacher is to awaken these sentiments in the breasts of his pupils. . . . Does not the farmer break up the soil, and open it to the sun, before he commits the seed to its bosom in expectation of a harvest? Have not celebrated artists owed their fame as much to the

careful preparation of their materials as to the skill with which they afterwards combined them?³²

Cyrus Pierce, also from Massachusetts, who ministered to a congregation (a career common to many school reformers), left to become a private school teacher, then accepted a post as high school principal in Nantucket, and finally, in 1839, accepted, upon Horace Mann's urgings, the headship of the first normal school in America.

When asked in 1851 about what his aims were as head of a normal school, Pierce replied:

Yes, to make better teachers; teachers who would understand, and do their business better; teachers who should know more of the nature of children, of youthful developments, more of the subjects to be taught, and more of the true methods of teaching; who would teach more philosophically, more in harmony with the natural development of the young mind.

The old method of teaching Arithmetic, for example, by taking up some printed treatise and solving abstract questions consisting of large numbers working blindly by what must appear to the pupil as arbitrary rules, would now be regarded as less philosophical, less in conformity to mental development than the modern way of beginning with mental Arithmetic, using practical questions which involve small numbers, and explaining the reason of every step as you go along.

And the teacher who should attempt to teach reading by requiring a child to repeat from day to day, and from month to month, the whole alphabet, until he is familiar with all the letters, as was the fashion in former days, would deserve to lose his place and be sent himself to school. Teaching is based on immutable principles and may be regarded as an art.³³

Pierce, Mann, and other reformers saw that while teaching may be a practical art, those who wished to teach should be schooled both in subjects and pedagogy. Nineteenth century normal schools nourished the notion that there is a body of knowledge about the art and science of teaching that can be used reliably in classrooms. The transforming of craftsman/artist into professional begins in these years.

By the closing decades of the century, the issue of how scientific the art of teaching was still puzzled educators. In 1881 the National

Council of Education discussed a committee report prepared by distinguished academics and superintendents that answered the question, Is there a science of teaching?

“Yes,” they answered. “A science,” the committee stated, “is a systematized aggregate of knowledge relating to some special important subject.” Just having an “aggregate of knowledge” is insufficient; scientific knowledge is orderly, connected, and systematic. Given these definitions, the committee concluded that teaching or “pedagogy” is a science.

It embodies in the first place, an aggregate of knowledge gathered through thousands of years, and so well known in many of its features, that it has become the commonplace experience of the race. Child-nature has been the object of study of every mother and every teacher. The pedagogical knowledge derived from experience and thought has been systematized by many thinkers and teachers. . . . There is also one central point to which all of these centralized data relate, namely, the Child. . . . The science of pedagogy consists of maxims or ethical axioms and of data arranged systematically and causally or logically connected.³⁴

The committee’s wrestling with the relationship between science and art were, of course, part of the larger struggle to professionalize the craft. Certifying those who completed their schooling and urging teachers to continue their education were central to nineteenth century reformers’ efforts to elevate both the status and practice of teaching. Converting the craft of teaching into a science, or if that was too ambitious, at least to give instruction a scientific veneer, was tied closely to the growth of the National Education Association (1870), expansion of universities, and a growing self-consciousness among educators. Whichever impulses drove reformers, the notion that the teacher needed more freedom to make classroom decisions was essential.³⁵

The freedom that teachers needed to guide students was implicit in the conception of teaching that John Dewey put forward in the 1890s and later. Dewey’s influence on how teaching should be done continues to shape thinking about classrooms and teachers in the remaining decades of this century. It was Dewey who offered a fuller, broader, and compelling image of teacher as a combination of artist,

scientist, tacit reformer, and moral actor. His writings not only changed the terms of the debate about what teachers ought to be but also offered critics the vocabulary of criticism for any shortcomings that subsequently emerged from classrooms.³⁶

To Dewey the teacher was the instrument for turning a sterile schooling into a potent education. The drawing out of a student's full mental and emotional powers and connecting learning with social change could now happen within the four walls of a classroom. Learning could be socially useful, by developing the mind and character of a child while removing the worst excesses of an industrialized and urbanized society. What Dewey expected of teachers was far more than what they did in the nation's classrooms at the turn of the century. He saw teachers and children engaged in a process of mutual learning in a highly moral enterprise. No longer the single authority, the teacher helped students link formal knowledge with the larger culture.

