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Constructing Curriculum in the Classroom

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Until quite recently, the dominant theme in most discussions of teaching and teacher education has been the remote control of teaching quality; that is, defining what teachers should do and how to ensure that their behavior will reliably conform to these specifications (see Doyle, 1990). As a result, issues of effectiveness and responsibility in teaching have been treated largely as problems to be resolved outside the classroom. Specifying how best to teach has been seen primarily as the responsibility of policy makers, school administrators, and researchers. Teachers, in turn, have been viewed as instruments to be managed to ensure that they carry out these system-level requirements for teaching effectively.

This traditional view has had a substantial impact on conceptions of what teaching is, how it can be studied, and what the issues of effectiveness and responsibility in teaching, especially at the classroom level, might mean. The purpose of this chapter is to critically examine the foundation and consequences of this traditional view and to explore the implications for both research and practice of the emerging emphases on subject matter in teaching and on the experienced curriculum that evolves within the interaction between a teacher and students. Throughout the discussion, attention is directed to how issues of effectiveness and responsibility can be understood and fruitfully analyzed in this emerging intellectual context.

The distinctive character of this chapter derives from its focus on curriculum processes in teaching (see Doyle, 1992). For most of this century, curriculum has been virtually invisible in studies of teaching and its effects. Rather, attention has focused largely on generic interpersonal processes or the "how" of schooling. If invoked at all, the term *curriculum* has generally been used to refer simply to the content of schooling or to the materials used in the classroom, items that are treated as if they were fixed and inert rather than dynamic aspects of classroom events. Pedagogy, on the other hand,

is seen as beginning where curriculum leaves off; that is, with the human interactions that occur during teaching episodes.

It is becoming increasingly apparent, however, that this stripping of content from the study of teaching has severely restricted our capacity to understand how teaching effects occur and, thus, how effective teaching is jointly constructed or achieved by teachers and students in classroom situations. Moreover, the separation of curriculum from teaching has made it quite difficult to keep issues of values and responsibility in focus during the analysis of pedagogy.

In this chapter, a deliberate attempt is made to identify curriculum processes in teaching. The inherent assumption in this emphasis on processes is, of course, that the curriculum is a dynamic rather than a static element in teaching. The focus, therefore, is on the curriculum in motion. The chapter begins with a brief analysis of the themes and issues that have shaped research on effective teaching. Attention then turns to curriculum studies in an attempt to clarify the meaning of the term *curriculum* at both institutional and classroom levels. Particular attention is given to recent work that reveals how the curriculum actually unfolds in classroom environments. The chapter ends with a summary designed to integrate the study of curriculum processes with deliberation about issues of effective and responsible teaching.

Underlying Themes in the Study of Teaching

The search for knowledge about teachers, teaching, and teacher education has been driven largely by the themes of effectiveness and quality control (see Doyle, 1990). These themes emanated from a basic assumption in North American society that excellence in education can be achieved only if teachers are governed remotely by administrators and policy makers. From this quality-control perspective, teachers are viewed as instruments or tools in the production of school achievement rather than agents who interpret situations and make decisions. As tools, teachers are to be directed from a distance by the imposition of uniform practices on all teachers and/or by the employment of a common set of indicators to evaluate performance. Research came to serve schooling by generating effectiveness indicators or classroom practices that reliably predict achievement-test scores.

The Emergence of Educational Science

How did this view of research on teaching evolve, and what were its consequences? The following brief exploration of the history of research on teaching provides a background for understanding these issues.

Over the course of this century, educational psychology, as expounded in its early decades by such leading figures as Edward L. Thorndike at Teachers College, Columbia University, and Charles Judd at the University

of Chicago, became the foundational discipline for educational research (see Lagemann, 1989). This psychology, designed to mirror the forms of the physical sciences, was behavioral, experimental, and atomistic. The focus was on precise measurement of specific behaviors and the use of controlled experiments to verify scientific laws. These laws, in turn, were intended to be prescriptive; that is, they would define precisely what teachers must do in order to cause student learning (see Joncich, 1968; Lagemann, 1989).

