

Chapter 3

CURRICULUM WORK AND PROFESSIONAL PRACTICE

Curriculum Workers 50	<i>Elementary and Secondary Classroom</i> 70
Curriculum Work 51	
Settings for Curriculum Work 57	Doing Curriculum Work 72
Becoming a Professional Curriculum Practitioner 61	Summary and Conclusions 74
<i>PERSPECTIVE INTO PRACTICE: Application of Personal and Professional Perspectives in an</i>	Critical Perspective 75
	Resources for Curriculum Study 76
	References 77

Remember being asked what you wanted to be when you grew up? Your first recollection is probably of a casual question or comment by your dad, your mom, a relative, or perhaps a friend. The question probably popped up numerous times later in school and in conversations with your friends. Then there was a new awareness, the pressure that began as early as middle or junior high school to decide about a college or noncollege, perhaps a vocational or general curriculum track. For most young Americans, growing up there were jobs like baby-sitting, working at the corner store, kitchen work, busing or waiting tables, lawn service work, construction work, and numerous other introductory experiences to the world of work. In most instances, all you needed was to be age appropriate according to state law and to secure whatever certificate was necessary, a food handler's permit, for example. Regardless of how you

50 THE WORLD OF CURRICULUM

started, you had to learn the work. Now you are taking a course leading to a degree and probably a certificate to teach. You are entering the world of professional work, and that requires learning a designated body of knowledge and demonstrating proficiency in applying that knowledge. You can eventually be a teacher working with curriculum as you teach, or you could be doing other curriculum work, perhaps as a curriculum and instructional specialist in a school or at the district office. There are others—a publisher, a school board member, a parent, an educational researcher, or president of a foundation—whose work with curriculum may not be so obvious.

CURRICULUM WORKERS

What do people who specialize in curriculum work actually do? Although the nature of the work varies, there are certain parameters that characterize it. Location, for example, where the work is performed, can mean the classroom or the state department of education offices in the capital. Jurisdiction for curriculum work, the assigned responsibility and authority, can vary from that of the teacher in the classroom to that of the state board of education and imply different commitments of time. Of those who work with curriculum, you are more familiar with teachers and other school personnel such as the academic counselor, the principal, and perhaps an assigned curriculum specialist. Looking beyond schools and workers in administrative levels relating to them, though, you will find many other persons who perform curriculum work in education.

Teachers and Curricularists

You are aware that a teacher's role is complex, a series of actions constituting a set of interrelated practices about curriculum, instruction, assessment, evaluation, and learning. The teaching role requires knowledge in all those areas. What flows through all that activity, whether as part of instruction, a conversation with another teacher, preparing the lessons for tomorrow, or attending an in-service, is some consideration of curriculum. A classroom teacher is involved with curriculum all day, perhaps not every minute, but continuously. Curriculum flows in and out of everything a teacher does. Teaching is in part the act of applying curriculum knowledge of several kinds, the kind about the subjects taught (school curriculum) and curriculum practice knowledge. It is also how to interrelate and blend curriculum, instruction, assessment, and evaluation individually for learners. Teachers, who probably make up the largest segment of people who work *with* curriculum, differ from those whose work roles are specifically for working *in* the curriculum. The nuance between *with* and *in* is important. Whereas the curriculum weaves in and out of teaching as a teacher works *with* curriculum, the *in* differentiates the important generalist like the teacher from a more contained or specialized curriculum work. Curricularist, a term first discussed in Chapter 1, is often used to designate a specialization in curriculum. As such, it does not indicate a

specific role with exclusive attributes. It does refer to more specialized roles such as the curriculum specialist, a position often found in a school district central office. The key point is the degree to which the role or work is exclusively *in* curriculum. Obviously, the teacher's role is broader and inclusive of other functions whereas that of the curriculum specialist is narrowly defined. Unfortunately, confusion often attends such distinctions when specialists are variously titled as curriculum specialists, instructional specialists, or curriculum and instructional specialists. The use of such titles in school districts is quite arbitrary, and the reality is that a person-designated specialist may or may not have expertise in either curriculum or instruction. Obviously, you would have to observe what kind of specialization the person is required to perform.

Other Curriculum Roles

There are many other roles in curriculum work in addition to teachers and curriculum specialists. Workers in publishing houses producing textbooks and other materials for the classroom are doing curriculum work. College and university faculty engage in curriculum work, both as specialists in the content that forms the school curriculum and in scholarly activities that study curriculum as part of their interest in teaching and learning. There are also those who, like teachers, work directly with curriculum but may not have the same entry-level degree and certification. Classroom aides, teacher assistants, and library or media assistants are several examples. Others working with curriculum are found in places far removed from the classroom. Employees in state and federal government agencies deal with curriculum within the larger scope of educational programs. School board members and parents are also part of the curriculum community. The student in the classroom can also be considered to be involved with curriculum work. A new and growing area of curriculum work involves assessment and evaluation, what can be classified as monitoring the curriculum. Item writers, creators of tests and other assessment instruments, all key their work to the existing curriculum. Evaluation experts study assessment data and interpret meaning in curriculum terms. All those workers are keeping the curriculum under surveillance at a distance. The instrumentation goes to the classroom or school or both, and is strapped, in a metaphorical sense, to the curriculum like the electronic monitoring devices attached to a heart patient that monitor pulse, blood pressure, and other functions. Those monitoring the devices are removed from the direct association a teacher has, but they are similarly connected to the daily work by virtue of the instruments they use. Evaluation and monitoring could be considered curriculum work through technological extension.

CURRICULUM WORK

Work in curriculum is complex and differs in several ways. For instance, expectations and requirements for performance outcomes may vary. Elementary teachers are

52 THE WORLD OF CURRICULUM

especially prepared to teach reading, a crucial skill, and expectations will be measured in the resulting number of children who can read at a given level of proficiency for a specific grade. A secondary teacher's performance is similarly related to the knowledge proficiency demonstrated by students in the subjects they teach. Others working with curriculum will have different preparation and performance expectations matched to the particulars of their work. Another factor that differentiates among curriculum workers is the proximity of particular work roles to the heart of curriculum work—school, classroom, students, and teacher. Moving out from that center, you encounter other roles and supporting curriculum work. The district curriculum specialist is closest to the classroom, removed from it but in a direct line of contact and support. In comparison, a publisher of curriculum materials is very far removed, not in a direct line of support, and has a seemingly incidental role in curriculum work, yet the publisher's products, a textbook or other materials, are essential to both the teacher and specialist in their curriculum work. Given such diversity, how can curriculum work be organized in order to understand it? Curriculum work seems always to be in progress, a variety of activities playing out in various places. Curriculum work would seem to defy any orderly classification. In fact, curriculum work is not easily classified except in a general way. If you were to survey the curriculum literature, particularly textbooks, you would find these commonly used work classifications: knowledge making, policy making, planning, development, management, assessment, evaluation, and research. These shape an initial structure in which to consider and order curriculum work, a world of knowledge and practice. As a preliminary set of terms about curriculum work, they are described in Figure 3.1. Depending on the context in which they are used, keep in mind that in different settings, there may be multiple functions performed by one practitioner or several people in combinations. For example, a curriculum planner might also work in development, or someone involved in development might be dealing with assessment-evaluation. The purpose here is to briefly familiarize you with these kinds of curriculum work so you will recognize them as the discussion proceeds.