To do this, teachers had to know about the psychology of child development, the principles of learning, how groups worked, subject matter, theory, and the philosophical foundations of education. The teacher had to become a professional with knowledge anchored in the sciences, philosophy, and history. In 1897 Dewey published *My Pedagogic Creed*. In it the transforming image of a teacher emerges clearly.

The school is primarily a social institution. Education being a social process, the school is simply that form of community life in which all of those agencies are concentrated that will be most effective in bringing the child to share in the inherited resources of the race and to use his own powers for social ends.

Education, therefore, is a process of living and not a preparation for future living.

The teacher is not in the school to impose certain ideas or to form certain habits in the child, but is there as a member of the community to select the influences which shall affect the child and to assist him in properly responding to these influences.

The discipline of the school should proceed from the life of the school as a whole and not directly from the teacher.

The teacher's business is simply to determine, on the basis of larger experience and riper wisdom, how the discipline of life shall come to the child.³⁷

The conception of the teacher that Dewey set forth expects much of the men and women that enter classrooms. They need to construct daily experiences that, while permitting children to figure out for themselves what is necessary to learn, still connect to the ethical ends that education seeks. The conventional view of the teacher as a formal authority presenting the student with content, in Dewey's perspective, shifts toward joint student and teacher planning, more physical movement in the classroom, and active involvement in tasks that make sense to the students—all of which are linked to the larger culture. Such fundamental shifts in expectations for what teachers should do imposes different obligations upon the teacher, obligations that require much teacher knowledge, skill, creativity, imagination and freedom to act. Could such an image of teaching survive in the existing world of urban and rural schools?

Hardly. Only in private schools, where the teacher is most free to teach, and occasional rural one-room schoolhouses, an institution reformers sought to eliminate, could such a vision of teaching survive intact. In the early twentieth century one-room school, the teacher faced twenty or more students of varying ages, scattered across at least eight grades, for five or more hours a day and six or more months a year. She was expected to teach all of the subjects. An occasional visit from the county superintendent constituted supervision. For many teachers, isolated from colleagues and ill-trained for the low-paying position, teaching became a mechanical series of recitations devoid of meaning to most students. Such instances of unimaginative instruction became grist for reformers intent upon consolidating one-room schools into larger units, in effect, modernizing rural schools to make them replicas of urban ones.³⁸

But for some teachers in these settings, isolation became precious freedom. Lack of supervision led to instructional risk taking, trial and error. Few materials sparked ingenuity in many teachers, including Marian Brooks.

After graduating high school in 1924 at the age of fifteen, Brooks began her first job in a New Hampshire one-room school located in a small Irish farming community. To prepare herself she spent the summer at a nearby normal school. That September she faced eleven children in grades 1 through 8, of whom one boy, a repeater of earlier grades a number of times, was waiting until he turned sixteen to leave school.³⁹

I was required to follow the teaching guide issued by the State Department of Education and the textbooks in reading, math, spelling, grammar, history, and geography. There were very few resource materials such as maps, games, supplementary reading books; these the teacher had to supply if she wished to have them in the classroom. I was also required to have posted a detailed timetable of each day's program, and I still recall the struggle I had in making a timetable that would include all the content areas: ten minutes of first grade reading, ten minutes of fourth grade reading, ten minutes of fourth grade math, and so on. But it was a greater and more frustrating struggle to follow it each day. I finally gave up, ignored it and went about establishing an organization that seemed to make more sense to me and the needs of the children.