Toward a Generic Understanding of Teaching

The impact of the new psychology on knowledge about teaching was specially strong since pedagogy was historically viewed as a branch of psychology. The result was research on pedagogy driven by the theme of effectiveness; that is, a search for the best way to teach or the criteria for identifying the best teachers (see especially Barr, 1929).

One of the distinctive features of this educational science was a lack of attention to content or subject matter in the study of teaching. The language of behavioral psychology focused on overt actions; behaviors rather than content were measured during classroom observations. Moreover, the effectiveness question focused on teachers or teaching methods as the direct causes of outcomes. Taken together, these frameworks excluded students and curriculum from the analysis of teaching. Questions of what was being taught to whom slipped into the background.

From a practical perspective, a generic educational science modeled on the emerging physical sciences had distinct advantages. In particular, it provided the necessary scientific authority for the social efficiency movement, which, through the efforts of Joseph Mayer Rice and Frederick Taylor, had already begun to influence schooling and business (see Kliebard, 1986; Lagemann, 1989). In addition, a generic view of teaching was quite compatible with the administrative uses of effectiveness research for the remote control of teaching through evaluation and training. If one were making decisions about a large number of teachers for an entire school system, indicators of effectiveness needed to be few in number, easily applied, and highly generalizable across teaching situations. If indicators had to be specific to each teaching area, it would soon become impossible to find a common metric with which to judge teachers.

On the other hand, the new educational science swept aside the rich intellectual heritage of teaching methods, a tradition characterized by philosophical and curricular arguments about the nature of knowledge, the character of learners and the learning process, and the impact of teaching activities (see Bayles and Hood, 1966; Kliebard, 1986). With the loss of these complex frameworks and a move toward the seeming simplicity and precision of science, pedagogical thought also lost its capacity to deal with reciprocity, negotiation, meaning, and constructive processes in teaching events. Effectiveness became a matter of prediction rather than understanding. Effec-

tive teaching became a mechanical process of behaving in conformity with scientifically derived standards of performance rather than a deliberative process of interpretation, judgment, and responsibility. Students, in turn, had little visible role in either comprehending instruction or contributing to the meaning that emerged from their experiences in the classroom.

Emerging Directions

At present, however, there are clear signs that conceptions in the field of teaching are changing fundamentally. Interest in curriculum is spreading rapidly among researchers who have traditionally studied teaching (see Shulman, 1986). At the same time, the emergence of cognitive science and qualitative-interpretive research perspectives has given rise to a fundamental reformulation of the disciplinary foundations of educational inquiry. This reformulation is opening exciting new theoretical and empirical corridors for research framed around issues of learning, teaching, and curriculum (see, for example, Brown, Collins, and Duguid, 1989; Connelly and Clandinin, 1986; Golden, 1989). Moreover, this ferment appears to be leading to fundamentally different conceptions of the character of educational science and of the relationship between research findings and classroom practice.

The remainder of this chapter represents an attempt to make curriculum an analytical concept in the study of teaching. As will be seen, this effort to frame teaching as a curriculum process has significant implications for understanding issues of effectiveness and responsibility in teaching.

What Is Curriculum?

The first task in identifying curriculum processes in teaching is to establish a foundation for understanding what the term *curriculum* means. As several observers (for example, Glatthorn, 1987) have noted, this term has multiple definitions, no one of which completely captures the various meanings commonly associated with it. This multiplicity of meaning exists in large part because curriculum processes operate at several levels of schooling. There are the official curriculum, the curriculum represented in textbooks and materials, the curriculum actually taught in the classroom, the curriculum that students learn, and the curriculum embodied in the tests that students take.

For the purpose of this analysis, attention will focus on curriculum processes at two levels: the institution and the classroom. As will be seen, these levels represent distinct but interrelated domains of curriculum discourse and, thus, different types of curriculum processes. Similarly, issues of effectiveness and responsibility differ between these levels.

Curriculum as Social Paradigm

At an institutional level, there are two major curriculum domains or centers: the abstract or ideal curriculum, which defines the connection between

schooling and society, and the analytical or formal curriculum, which translates curriculum policy into instruments that are used in actual curriculum events.