Knowledge Making

Knowledge is being created at the very moment you read this. There is the knowledge of information, data, news, gossip, and conversation, the informal kinds of unvalidated, everyday public knowledge. There is also a formal knowledge, the validated kinds of academic conversation, research, and scholarly inquiry associated with the academy. The *academy* refers to the colleges and universities and some research institutions that contribute to curriculum work and knowledge production. Obviously, they are located in different places in the United States and throughout the world. Academics study schooling and curriculum for a variety of reasons, including research, theory building, and other scholarly pursuits related to their academic roles. They contribute to curriculum work by the knowledge they produce, which may or may not emerge

Figure 3.1 A First Look at Curriculum Work

Knowledge making: As it suggests, the creating of knowledge about curriculum as a process, how it is done, and the subject matter or content it contains.

Policy making: Creating the authority that sets the direction for creating curriculum, much like a law does.

Planning: This refers to the preliminary thinking about the actions and scope needed to implement something and determine the preliminary activities or elements needed.

Development: The activities to create something, in this case a curriculum, the actual production of a math curriculum, for example.

Management: The continuous activities that are repetitive, umbrella-like, to carry on what has been decreed by policy, planned for, and implemented. These activities also occur in each of those kinds of work (e.g., managing, policymaking, or planning).

Assessment: It is important to find out how a policy, plan, or management process is doing, so data about it must be gathered, usually on a continuous basis, for making further judgments. Sending out a questionnaire and giving a test are examples of assessment activities.

Evaluation/Research: Activities that can range from simply gathering information about car insurance to undertaking a long-term study of a particular medicine's effects or how a particular curriculum compares with another one in terms of ease of learning.

directly from involvement with schools and schooling. Traditionally, they have produced curriculum theory, been involved with curriculum development, and trained people such as teachers for curriculum work. What academics and other curriculum workers share is a reliance on the same curriculum knowledge foundation. Their critical role is to know that foundation and convey it to those entering curriculum work. They also contribute from a distance by thinking about the curriculum knowledge being created and how it can be structured so it can be passed on and understood. For example, data from assessments related to school and learner performance have no particular use as curriculum knowledge until they are given that value through analysis and interpretation, usually the work of an academically situated person. There is another dimension to knowledge making that is often overlooked. That is the knowledge about the particular ways of doing things in any type of curriculum work, what is referred to as the practice of curriculum and the knowledge culture, the cocoon in which the thinking, doing, and relating about the work occurs. It is not like knowing subject matter in the school curriculum or the foundational knowledge of curriculum, it is the knowledge that each worker comes to hold about the way to do his or her work and participate with others in that work (Clancey, 1997; Danielson, 2004; Uneo, 2000). You have probably experienced that sense of knowing about the work, not only how to do it but also the nuances and subtleties of what to do and not do as a participant in that work, including the moral and ethical allowances of work behavior. All those elements, the mores, traditions, customs, and ways of doing things, are part of that work culture of practice.

54 THE WORLD OF CURRICULUM

People who stay in a type of work for a long period of time acquire that particular cultural knowledge (tacit knowledge) and, as they become senior workers, contribute to the culture and pass it on to others.

Policy Making

Presidents, governors, mayors, and legislators always seem to have something they want to change, start, or improve. What they propose usually starts out as an expression like “we need a policy . . .” and then they add whatever is on their mind. Listen to a newscast or pick up a newspaper and you find references to some policy about this or that. Is it just another word thrown around indiscriminately in public conversation or does it have important and significant meaning? What is policy making? *Policy* refers to a defined course or method of action, a coherent plan selected to guide and determine present and future decisions. *Policy making*, then, simply refers to the creation of policy.

The formal study of policy and policy making has essentially been the province of historians and political scientists. Policy studies in the education field began to emerge in the 1950s, focusing on policy formulation and its effects on efforts to reform schools, such as the comprehensive high school movement and the federally supported curriculum initiatives later in that decade and into the early 1960s. The education literature is sparse but growing (see Stein, 2004; Warren, 1978) with some useful discussions of policy making and curriculum (Elmore & Sykes, 1992). Two examples of political initiatives that established important public policy involved international affairs. One familiar example you should recall from your history courses is the Monroe Doctrine, which in effect told 19th-century adventuring European nations to stay out of the Americas. Another, more contemporary one is the famous containment thesis of George Kennen, which after World War II became the guide for American foreign policy to control the spread of communism and the Soviet Union. Concerning schools and schooling, there are two familiar contemporary examples. The report of the National Commission on Excellence in Education of 1983, *A Nation at Risk*, initiated a national school reform movement that took different forms depending on how political parties and interest groups coalesced on particular aspects of the report. The legacy of that report, the impetus to and emphasis on reform, continues today. The importance of the report was not its effect on direct policy making but on promoting different approaches to reform rather than using the governing apparatus of the state and the law. That changed with the most recent reform initiative, the No Child Left Behind (NCLB) Act of 2001, signed into law in 2002. This act is the latest reincarnation of the Elementary and Secondary Education Act dating from the 1960s. The NCLB Act is a comprehensive accountability program based on extensive testing and increased financial support for schools keyed to meeting particular mandates such as developing curriculum standards, establishing comparative student performance levels across states, and assuring

teacher quality in their areas of curriculum expertise. Reform, standards, associated costs, and the NCLB Act are major educational policy issues with important curriculum implications. The importance is the shift from policy initiatives resulting from reports and reformers to direct policy making by law.

Planning

Policy gives direction to planning. Policy says, here is what is to be done, and planning takes policy from idea or statement and shapes it into a vision to guide later development actions. *Curriculum planning* identifies the elements and forms that will be necessary, the assemblage of ways to think about and work through the elements to be used in creating the curriculum. A similar process might be the preparation of a blueprint for a building or a computer-assisted design—both are representations of what is anticipated. In planning a building, consideration is given to the purposes or functions to be served and particulars such as the number and type of rooms and the heating, cooling, plumbing, electrical, and other systems that are needed. Curriculum planning also takes in the purposes to be served; what content elements, subject matter such as science, mathematics, and so forth, will be included; and how the curriculum will be organized—the broad scope of what is to be embraced and sequenced, and the overall organizational designs to fit the schooling pattern. In a general sense, planning bridges policy and what is to result, the development that is intended to carry out the policy and implement the plan. Think of the policy-planning relationship this way: Policy is the authority for implementing the purpose or idea to be carried out, whereas planning is the activity to shape the parameters for development work. The degree of planning and who does it will vary depending on the given planning unit, its location, capability, and grant of authority for planning work. Policy making and planning are developed in more detail in Chapter 9.