We read together at the same time or did math together. I would work with one child, such as the little boy in first grade who needed my help in beginning to read, or with the group; the rest of the children would help each other. The fourth graders would read from their history text together as a group or individually if they wished, helping each other with the study problems at the end of the chapter. . . . My very competent little girl in the eighth grade often read with the children in the second grade, then later I would work with them on the reading skills.

As I look back on those years I realize what a great learning experience it was for me as a beginning teacher. Sure if I had had an experienced teacher to confer with and give me some sympathetic guidance and support I, no doubt, would have done a better job in reassessing my practices and making changes. But it was equally important for my own development that I was free from many outside pressures and had the time to find my own style of responding to the children and to discover ways of making learning and school an experience that they could become excited about and enjoy.⁴⁰

By the 1920s reformers interested in modernizing rural schools had introduced to country schools bureaucratic organization, supervision, a planned curriculum with accompanying texts, and large buildings housing hundreds of students listening to college educated and state certified teachers. But beliefs in teachers making independent judgments about content and methods of instruction persisted in the growing professionalization of the craft.

Invariably the belief that teachers, as professionals, should have the autonomy to create motivated learners was wedded to the child-centered wing of the progressive education movement. The broader view of the pupil as more than a mind that needed molding to the contours of an adult-generated curriculum gained increasing currency among teachers and administrators in the years between the two World Wars. For the most part, these reformers wanted instruction and curriculum tailored to children's interests; they wanted instruction to occur in small groups or individually; they wanted programs that permitted children more freedom and creativity than existed in urban schools; they wanted school experiences connected to activities outside the classroom; and they wanted children to help shape the direction of their learning. Accompanying these progressive ideas about schooling was the idea of the teacher as a careful decision maker qualified to decide what students needed, when, and under what conditions.⁴¹

In the 1920s, for example, Denver Superintendent Jesse Newlon, a leader among pedagogical progressives, initiated an experiment in teacher decision making that combined the image of the teacher as craftsman/artist with the image of a professional. Newlon believed that involving teachers directly in determining what they would teach would lead to a staff "that would teach better and with more understanding and sympathy than they could ever otherwise teach."⁴² Why did Newlon believe this?

It is only by actively engaging in the process of curriculum construction that a teacher can attain his greatest effectiveness. There is no substitute possible for a maximum of teacher participation if teacher growth and effectiveness . . . are to be expected from classroom procedures. Since teaching is a professional job, the practitioner can be master of his profession only if he is conversant with the theories that underlie practice.⁴³

Participation meant that teachers chaired subject matter committees on which principals and central office administrators served. Substitutes replaced teachers on those days when committees met. Each committee prepared objectives, selected content, designed instructional methods, including which questions to ask, and suggested varied projects and materials that their colleagues might use. After syllabi

were written, they were used in classroom trials, and with further comments from teachers, revisions were made.⁴⁴

Such teacher involvement was rare in the 1920s. Bureaucratic curriculum-making reigned. Most districts designed curricula in the central office, shipped it to principals, and ordered that it be implemented. Supervisors inspected classrooms to determine if the curricula were being taught. Denver's experiment placed teachers at the center of curriculum design. Essential to this process was the belief that teachers had to understand how a curriculum was put together if they were to teach it well. What went on in teachers' minds, their intentions, became crucial to teacher improvement.

Teacher participation in curriculum development spread as a result of the Denver experience but seldom with the intensity that Newlon and his successors brought to it. Of course, teacher associations and, later, unions made this assumption central to their professional activities. But they were private groups openly serving teachers' material interests. For administrators to nourish that conception was unusual in the post-World War I decades.