The abstract curriculum serves primarily to define or typify schooling. If one asks what goes on in a school or school system, the answer is likely to be framed in terms of broad goals and general experiences (for example, a process approach to science or a whole-language emphasis in reading) or symbols (for example, standards, discipline, or free expression) rather than the multiplicity of particular incidents that occur daily. Schooling is often typified, in other words, through a relatively abstract model or description of what a school or school system is and does.

This abstract model serves as a means of capturing aspects of the educational ideals and expectations that exist within a society and representing the forms and procedures of schooling as responses to these ideals and expectations (see Lazerson, McLaughlin, McPherson, and Bailey, 1985). As a result, this model serves the important function of establishing the terms of the connection between schooling and society.

It is important to underscore that the abstract curriculum is not equivalent to the official statements or written documents that are often issued by school authorities. At its core, the abstract curriculum is a tacitly understood and shared conception or paradigm of schooling. Official statements and documents are certainly shaped by this shared conception and often capture important aspects of it. Nevertheless, the operating form of the abstract curriculum is the shared social understanding that is used to judge the adequacy of proposals about what should constitute the experience of schooling.

Curriculum at the intersection of schooling and society consists largely of images or metaphors that are relatively nonspecific with respect to classroom practice. These images are fundamentally important because they embody conceptions of what is desirable in a society, what is to be valued and sought after by members of a community or nation (see Chapter Nine). At this level, curriculum becomes an instrument for both clarifying social norms and responsibilities and bringing them to bear on the special role that schooling is to play in contributing to the achievement of these ideals. Curriculum, in other words, is the means by which moral significance is carried forward into the activities of teaching.

A moment's reflection suggests that the institutional curriculum in all probability reflects the fundamental character of a society. In societies that are deeply heterogeneous with respect to basic values, curriculum agreements are likely to be tenuous at best. At the same time, this heterogeneity is likely to influence teaching effectiveness. As Nisan argues in Chapter Nine, social norms play a key role in influencing students' motivation in classrooms. To the extent that consensus regarding basic social values is lacking, it is hardly reasonable to expect that the social group, including parents and children, will cooperate with and support the activities of schooling.

From the perspective of this volume, the abstract curriculum can be

viewed as an important arena for examining issues of effectiveness and responsibility in teaching. The basic educational issue is not simply "What works?" The more fundamental question is "What should the members of a society desire?" Whether intended or not, the abstract curriculum, as a social paradigm with respect to education, is a statement about what is desirable within a social group. And the responsibility for formulating this statement is not simply the province of educational experts. It extends to all citizens. Thus, deliberating about curriculum can be an occasion for citizens to understand what they believe in. Unfortunately, such public discourse is rare.

Similarly, effectiveness is not something that schools achieve in spite of society and, therefore, is not a responsibility that can be delegated solely to teachers. It is rather a product of educators, students, and citizens working toward comparable ends. Thus, curriculum processes, even at the somewhat remote level of the intersection between society and the institution of schooling, have substantial and immediate consequences for teaching effectiveness.

Curriculum as a Theory of Content

The institutional curriculum, as a paradigm of schooling with respect to society, is also important as the starting place for a complex transformational process through which curriculum policy is translated into instruments for use in classrooms. Herein lies a second basic meaning of the term *curriculum*—an elaboration or theory of content with respect to both the aims of schooling and the activities of teaching. The formal process of constructing curriculum, in other words, consists of framing a set of arguments that rationalize the selection and arrangement of content (knowledge, skills, and dispositions) and the transformation of that content into school subjects; that is, a form suitable for use in classrooms (see Fenstermacher, 1984). In this way, the formal curriculum, as a theory or set of theories of content, bridges the gap between the abstract curriculum and the classroom.

From this perspective, it is imprecise to say that the curriculum is the content. It is more accurate to say that a curriculum is a theory of the content, an elaboration of the fundamental nature of the content and how it is to be represented to children at various grade levels (see Kirsch, 1977). Unfortunately, little attention has been given to theories of content in the United States. For many of the reasons discussed earlier in this chapter, the traditional focus has been on the managerial or regulatory uses of curriculum to organize levels of schooling and synchronize the work of teachers within and across these levels.