Development

Curriculum development is probably the most well-known activity in curriculum work. Unfortunately, *curriculum development* is often used interchangeably with the word *curriculum*, creating the impression that they are one and the same. They are not! Curriculum development is a type of curriculum work; it is not curriculum, either as encompassing all curriculum activity or as curriculum, the body of knowledge. Think of curriculum development as those activities that create curriculum and its representative materials for use in some school or comparable setting. There are two primary ways to think about development as an idea. Some authors mate planning and development as a single process. Others separate them as connected but different activities. If it helps, substitute the word *construction* as synonymous with *development*, as W. W. Charters

56 THE WORLD OF CURRICULUM

did in *Curriculum Construction* (1923), or substitute *making* for *development*, as in *curriculum making*, the term used by another pioneer in curriculum development, Franklin Bobbitt (1924). As a key type of work, curriculum development contributes to and relies on the curriculum knowledge bases that you will begin to explore in Part II, Chapters 5–8. The knowledge about developing curriculum, a product of scholarly study of practitioner activity, enters into the curriculum knowledge base. That knowledge is then passed on to new workers who study curriculum and then become practitioners. Their work in turn produces knowledge that again cycles into the knowledge base. As one kind of work, curriculum development both relies on and contributes to the curriculum knowledge base. The commentary here is meant only to introduce you to development very generally. A broader discussion of development in creating curriculum waits in Chapter 4, and a discussion of the developmental process as a key kind of curriculum work is in Chapter 10.

Management

The school curriculum, like anything else, has to be looked after and kept in repair; in a word, it has to be *managed*. *Curriculum management* entails a number of activities you will recognize: official curriculum materials such as district or state curriculum guides have to be distributed, and textbooks must be issued and later requests for replacements or additional ones handled. These activities depend on dedicated storage space, often a central repository, and a distribution system. Management and maintenance are needed to keep the curriculum viable, a process of managing and maintaining the basic materials, the supporting resources, and the procedures that connect all curriculum workers in the management process, be it at the school, district, or some other level or place in curriculum work. Management work might mean responding to a request for the reproduction of materials within the school or at the district office. Outside workplaces might include a publishing house that produces texts or other needed material. Management work might mean contact with curriculum vendors who supply such common curriculum materials as software, hardware, paper and other consumables, and maps and other materials. These are images of traditional curriculum management functions, acquisition, storage, and distribution, which on the surface seem to require little curriculum knowledge. Management and maintenance as a kind of curriculum work are discussed extensively in Chapter 11.

Monitoring

It is important to know how a curriculum is working with reference to itself or students and if it is meeting goals or reaching stated outcomes. Securing such knowledge should not be a reaction to problems that arise suddenly, demands of the moment,

or forces outside curriculum. It should be knowledge available from data derived through a systematic process inclusive of assessment, evaluation, and research. The term *monitoring* is used here to refer to those particular activities that are continuous and embedded in curriculum work rather than random or ad hoc. Referring again to Figure 3.1, assessments are the tools used in evaluation—tests, observation ratings, checklists, and so forth—to establish some measurement, some form of data. Evaluation is the matter of establishing or placing a unit or units of value on the data. Put a little differently, evaluation gives the assessment meaning. Considered in the context of monitoring, assessment-evaluation should be continuous, like the monitoring that occurs in a water filtration process where instrumentation is strategically placed to provide a flow of data. In planning and constructing curriculum, one of the important considerations should be to establish a monitoring process. Research in monitoring has a more specialized purpose as a tool for formal study of more complex questions and issues about curriculum, usually indicating a need for large-scale investigation, perhaps across multiple activities such as curriculum and instruction. Summarizing, monitoring as a concept refers to assessment-evaluation and related research functions that generally fall into the category of inquiry methods. Chapter 12 is devoted to further elaboration of those ideas in curriculum work.

SETTINGS FOR CURRICULUM WORK

Curriculum work and practice are layered. Probably the most important layer and the focus of all curriculum work is the classroom or similar setting as the point of interaction between the curriculum and the student or other designated recipient. The purpose for almost all kinds of curriculum work is to ultimately affect that place and what goes on there. The matter of place as the location where there is curriculum activity is important (Hutchison, 2004). There are several ways to consider the matter of place and location in curriculum work. One is as layers of locations: the states taken individually or as a group; national as in considering the nation as a single unit, the United States of America; or regional/sectional as in the South, Midwest, or Southwest. Another approach is to consider units of control, places empowered to do curriculum work: the state of Idaho, the federal government, or the local school district. The problem with either approach is that certain variants of curriculum work cannot be easily accommodated. A publisher does not fit easily within classifications of location by state or other political units in describing where and what they do that is important in curriculum work. There are also the peculiarities of how curriculum work is assigned across such units. The federal role in curriculum work is unlike that of the various states, which themselves empower curriculum work in different ways. A third approach, using both the place-location and political units of control, will be used in this overview and introduction to where curriculum work is done.

Academic Departments

The academy is the keeper of knowledge. While both academic and school practitioner work creates or seeks to create knowledge, one important role of the academic is to collect, interpret, and organize knowledge in disciplined ways. William Wraga's (1997) discussion of what he calls the "professional knowledge" of curriculum suggests that the primary resource of curriculum knowledge is the literature about curriculum. Determining the specific literature constituting that knowledge is based on various studies of what literature the professors of curriculum consider important. The literature so specified subsumes studies of synoptic texts, orientation or philosophies of curriculum, curriculum activities, and shared expert judgments. Certainly teachers, curriculum specialists and others directly involved with schools, and independent researchers and others who study schooling also create knowledge in addition to what professors and other academics say is important. That knowledge from practice (e.g., from teachers, curriculum specialists, professors, researchers) is itself important curriculum knowledge. Regardless of which workers participated in creating that knowledge, it belongs to all. Knowledge of work, of role, and of the culture of both is part of the professional conversation about knowledge from practice. The academic community acts as the arbiter of what knowledge is important for inclusion in the discipline: the appropriate rubrics of discourse, canons of practice, and other formal matters that set the parameters for work in curriculum.

Classrooms and Schools

With the possible exception of students who are home schooled, the central focus of curriculum work is the classroom and school. Any aspect of curriculum thought, activity, and work has some expression in the local classroom and school. Your classrooms and schools are also what you personally remember about curriculum. The often-used political expression referred to previously, all politics is local, suggests that it is local politics and community matters that prevail in how you see the world. It can also be said in the same spirit that all schooling is local. What both mean is that what is experienced, lived, as local, as community, as what is relational to your sense of place and location, is immediate and personal. Think of the neighborhood elementary school, what is first experienced, the stepping outside the home into a new world of peers. It is the first place of curricular engagement. It is a world of teachers, principals, support personnel, and students, all working with curriculum in various ways in a particular place. There are a host of other roles, from custodial workers to members of the school board. The local school, the first school experience, sets the tone and, for better or worse, personalizes the meaning of schooling through the people students encounter and how they are guided into learning. The importance of

the initial local school experience suggests several observations about curriculum at the level of school and classroom.