The notion of teacher as craftsman/artist persisted in ensuing decades. Gilbert Highet's *The Art of Teaching* (1950) continued the familiar dialogue between art and science. "I believe," he wrote, "that teaching is an art, not a science." Acknowledging the orderly and systematic work that is part of teaching, Highet believes, is not science. "Teaching involves emotions which cannot be systematically appraised and employed, and human values, which are quite outside the grasp of science."⁴⁵

If Highet's book draws from the great teachers of the past, Philip Jackson's classic, *Life in Classrooms*, captures the complex society of thirty children and one adult that exists for six hours daily within a small room. In contributing to the discussion of art and science, Jackson concludes:

People who are interested in the application of learning theory or the engineering point of view to teaching practice often have as their goal the transformation of teaching from something crudely resembling an art to something crudely resembling a science. But there is no good evidence to suggest that such a transformation is either possible or desirable. An equally reasonable goal . . . is to seek an understanding of the teaching process as it is commonly performed before making an effort to change it. As we learn more about what

goes on in these densely populated hives of educational activity it may turn out that we will seek to preserve, rather than to transform, whatever amount of artistry is contained in the teacher's work.⁴⁶

Other recent books continue the tradition of viewing the act of teaching as some ineffable mix of science and practical art. Louis Rubin devotes an entire book to teachers as artists. Ken Macrorie found twenty teachers and professors who were "enablers," people who did more than transmit the knowledge of the world and get it back from students on tests; these were people who "help others to do good works and extend their already considerable powers."⁴⁷

The image of teacher as craftsman/artist continues to inspire researchers, practitioners, and policymakers. It also continues to compete with the image of teacher as bureaucrat/technocrat. No single public image captures a consensus among teachers and nonteachers over what teaching should be. Among educators, however, the conception of teacher as professional merges the technical and moral images, sacrificing clarity for a blend, but one that has come to be the preferred metaphor, blurred and unaccepted by many researchers and other professions as it may be.⁴⁸

Over the last century and a half, academics, policymakers, and citizen reformers have viewed the classroom as a place where teachers *ought* to do one thing or another in the quest to raise the next generation correctly. Often holding the same views, teachers also have entered classrooms with private images of how they should go about their work with children. These contending images rose and fell in popularity depending, it seemed, on the larger social forces at work in the culture and the particular experiences and values that teachers had. The uneasy coexistence of these pictures in people's minds continues to this day. What these pictures of teaching suggest is that images have a potent influence on policies and practices. In effect, the pictures help shape teaching behavior.

After all, teachers do so many things in classrooms. The image of bureaucrat/technocrat inevitably conveys a fraction of the essential classroom tasks. There *is* a rule-governed and technical set of tasks in managing a crowd of children for six hours a day. Attendance has to be taken; tests have to be given; homework policies have to be complied with at some level. Moreover, there are techniques that need to be mastered by teachers to construct tests, to question, to praise and

reprimand, and scores of other mundane but essential classroom tasks that constitute what a skilled classroom teacher should do.

Similarly, the craftsman/artist image fits another portion of classroom activities. Improvising when emergencies arise with students or when planned activities go awry; sensing that special moment of when *not* to proceed with the next planned task and, continuing with what is going on instead; deciding when there is too much planned, too much crowded into too little time, and figuring out how to better pace the lesson.

Within a six hour day a teacher may proceed in a technocratic manner in drilling students, assigning and monitoring seatwork, and similar tasks; yet at other portions of the day, that same teacher will work with groups, handle an outburst by a tense child, confer with an individual student while the rest of the class is working, and lead a soaring discussion. Both images of teaching then, like two-dimensional Egyptian paintings, depict portions of the teacher's duties. But a third dimension is needed to give depth to the classroom portrait. If the history of these images of teaching helps us understand something of classroom instruction, we have yet to find out how teachers teach and the varied roles that they play in the classroom.

TEACHING: WHAT HAPPENS IN CLASSROOMS

How Teachers Taught

Few historians have written about what teachers have done in classrooms. The enormous task of recapturing classroom descriptions from student recollections, teacher autobiographies, school reports, photographs and paintings, accounts from visitors, and other sources intimidates most researchers, save for those determined to reconstruct what happened.

Barbara Finkelstein, using many of the above sources, described teaching in rural and urban elementary schools between 1820 and 1880. In those classrooms teachers talked a great deal. Students either recited passages from textbooks, worked at their desks on assignments, or listened to the teacher and classmates. Teachers expected uniformity in both behavior and classwork. According to Finkelstein, teachers told students "when they should sit, when they should stand, when they should hang their coats, when they should turn their

heads." Frequently students entered, stood, sat, wrote, and spoke as one.