With content deliberation made invisible or relegated to the relatively obscure domain of experts in philosophy or the academic disciplines, basic issues of effectiveness and responsibility in teaching are ignored in the formation of school subjects. Moreover, within a managerial emphasis, there is little room to consider teachers' and students' responsibilities; what teachers

and students think is relevant only insofar as it might constitute a deviation from the faithful enactment of the formal curriculum. As will be seen, when content theories are neglected, it is easy to overlook the important impact of teachers' and students' conceptions of content on the curriculum as it is actually experienced in the classroom.

Curriculum Processes in Classrooms

Recently, attention among curriculum specialists has shifted from the curriculum as a regulatory mechanism to the curriculum as an event experienced in the classroom (see Cornbleth, 1988; Posner, 1988) and as "an evolving construction" resulting from the interaction of teacher and students (Zumwalt, 1989, p. 175). Similarly, pedagogy is being seen not simply as a neutral pipeline for delivering content but as a social context that has fundamental curricular effects (see Doyle, 1986).

This modern surge of interest in the experienced curriculum signals fundamental changes in educational discourse. The emphasis on the remote control of teaching is increasingly being replaced by a concern for teachers' personal practical knowledge and their role as responsible curriculum makers (Connelly and Clandinin, 1986; Zumwalt, 1989) and for students' paradigms and how they operate in the construction of shared meanings in the classroom (Confrey, 1990). Attention is being directed to teachers' and students' curriculum knowledge, how it is constructed, and how it affects what the curriculum actually comes to be in the events of teaching.

One of the fundamental effects of this emerging emphasis is an awareness of how the curriculum is shaped in powerful ways by local factors in classrooms. What follows is a brief survey of two research programs, one on knowledge construction processes and one on academic tasks, that are helpful in identifying curriculum processes in classrooms, especially the processes of interpretation and construction, and how these processes shape and are shaped by teaching. For a more complete discussion of research that sheds light on the experienced curriculum, see Doyle (1992).

Knowledge Construction in Classroom Lessons

Using reader-response criticism from literary theory and text analytical procedures, Golden (1988, 1989) has demonstrated ways in which the meaning of a text is constructed by students in lessons. Her basic argument is that a text is "a highly organized arrangement of cues which evoke a range of cognitive operations resulting in the formulation [by the reader] of the aesthetic work" (Golden 1988, p. 71). In one study, Golden (1988) used this perspective to analyze story-reading lessons taught by two teachers. Golden described the episodic structure of the text itself and then the structures of the instructional texts (instructional moves and themes) produced by the two teachers in reading the story and asking questions. She noted that both

teachers appeared to be sensitive to the episodic structures of the story text but that they differed in their emphasis on themes. The first teacher focused on episodic information from the text itself as a central point of reference, whereas the second teacher emphasized text-related themes (that is, information relevant to but not included in the text). What students recalled from the lessons was consistent with the teachers' instructional texts.

In a second study, Golden (1989) analyzed a five-day lesson in a sixth-grade class in which the principal text was an excerpt from an autobiography focusing on a Mexican-American's acculturation experience upon entering school. During lessons, the teacher elicited personal reactions to the narrator's feelings, but she maintained tight control over which interpretations were acceptable—namely, those that reinforced her emphasis on patriotic behavior. When students' responses did not reflect this emphasis, the teacher drew on her own experiences to model the appropriate interpretation. The teacher, in other words, was the primary interpreter of the text, who controlled which interpretations were allowed on the floor.

These studies by Golden, as well as similar ones by Heap (1985) and Lemke (1990), are important for at least two reasons. First, they demonstrate ways of examining content itself rather than simply the processes surrounding the use of that content. This is a significant breakthrough for understanding curriculum processes in teaching. Second, these studies show that texts read and written in classrooms are embedded in interpretive structures created and governed by teachers as they struggle to transform and represent the curriculum to students in a complex social setting. More needs to be known about these structures and how they function over time to affect the range of realizations of curriculum in classrooms.