- Implementing the curriculum requires shared engagement of common material—in its simplest form, the curriculum is the textbook.
- Curriculum is the heart of schooling—whether it is as a textbook or in some other form, it is the reason for schools and the most common shared experience of citizenship.
- The availability of a common curriculum in the form of the traditional commercially published textbook is economically cost efficient. No single school, district, or state can generate the numbers of texts and materials needed for schooling in the United States.
- The obvious and most important roles in working with curriculum are the students and the teachers. Less visible are the workers who produce the curriculum or those whose work supports classroom engagement of the curriculum.

The classroom, school, and textbook signify the basic sources from which the need for all curriculum work springs. Most important, there would not be a need for policy making, development, or other curriculum functions if schools did not exist.

Districts, Regions, and States

Beyond the local school, other units are involved with curriculum work, the most important being the local school district. The administrative officials, school board, and teachers and students are the core constituents. There are also a number of important community and interest groups and affiliations. Among those with a direct connection are the student-parent-teachers association (SPTA) or equivalent. Others not as directly associated, as is the SPTA, include interest groups such as the Chamber of Commerce, local unions, and other service organizations, all of which have been traditional supporters of schools in local communities. While those organizations and agencies do not do curriculum work by creating it, they do become involved with policy and planning activities when citizens and groups in a community are called on to serve on school committees, either for their own children in a particular school or on advisory boards the district superintendent or school board may create for consultative purposes or to tap expertise in the community. There are also local philanthropic organizations that become involved with gifts, such as a new pool for the high school or new American flags for all the schools. Sometimes these “gifts” can lead to controversies; consider, for example, placing the Ten Commandments in a school lobby and you will probably incite an immediate public storm.

There are 50 autonomous state governments, each operating under a constitution that sets the basic law or laws regarding schools. As pointed out before, schools are

60 THE WORLD OF CURRICULUM

creatures of the state. However, no particular state is isolated, and states with contiguous boundaries work out reciprocal relationships where schools are concerned. This has occurred where schooling sits astride the state boundary lines and when different state jurisdictions apply. This can mean problems arising from different state authorities over funding, health requirements, busing, and other school matters. Often this leads to special laws or agreements by two different states to address these unusual local problems. An example might be a city school district bounding two states where the city schools take in students from an adjacent state. Which state's laws are controlling? What if the per-pupil expenditures and the lines of support differ? These kinds of questions get into issues of reciprocity, funding, and control—all matters of policy requiring coordination, planning, and legislative and executive involvement. Curriculum requirements and textbook selection procedures may differ. What if one state forbids the use of the term *evolution* in science texts and the other doesn't? Those kinds of questions point both to curriculum's importance and to the importance of curriculum and schooling events at the state level. Sometimes matters like those affect a number of states. This can lead to a regional solution involving negotiation of protocols, special legislation, and sometimes funding. Recently, these interstate compacts have become important for pooling common resources, credentialing, and eliminating duplicate educational services, especially in higher education. The ventures of particular interest for curriculum are those coordinating access to Internet electronic libraries and similar resources.

National and International Domains

You are aware that there is a United States Department of Education. You may not know that it was created as recently as 1977. Prior to that, the federal involvement with education and schooling was through the United States Office of Education, established in the latter part of the 19th century and headed by a Commissioner of Education. Among the more illustrious commissioners have been Henry Barnard, William Torrey Harris, and Francis Keppel. Federal involvement has been slow to develop for several reasons. Foremost is the lack of any direct grant of power in the United States Constitution to the federal government. Over time, court cases have expanded the federal role from one of limited advocacy, as it was under the old Office of Education, to more extensive involvement via the general welfare clause and, in the 1950s, by extension, through national defense. An associated reason for the federal reticence is the traditional issue of local control discussed previously. There is and always has been a tension between local/state and state/federal interests where schools and schooling are concerned. Schooling has been considered the province of the state. Economic upheavals such as the Great Depression, international conflicts, and the rise of America as an international power have increased pressure for excellence in schooling to keep pace with other nations. Those pressures have at various times overridden traditional

concern about state-federal separation. As examples like Head Start, federal programs for special education, and the recent NCLB Act attest, the role and influence of the government in Washington are still being defined.

Although the conversation about curriculum work and practice has been limited to the United States and the American experience, it would be naive to assume the school curriculum is strictly an American phenomenon. Much of the curriculum knowledge base is informed by work in other national settings (Gamoran, 1998; Kelly, 2004). In the early development of American institutions, critical knowledge, key ideas, and influential practices about schooling emanated from Europe. Now, American colleges and universities are a mecca for foreign students wanting cutting-edge knowledge and to understand American institutions such as our schools. As a world leader, the United States is also economically and ideologically competitive, and the success of the American curriculum in keeping pace with other nations educationally is important internationally. Indeed, the International Assessment of Educational Progress and international educational activities under the auspices of the United Nations suggest the size and importance of the world enterprise. Unfortunately, a discussion of international education and curriculum has to be limited for two reasons. First, that telling is a whole other book. Second, there is the matter of the translation of educational traditions and policies in other societies and nations and the differing cultural implications from one location, society, or culture to another. This refers to the assumption that a finding about schools and schooling deemed beneficial in one culture or society is transferable to another, or that international test results in themselves allow for comparisons about schooling across nations. Those are contentious issues with potential political implications outside the purview of this book and the narrower considerations of American curriculum.

BECOMING A PROFESSIONAL CURRICULUM PRACTITIONER

Professional practitioners of whatever stripe form a collective of people working in the area where the matter of proficiency, of applied expertise and judgment, is crucial. They are a community of conversation, a disciplined discourse, to establish the standards for attaining proficiency, expertise, or competence and an agent or agency to certify that achievement. Those who wish to participate in such a learning community must acquire the knowledge, the ways of knowing, and the qualities of practice that define the conditions of participation. These prepractice and practice requirements are presented in Figure 3.2. They suggest the elements of professional performance that a potential curriculum practitioner should acquire.