Documenting these patterns, Finkelstein richly detailed monitorial schools established in cities in the 1820s, where group recitations and standardized behavior were routine in rural one-room schools, where individual students sat before the teacher on the recitation bench and raced through their memorized text.

Finkelstein found three patterns of teaching in these classrooms. The "Intellectual Overseer" assigned work, punished errors, and had students memorize. The "Drillmaster" led students in unison through lessons requiring them to repeat content aloud. The "Interpreter of Culture" located only occasionally, clarified ideas and explained content to the children.⁴⁹

My research on both elementary and secondary classrooms between 1890 and 1980, using similar sources, extended Finkelstein's work into the closing decades of the twentieth century.

In studying over 7000 classrooms, urban and rural, black and white, poor and nonpoor, at times of peak efforts to alter classroom instruction (e.g., progressivism in the 1920s and 1930s and open education in the 1960s), I found the persistent domination of teacher-centered practices before, during, and after each of the intense surges of reform aimed at installing student-centered approaches.⁵⁰

Changes did occur. Reforms left their marks on chalkboards, desks, and teachers' repertoires. Some teachers, mostly in elementary schools, created their versions of student-centered instruction where pupils could move about freely to work at learning or activity "centers," where clustered desks encouraged cooperation, and where student-teacher planning occurred.

Other teachers—a much larger number—used certain student-centered practices for part of a day or once a week. They felt such innovations would benefit children and not unsettle existing classroom routines. Some, for example, began grouping students for certain periods a day; others established a science or reading center in a corner of the room. Some pulled desks into a circle so that children could talk to one another as they worked; others choose a unit on American Indians and tried to integrate many subjects into the three weeks spent on the project. These new practices were often used slowly on a consciously selective, piecemeal basis. Over time, practice altered.

But most teachers, especially at the secondary level, retained the general teacher-centered pattern of instruction. Studies of teaching

behavior in the 1980s confirm these dominant teacher-centered practices.⁵¹

Such studies fail to capture the rhythms and busyness of classroom life; the complex repertoires that teachers use in varying what they do in different settings; the daily ebb and flow of emotions that tie teacher and students to one another; the unique culture that develops for thirty-six weeks and disappears when the school year ends. The nature of that classroom culture adds an important dimension to understanding the realities that teachers face daily. I now turn to what some classroom observers have found.

Teaching and Learning in Classrooms

When the state compels a group of students to spend six hours a day absorbing certain information and learning particular skills from an adult certified to teach, the DNA of classroom life emerges. Implacable imperatives drive much of what occurs between students and teachers, regardless of what pedagogy is used, or the personal traits or philosophy of the teacher.⁵²

Walter Doyle detailed concisely these classroom facts of life.

MULTIDIMENSIONALITY. The classroom is a crowded place where many tasks have to be done. As Doyle states, "Records must be kept, schedules met, supplies organized and stored, and students' work collected and evaluated." With limited resources available to achieve many goals, complex choices must continually be made against this backdrop of shifting school circumstances.⁵³

SIMULTANEITY. Many events occur at the same time. A third grade teacher, for example, listening to Barbara read aloud in the top reading group, scans the class. With a snap of her finger, she signals Jose, who had left his desk and worksheet, to return to his chair. Barbara makes two mistakes and the teacher questions Barbara. A messenger from the office delivers lunch tickets. Two students come up to the teacher and whisper in her ear. She nods and they pick up the wooden pass hanging by the door and leave for the lavatory. Elapsed time: thirty seconds.

IMMEDIACY. Classroom events swiftly begin and end. Seldom do teachers have time to deliberate before acting. Researchers estimate that an elementary teacher daily has over 500 exchanges with individual students. Reprimands or praise for the conduct of students occurs almost ninety times a day.⁵⁴