Classroom Task Structures

Recently, attempts have been made to analyze academic tasks as central organizing frameworks in classroom settings (see Doyle, 1983). In these studies, the concept of "task" is used to refer to the way in which students' work is organized or structured in a classroom.

In describing classroom tasks analytically, investigators focus on three essential components: a goal or end state to be accomplished; a problem space or set of conditions and resources (such as information or tools) available to accomplish the task; and the operations (that is, thoughts and actions) involved in assembling and using resources to reach the goal state (Doyle, 1983).

In classrooms, goal states for curriculum tasks are usually embedded in a product—such as answers to a set of work-sheet or test questions or an original essay—that must be generated to complete an assignment. Resources in classrooms vary widely. For some tasks students can consult peers, while for others they must work strictly alone. The operations that students are to use to accomplish work are not always clearly specified by teachers

and sometimes are difficult to communicate. Moreover, students often circumvent task demands or invent their own strategies for getting work done.

A fundamental premise of task investigators is that tasks organize students' cognitions and, therefore, have powerful treatment effects in classrooms (see Doyle, 1983). In other words, they provide situational instructions for thinking and acting with respect to curriculum, and students learn the information and processes that they use to accomplish the tasks that they encounter. If someone were asked, for example, to count the number of times the letter *s* appears in a paragraph, it is unlikely that this person would acquire much of an understanding of the substance of the text.

From this perspective, tasks frame both curriculum and pedagogy. Regardless of the announced or presented curriculum, students experience the curriculum as it is encountered through the tasks that they are asked to accomplish. Moreover, the significance of a teacher's actions in explaining, questioning, and praising students depends on their relationships to the task system in a classroom. If, for instance, a teacher asks higher-order questions during class discussions but holds students accountable in written work only for knowing definitions of key terms, it is unlikely that students will, over time, pay much attention to classroom questions. To capture the curriculum in use, then, one must describe not only the information represented to the students but also the tasks enacted with respect to that information (see Doyle, 1986).

Finally, because tasks are enacted in the complex social setting of a classroom, they have an inherently dynamic quality that requires participants to do a considerable amount of interpretive work to ascertain what a particular task is and how it can be accomplished.

A major portion of task research has focused on the types of tasks that occur in classrooms (see, for example, Doyle and Carter, 1984; Sanford, 1987). Typologies of tasks are usually constructed around the presumed cognitive processes or operations that are required to accomplish tasks. Doyle (1983), for instance, distinguished among tasks involving (1) memory or the reproduction or recognition of information previously encountered (for example, spelling tests); (2) routines or algorithms that reliably generate answers (for example, arithmetic or grammar exercises); (3) opinion or the expression of a disposition toward content (for example, reactions to a poem); and (4) understanding, including recognizing transformed versions of text, selecting appropriate procedures to solve complex problems, and drawing inferences or making predictions from information given (for example, solving word problems in math, performing science experiments, or reading a new passage with comprehension).

Doyle (1986) argues that tasks are deeply entwined with the structure and flow of action in classroom environments and that these circumstances shape the curriculum. When academic work is routinized and familiar to students (for example, spelling tests or recurring work-sheet exercises), the flow of classroom activity is typically smooth and well ordered. When work

is problem-centered—that is, students are required to interpret situations and make decisions to accomplish tasks—activity flow is frequently slow and bumpy.

From the students' perspective, problem-centered work involves high levels of ambiguity concerning the precise character of the product and the risk that they will not be successful. Students often respond to the ambiguity and risk involved in such work by negotiating directly with teachers to increase the explicitness of product specifications or reduce the strictness of grading standards. Otherwise, error rates may go up and engagement and completion rates go down, creating pressures on work flow and order in classrooms.

Teachers sometimes respond to these pressures by excluding higher-level tasks from the classroom altogether. More often, however, they revise or simplify task demands by clearly defining specifications, emphasizing procedures for completing assignments, providing prompts and resources, and adjusting accountability for work. When this happens, students' attention shifts from meaning and the underlying operations with content to obtaining correct answers and completing the work.