Figure 3.2 Elements of Professional Practice

<i>Preparation for Practice</i>	<i>Practice</i>
Acquiring Knowledge	Activating Knowledge
Organizing Knowledge	Communicating Curriculum
Building Perspective	Envisioning Curriculum
Building Expertise	Reflecting on Curriculum

Building Knowledge

The usual introduction to curriculum begins in course work and a textbook. Each textbook represents one author's view of curriculum and is intended to do several things. First, it is to articulate the knowledge that exists about curriculum. The second function is role related; it focuses primarily on understanding the curriculum-teacher relationship, with secondary attention to others, like the curriculum supervisor or specialist in the school district. With varying degrees of emphasis, all contemporary texts address curriculum development, curriculum theorizing, and curriculum evaluation and curriculum history. In addition, there are varying treatments of contributing knowledge from philosophy, cognition, learning theory, and sociology. Knowing curriculum work is not just acquiring the academic knowledge about the functions of each type of work, it is also about the manner of practical application; the roles and functions particular to curriculum work; the various institutional places and locations where the various types or categories of curriculum work take place; and the breadth of that work, the levels of institutional concern inclusive of the type of work, roles, and places of work.

Introductions to curriculum knowledge are also about the various ways to describe knowledge and how it can be organized. You are probably familiar with knowledge categorized as the humanities, sciences, and the arts. There are other ways to understand knowledge and organize it. There is knowledge as content to be learned: mathematics and biology are familiar to you as examples of knowledge in the school curriculum. All knowledge is personal and "encompasses all that a person knows or believes is true, whether or not it is verified as true in some sort of objective or external way" (Alexander, Schallert, & Hare, 1991, p. 317). Knowledge, as you recall from discussions in the preceding chapters, can be generally classified as formal or informal, but the modes or ways of knowing in and across any knowledge are more complex. A sample of ways to organize knowledge and ways or the manner of knowing is provided in Figure 3.3. Although caution is advised in generalizing as to whether ways of knowing are particular to either domain in the figure, there is a tendency to understand them as more applicable in the formal domain. For example, knowledge can be characterized by how

Figure 3.3 Modes of Knowing and Forms of Knowledge

Basic Organizations or Domains of Knowledge

Formal knowledge refers to knowledge and modes of knowing from a discipline such as biology or a field of study such as medicine where it is stipulated and intended by its very organization. Logical knowing is associated with formal knowledge.

Informal knowledge derives from experience and is usually characterized as vicarious and unintended rather than as expected and intended, as in formal knowledge. The knowledge gleaned from everyday living, interrelationships, and the location-place in life.

Knowledge as Modes of Knowing

Conceptual knowing is understanding relationships among discrete bits of things and uses, thought, and reflection, as in knowing the concept of tree and being able to place objects that seem to be trees in that category by virtue of their common characteristics, the links among them.

Contextual knowing is conditional knowledge about where and when to apply what you know as in a setting, a fit of knowledge within the current place one is experiencing.

Declarative knowing is what you know and can verbalize or declare about something.

Focus knowing is different from tacit knowing in that you know about something in your focus by describing or otherwise characterizing it without depending on what you might already know about it.

Logical knowing is understanding correct and incorrect reasoning, as in problem solving, and is distinguished from irrational thinking.

Practice knowing is knowledge generated by specialized actions in very defined settings or contexts such as those of a teacher, a doctor or other medical personnel, or an electrician.

Procedural knowing deals with rules, ordered procedures, sequences, and the like, as in counting or word use or ordering of symbols.

Tacit knowing is knowledge you already have and bring to thinking about something that is in your focus. Usually not verbalized, as in the automatic way you know how to open a door even while conversing with another person.

you acquire it and use it, what Elizabeth Vallance (1999) referred to as the “modes of knowing.” *Content knowledge* (think of book learning) is often associated with formal knowledge (Alexander et al., 1991). Such content, once learned, remains as something to be recalled or remembered on some occasion and is often referred to as *declarative knowledge*. Knowledge is also a demonstration of having learned something and the manner of being able to use that knowledge. This is sometimes called *conceptual* and *procedural knowledge*. In applying what you study, you read the contextual environment in which you practice, acquiring what Sternberg (1990) calls contextual intelligence. Applying that contextual intelligence yields *contextual knowledge*. For example, doing curriculum work as a teacher is not just the application of knowledge about curriculum; often it is the received knowledge about a need to adjust the curriculum being taught in the immediacy of the classroom environment as it changes from moment to moment.

64 THE WORLD OF CURRICULUM

That is a daunting task. Metaphorically, it is a game of engagement in which the outcome is the assessment of curricular moment-to-moment intake by the learner. The teacher functions as a manager, a game master, aware of the governing rules but prepared to officiate others as they would seem appropriate to the moment and the probable future. It is practice in which worker actions are guided by unspoken rules so familiar they are taken for granted, an example of what Michael Polanyi (1958) labeled *tacit knowledge*. Kinds of knowledge and modes of knowing aren't fixed or necessarily rooted in the curriculum knowledge base; they are also social and situational, embedded in the coordinated activities of professional practice as *practice knowledge*. Collectively, these modes and forms of knowledge are part of what Pierre Teilhard de Chardin (1975) refers to as the "noosphere" of human social and cultural consciousness. Similarly, psychologist Jerome Bruner points out in *Acts of Meaning* (1990) that individual human knowing of the world and self is a self, social, and culturally created process.

Knowledge, as noted earlier, can also be categorized as simply formal or informal. Expanding on the idea of informal knowledge, there are two aspects to consider. One is that the informal can be personal or shared knowledge. As personal knowledge, it is held without being verifiable or made credible in other ways—it is our own creation. Second, when shared, it may not be necessarily held to be the same by others even though in using it they may seem to convey or exhibit a common understanding (Clancey, 1997; Davenport & Prusak, 1998). Those aspects taken together differentiate formal and informal knowledge. *Personal informal knowledge* is distinctive walk-about knowledge: ways to behave, rules, the ordinary social and culturally acquired things that guide our daily ways of living and participation in public life. In school, this is learning how to play with others, walk in the halls, be orderly in the classroom, and obey rules. In contrast to personal informal knowledge, *personal formal knowledge* is consensual knowing: something validated or standardized and made useful as being true or applicable under specifiable conditions. Examples include the empirical knowledge of science and scholarly inquiry, and the formal knowledge of the farmer, electrician, plumber, engineer, draftsman, or medical practitioner that represents technical and commercial knowledge validated in applied ways. It is also the knowledge of academic and professional work, the logical knowledge of created facts, concepts, ideas, procedures, and multiform data held together by a system or systems of thought. There is also formal knowledge that is philosophical and literary, for want of a better term: a literate, humanistic knowledge, what is knowable and true in the arts and literature (see Wood, 2003). It is knowledge that is valid and reliable in the sense of scholarly rationality rather than empirical-scientific. In the real world of teaching and learning, no work role is purely one way of thinking or relies on one specific base of knowledge. The student learning about curriculum needs to be familiar with the forms of knowledge and modes of knowing that will be encountered in doing curriculum. This mix of various ways of knowing and the formal and practice knowledge configures the practical, the essence of the role-work-knowledge relationship in practice, what is realized in the actual doing of curriculum work.