In summary, the research on tasks and task structures is beginning to provide useful insights into the fate of curriculum within classrooms. At a classroom level, tasks are pushed around by intrinsic factors related to management, activity flow, and direct student negotiation. Novel or problem-centered work, in particular, appears to stretch the limits of classroom management and to intensify the complexity of the teacher's task of orchestrating classroom events.

Curriculum Process in Effective and Responsible Teaching

In this final part of the chapter, I attempt to distill and integrate the various lines of thought surveyed above to construct a framework for inquiry into curriculum processes in teaching and to examine how issues of effectiveness and responsibility can be understood within this framework. While several important issues of effectiveness and responsibility in teaching emerge at the institutional level, the discussion in this part centers on issues of effectiveness and responsibility at the local level.

Interpretation and Construction in Teaching

The premise of this chapter is that understanding issues of effectiveness and responsibility at the local level requires a model of teaching as a curriculum process. Such a conception of teaching means that classrooms are contexts in which students encounter curriculum events—that is, must act with respect to some content. These events can be thought to consist of written, oral, and behavioral “texts” that must be interpreted and acted on (see Green, Weade, and Graham, 1988). Teachers “author” curriculum events to achieve

effects on students. In this sense, teachers are curriculum makers who guide students through the texts, shape the interpretations that are allowed on the floor (see Golden, 1989), and, importantly, define the tasks that students are to accomplish with respect to these texts (see Doyle, 1986).

At the same time, students contribute to the authoring of curriculum events as they participate in these enactments. By providing information, asking questions, and participating in classroom events, students shape what the curriculum comes to mean. Moreover, the meaning that they take away from their experiences within these events is dependent on the frames that they bring to the situation (see Confrey, 1990). This perspective also suggests that moving through the curriculum successfully involves a large amount of basic theoretical work as categories are reformulated, propositions understood, and interpretation revised.

There are, of course, limits on this constructive process in classrooms. Students, who often share the broader social norms embodied in the institutional curriculum, witness classroom curriculum events and judge them as "proper" or not (see Burgess, 1984). These definitions and judgments would seem to play an important role in sustaining curriculum events within classrooms. At the same time, as curriculum events become visible in various ways to administrators, parents, and other citizens, forces can be brought to bear at the classroom level. Through these mechanisms, the classroom curriculum is indirectly connected back to the abstract curriculum and the formal curriculum.

This analysis highlights at least two important aspects of teaching. First, interpretation and knowledge are placed at the center of curriculum processes. These constructs are likely to be much more powerful than "learning" and "behavior" for understanding teaching, because they direct attention to the frameworks of meaning that students and teachers bring to a situation and how these interact with the curriculum contexts in which they find themselves.

Second, the analysis underscores a theme that emerges in several lines of inquiry: students' curricular knowledge is deeply embedded in the fabric and culture of a classroom (see Doyle, 1986; Golden, 1989; Green, Weade, and Graham, 1988). Indeed, there is evidence to suggest that curriculum is locally produced and jointly constructed as teachers and students go about enacting and accomplishing tasks. Remote control of this process, especially through a small set of generic indicators of teaching effectiveness or students' achievement, is likely to distort the process itself (see Madaus, 1988).

Effectiveness and Responsibility

This conceptualization of teaching as a curriculum process suggests that teachers and students have powerful theories of the content that shape classroom plans, choices, and outcomes in fundamental ways. To understand effective teaching, then, it is necessary to understand these curriculum theories

and how they operate. Clearly, effectiveness in teaching is not a mechanical process of using the correct behaviors but rather a matter of interpretation and choice.

Because teaching effectively is a matter of choice, issues of value and responsibility are at the heart of the enterprise at the local level. As teachers and students interpret and select within the classroom, they are jointly shaping the consequences of schooling. Thus, teachers and students must give attention to fundamental education questions as they participate in defining what that education will be. These issues cannot, in principle, be settled or controlled remotely.

The view of teaching advanced in this chapter implies, then, that teaching and teacher education can never be treated solely as a matter of technical proficiency. Teaching is, at its core, an interpretive process grounded in conceptions of what one is teaching and what value that content has for students and society. And the choices that teachers make with respect to their content have enormous consequences for the lives of students and the health of the society. To teach effectively, teachers must be responsible curriculum theorists.

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