Building Perspectives

In general, roles in curriculum work share certain attributes associated with being a professional practitioner. None is more important than that of perspective building. In Chapter 1, the concept of a *critical perspective* was introduced, which included reference to your own personal perspective and the one you build as a professional and practitioner. As a composite, they represent how you see yourself, the way others see you, and how you perceive and do curriculum or any kind of work. In education and curriculum, perspectives have various qualities such as being scholarly; an inquirer; an expertise builder; and an on-your-feet classroom learner, a professional practitioner who can work with whatever is at hand. Perspective building begins with the perceptions and other sensory sources; they are the raw materials used in developing frames of reference, your ways of making sense of the world. The word *perspective* serves in an economizing way to represent other words or phrases (e.g., frame of reference, point of view, etc.) generally conveying the same meaning. Perspective building includes what beliefs you hold about life, politics, religion, and social relations that you act on. Perspectives are the “up-front” expressions, the rationales you give for what you say or how you behave. Perspectives represent getting to “know” the world, what Weick (1995) and Coburn (2001) refer to as “sensemaking,” the personal making sense of perceptions, creating meaning that is personal, cultural, and social in significance. In the plural, involving many persons, shared perceptions and perspectives result in collective sense making. Perspectives represent a synthesis of perceptions, a cognitive hub that filters the possibilities for knowledge and action. The idea of the critical perspective is that it acts as the governor of other perspectives, the personal and professional ones you and I create as practitioners.

Personal Perspective

The personal perspective refers to things in our everyday life: the family and religion, the beliefs and values a person holds about life. These develop from social and cultural experiences, family and peer relationships, how you are brought up, and a mix of things that with biological inheritances generate a sense of self, an identity. Personal perspective can also be affected by encounters with ideology, identity, and social-cultural contexts.

Ideology

Ideology refers to the idiosyncratic and culture-bound ways of thinking and the prevailing ideas that characterize a person or a group. Terms like *democracy*, *freedom*, and *civil rights* reflect ideological considerations that are Judaic-Christian and European, hallmarks of Western civilization. Curriculum taught in schools is an ideological product, a way to think American. In the mainstream curriculum that most students take, history choices include American and perhaps a world history course. Literature

66 THE WORLD OF CURRICULUM

offerings are, again, mainly American and European, with possibly some prose and poetry to suit local students from special cultural backgrounds. The American curriculum is constructed to Americanize, to create an American ideal.

Ideology also enters into the preparation of professionals. Earning a degree places you in classrooms where faculties introduce different ideas about education and schooling. There are the “isms,” progressivism and constructivism, for example, and the “ists,” such as the cognitivists, modernists, and postmodernists. These are ideologies of the academic culture that you encounter and about which you must make rational decisions as you prepare to be a professional. The critical perspective becomes important in thinking about these ideas.

Identity

Who are you? What do you believe? How would you describe yourself?

Those are questions of identity. Sociologist George Herbert Meade conceptualized the self as what we know about ourselves and what we receive back from others about ourselves, something he called the “generalized other.” There is personal identity, social identity, cultural identity, and identity with work roles. The personal folding of those into one designates the self. The clarification of yourself to others is often referred to as your character. Identity refers to the individual’s sense of who and what he or she is. Identity enters into curriculum work in our presentation of self as a worker, thinker, and personality. Am I a good listener, a cooperative coworker?

Sociocultural Context

Society and culture provide us with the social and cultural experiences that are among the strongest influences in our development as humans. Neighborhood, community, peer group, and school experiences create perceptions about place-location from which we build personal and collective perspectives about what it is like to live in a city, in the suburbs, or on a farm. Our interactions with others often make us aware of perceptual differences, the recognition that we don’t see things the same way, especially when religious and political matters are at issue. Ethnic associations, for example, create subtle perceptions based on skin color, movement, dress, and language. Consideration of factors such as place, location, and ethnicity is also recognition that things in our focus have multiple characteristics; we may focus on the same thing but have different perceptions because we fix on different qualities. Our self-understanding, our sociocultural personhood, who and what we think we are, the self-perceptions we hold, is a composite of knowledge acquired in the experience of living, from family views of life in general and personal sociocultural background. These qualities shape how and on what we focus in developing our idiosyncratic construction of meaning.

Figure 3.4 Attributes of a Professional Perspective

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- **Critical Perspective**
To promote reflective thought and guide thinking in all its aspects, thinking about thinking itself and the objects of thought.
 - **Personal Perspective**
The self-knowledge necessary in continually understanding yourself, both separately as a person and as a person in a professional role.
 - **Knowledge Perspective**
Discerning what perspectives are embedded in knowledge as ways of thinking in a body of knowledge or across several bodies of knowledge.
 - **Other Attributes**
Cultivating a scholarly outlook, being an inquirer or researcher, building expertise.
-

Professional Perspective

A professional perspective is formally acquired as one learns a vocation or profession. Some aspects of a professional perspective are practice based, others are academic related, and some are both. One way to think of a professional perspective is as a superperspective that takes in other perspectives, as suggested in Figure 3.4. These, like the critical perspective discussed in Chapter 1, have been mentioned in previous discussions and are now brought together as elements in a professional perspective. In each case, it is a body of requisite knowledge, whether it is self-knowledge or the knowledge of thought that should become part of the professional person's development. The professional perspective continues to evolve and mature through work in the practice setting, continuing academic study, and the interrelating of the two. Your professional perspective guides how you view curriculum and perform curriculum work. Professional perspectives should not be dogmatic; they should include learned correctives, the suspending of judgment, the capacity to meditate, the ability to detach and stand outside oneself, and the idea of the critical perspective. An applied professional perspective should suggest behaviors with certain transcending qualities: an appreciation of scholarship and research, the development of a grounded expertise, and the capacity for on-the-feet learning. In addition to those perspectives, certain other elements of the professional should be cultivated, things such as a scholarly outlook, a dedication to research and inquiry in all its forms, and a commitment to expertise.

Scholarly Outlook

Scholars, suggests A. D. Nuttall, are not just intelligent or bright, they have a “dedication to detail and a passion for accuracy” (2003, p. 60). Scholarship has a “quality of completeness” about it he describes as “complete, though not redundant, documentation; complete accuracy, *even with reference to matters not crucial to the main argument*;

68 THE WORLD OF CURRICULUM

and, together with all this, a sense that the writer's knowledge at the fringe of the thesis is as sound as his or her knowledge of the core material" (p. 61). The scholarly way is a struggle to get everything right and complete, what Nuttall calls the "abstract altruism of the intellect." Scholarship is accuracy and completeness, as in having copious foot- or endnotes, appropriate and useful citations, and applicable references and indexes. Finding such things suggests good form and a respect for others in the enterprise. The quest for accuracy stands equally beside the scholar's obligation to truth, not just in the factual sense but the interpretive and analytical as well. Whereas the scholarly path is concerned with truth and accuracy, those quests are bound by moral and ethical dispositions to be encountered, experienced, and acquired in becoming a professional. Matters of plagiarism, failure to attribute to others their due, and failure in collegial relationships can become pitfalls in scholarly work.

Being an Inquirer

A curriculum practitioner should also cultivate a sense of curiosity, a need to find out, to know, to be an inquirer. Inquiry in its informal meaning refers to an attitude, a perspective. In its formal sense, there are two aspects of inquiry: one is being a researcher, and the other is being a consumer or user of research. All professional preparation programs address those dimensions of inquiry. Somewhere in the program there will be an encounter with a component (usually a series of courses) that introduces inquiry as practice, the matter of being a researcher. Prevailing models of research in the discipline of interest are studied. The emphasis is on familiarizing oneself with the models, then developing a research proposal using either a qualitative or quantitative method, all in preparation for being involved directly as a participant in some research enterprise. There being no lock on the research door, anyone can participate as long as they adhere to the practices and judgments about what is appropriate research according to currently accepted standards by researchers and practitioners in the particular knowledge community of interest. Not every curriculum worker needs to be a researcher, but everyone needs to be ready to be a participant and a consumer of research.

Appreciator of Research

Although associated with inquiry, it is important to be an appreciator and consumer of research. As part of preparation, professional practitioners explore research to understand criteria for appraising the investigative process and the findings that result. The practitioner as a consumer of research is in an important position to judge the utility of the research findings as applied in classrooms with learners. In the work of creating curriculum, one of the most important tasks is piloting materials with a variety of teachers and students across different classroom settings. This is an important level of inquiry, to determine if the curriculum fits the intended purposes and the ways it works out with teachers and students alike.

Building Expertise

The professional practitioner starting out is a novice. Attaining the cloak of the expert awaits continued study and the experience of practice. Expertise has a number of interpretations. There is expertise by professional standing, an acknowledgement of expertise in a field of work. For example, in physics, few would doubt the expertise of a Stephen Hawking or an Albert Einstein. Standing can also refer to affiliation or association: being employed by a particular college or university or place of practice such as a clinic, medical complex, or hospital; being selected to membership on a team led by a renowned professional; being elected to office in a premier professional organization; or, vicariously, being a student or associate of a particular scholar or practitioner. Expertise by authority refers to the interesting manner in which the legal system identifies a person as an expert to give testimony. The United States court system relies on *Rules of Evidence for United States Courts and Magistrates* (2003), specifically Rule 702, in considering what is an expert. Individual state judicial systems also have rules on expertise that differ in the particular gradations made by each state's judiciary or legislature.

What all those examples convey is the common reliance on personal knowledge, skills, experience, training, or education to classify individuals as experts—they are experts by virtue of what they know and have done. More recently, the focus has been on what are called expert studies (Brint, 1994). The idea is that, by analyzing the learning process of persons considered experts, it will be possible to understand what cognitive functions are needed in going from novice to expert in selective arenas of work such as education, medicine, mathematics, and sports (Bereiter & Scardamalia, 1993). The idea is that a composite of such studies would suggest a set of common cognitive functions to assist the transition of workers from the novice state to that of the expert. Patricia Alexander (2003) has provided a useful introduction to this work. Robert Sternberg (2003) also provides insights into the thinking dimension of domain work, the expertise-wisdom relationship in critical cognitive functioning experts use in working within their particular domain of knowledge such as physics, history, or fine arts. In curriculum, it would be equivalent to studying the way an expert understands and uses the knowledge base in curriculum to do curriculum work. There are several caveats to this research. One is that the studies are domain specific (physics, languages, etc.), and the nature of a domain of knowledge itself might mean that the expert pattern in one knowledge domain may vary from that in another. For example, two secondary school teachers, one in math and the other in history, would find the ways they have to operate in and with their domain of knowledge different. Second, what one knows, a person's expert knowledge, is in part learned in idiosyncratic ways and it may not be possible to generalize expert learning across all domains or persons. Third, it is important to keep in mind the transitional, dynamic quality of all knowledge and thinking. What delineates a novice or expert at any given time shifts and changes; today's expert may not be the same as the expert of tomorrow because what constitutes expertise will change. Regardless, traversing the road to expertise in curriculum work begins in the basic knowledge of curriculum and curriculum practice.

70 THE WORLD OF CURRICULUM

On-the-Foot Learner

In addition to being scholarly, being concerned about carefully constructing a professional perspective, developing expertise, and becoming an inquiring professional, a curriculum practitioner must be ready to invent and take actions based on what is *at hand*, not what he or she would like to have *in hand*. It is a matter of immediacy, the making do with the available tools, ideas, strategies, and so forth. Anthropologist Claude Lévi-Strauss (1966) associated this with the French word *bricolage*, meaning a construction of something from what is at hand. A professional practitioner often has to work as a *bricoleur*, a person who makes things or takes action with what is available. Applied to you as a learner, it means to think and act on your feet. For the teacher practitioner, it means being an on-the-feet learner as you teach. Teachers in their classroom curriculum work would immediately recognize the importance of this professional characteristic. Often in a classroom, there is an immediate need to substitute or swap curriculum materials to enhance learning opportunities. A curriculum specialist may get a priority request from a school for different texts. The bricoleur's strategy might mean a quick trip to a book repository, the copying of some material, or procuring whatever else is "at hand" to complete the work. Curriculum work can involve the unexpected, such as a curriculum question or inquiry asked on the fly while walking with a parent or staff member, or an on-the-spot discussion about curriculum materials. All those situations require immediate responses that may be dependent on the professional's formal knowledge of curriculum or the experience knowledge gained from working with curriculum. Circumstances like those are part of curriculum work.

PERSPECTIVE INTO PRACTICE: Application of Personal and Professional Perspectives in an Elementary and Secondary Classroom		
<i>Perspective</i>	<i>Elementary Classroom</i>	<i>Secondary Classroom</i>
Professional Aspects		
Inquiring	The teacher observes how different children respond to word recognition, spelling, and sounding out words and wonders what curriculum options there are.	A civics teacher notes that in teaching about the U.S. Constitution, different perspectives enhance the curriculum organization.
Appreciating Research	In talks with other teachers and a district curriculum specialist, the teacher identifies available knowledge from research.	Recalling from a curriculum course, the teacher considers alternate curriculum patterns, such as a spiral or other format, and seeks out appropriate research with other teachers and the district specialist.

Applying Research	With the assistance of the specialist, several research-proven curriculum alternatives are applied to special-case learning problems in spelling and word recognition.	The teacher decides to teach the Constitution by proceeding from the idea of structure (the branches of government) related to the local experiences of students and work toward state and federal examples using patterns from a research study.
On-the-Foot Learning	Application of new knowledge in realistic teaching situations and how an approach to spelling works by itself or in combination with other applications gives experience in adjusting the curriculum as you go.	Even with research-based curriculum options, implementation with learners requires movement between one pattern and another as student responses indicate.
Expertise Building	The teacher now has increased knowledge and experience from implementation that is available to others in the school and district.	By identifying alternative ways to organize the civics curriculum's study of constitutions, the teacher becomes an experience base of knowledge for others and can model the curriculum option.
Personal Aspects Ideology	Professional behavior is tied to flexibility in thinking about a problem or circumstance and teacher role to enhance possible learning opportunities.	The realization that there is no one best way to organize curriculum and teach it. Flexibility, like rigidity, is its own ideology. Experience and knowledge of practice promote personal learning.
Identity	Positive sense making, a trait of a confident person, evolves into a positive professional identity.	Personal confidence in the knowledge and use of curriculum is both a matter of knowing the subject (civics) and knowing curriculum knowledge; both are essential to a teacher's identity.
Sociocultural Contact	Recognition that the learners' capability to learn to spell and sound out words may be a function of home and group language learning pattern and that, as a teacher, you exhibit similar personal use of speech.	Interest in civics and history is related to what knowledge is considered important and relevant by a learner. Personal sociocultural contexts influence what a person wants to learn.

DOING CURRICULUM WORK

The practical in curriculum is thoughtful action. In its most applied sense, a teacher working with students finds it in the employment of knowledge about curriculum. It is a curriculum worker's personal dialogue between knowledge used, knowledge received in that use, and new knowledge about curriculum created in the context and circumstances of being applied. The dynamics of curriculum practice are little studied. Summarizing from Walter Doyle's (1992) review of curriculum and pedagogy, with the exception of a few studies about teachers' work with curriculum, research specifically looking at the characteristics of other curriculum work and roles is very limited. Based on the literature available, curriculum roles and work would seem to have these qualities in common: activation of knowledge and its communication, a speculative turn of mind, envisioning the result or effect of some action or idea, and reflection—the reviewing, the rethinking, the ruminating about what has happened from start to finish. Using the teacher role as an example, each quality can be illuminated.

Activating Curriculum

Activation involves two curriculum dimensions. One is the content or subject matter knowledge—what is to be taught—which is the school dimension of curriculum. The other knowledge of curriculum is the teaching dimension of curriculum, working the subject matter through knowledge of curriculum concepts such as a scope or sequence. If one has studied the knowledge base in curriculum and rehearsed its deployment, for example in student teaching, then the impression of a command of curriculum has been established. Activating that curriculum knowledge implies two aspects. One is to make that command of knowledge, what is to be taught, explicit and accessible to the intended, the students. Second, the application should demonstrate competence in operationalizing the intended formal content of the school curriculum carried as the message through instruction. Activation in curriculum work, a teacher's enacting of the content to be taught, mirrors the grasp, or mastery, of knowledge about curriculum in both the school and teaching dimension of curriculum.

Given opportunity and experience, the activation character of curriculum practice becomes tacit knowledge. One studies curriculum by learning to organize content, plan lessons or units, and present them through instruction. Along the way, the novice teacher picks up cues about different ways to organize knowledge, alternate knowledge options, and other insights that are unwritten in a text or materials about curriculum but that are important in practice. You learn to think “curriculum” on your feet and discern the shadow of new understandings between your thoughts and your actions. In practice, a teacher differentiates among thoughts and actions that simultaneously contain curricular, instructional, and other applied elements in the set of actions that circumscribe teaching.

Communicating Curriculum

Teaching is a process of engagement, a communication, the sending and receiving of curriculum. Imagine a kindergarten teacher working with numbers, that being the “content,” or message being delivered. There is a confluence of two important bases of knowledge. One is the teacher’s curriculum knowledge, how to organize the curriculum, plan an order of presentation, and arrange the context of engagement for the learners. Those curriculum concerns inform the teacher about the second, content dimension of curriculum work, determining what needs to be modified in the organization of knowledge about numbers. The curriculum becomes a participatory, shared creation as a communicated experience. It is a collective understanding about specified content deriving from interaction between teacher and students. In that sense, what is learned is held in common, an assumption of mutual belief and knowledge. The teacher learns, the students learn.

Curriculum is also communication of the expected. The curriculum the parent experienced is what is expected for the child. The larger social and cultural purposes for schools are carried in those experiences and expectations. The teacher, indeed any curriculum worker, should be able to explain the curriculum goals and understand the popular expectations, to answer a student’s basic question, “Why do I have to learn this?” Being able to respond to such questions or situations is why there is a need to study the knowledge base in curriculum, particularly curriculum history and politics. The curriculum has been used throughout the American experience to communicate the message of citizen loyalty, to direct the knowledge resources toward economic ends, and to create a sense of nationhood and influence the direction of the society. The curriculum practitioner often walks a fine line among personal views about what the curriculum should teach, the purposes for which it exists, and what it actually contains. The school curriculum and the curriculum worker can become embroiled unwillingly in the contesting of curriculum messages by external forces, from the initiation of curriculum work when choices are made in planning a curriculum, through the creation of materials that represent it, to the classroom enactment of the curriculum.

Envisioning Curriculum

Curriculum practice is open ended, there is no finality, and it is always in a state of becoming. Even when a teacher has taught a lesson or a curriculum specialist has prepared a curriculum guide, there is an acceptance that the knowledge imparted as subject matter, the curriculum-in-use, has been modified, is outdated, or has become obsolete. There is also awareness of possible limitations in the capacity of existing curriculum discipline knowledge to guide practice. For example, knowledge production in curriculum or any discipline is always subject to the time lag in validating and disseminating new knowledge. However, another characteristic of practice is that it is a proactive

74 THE WORLD OF CURRICULUM

endeavor necessitating some practical vision of future practice. For the practitioner, *envisioning* is a process of imagining, anticipating, or “hunching” the practical knowledge necessitated by curriculum practice. Often, curriculum workers engage in the possibilities of what might be: a consideration of what exists, whether it can or should be influenced by considering new relationships, and how it would appear if placed in different contexts, modified as a tool, or recast in some other way. It is a form of practice knowledge that Schon (1983) refers to as the *nonpropositional* knowledge derived from meditation-in-action, what can be called *effluent knowing*. In the disciplinary sense of knowledge production, this is the raw knowledge of individual practice that begins the journey to becoming part of a discipline’s knowledge base, either as a result of formal research into practice or as authenticated in the collective discourse among practitioners about what works in actual practice. Teachers *envision* in planning the curriculum from one day to the next, when they anticipate content organization and order of presentation. A district curriculum supervisor, in planning for new curriculum materials such as new textbooks, has to envision how the materials fit the existing curriculum.

Reflecting on Curriculum

Another aspect of practice is reflection, the conceptualizing of what is transpiring or is ongoing. It is a different process: an overarching thinking about practice from beginning to end that subsumes envisioning, communication, and activation aspects of practice. *Reflection-in-practice* has several meanings. There is a form of reflection that occurs as one thinks about what one is doing as one does it, a sort of contemplation, or what Carter (1990, p. 301), in a review of studies of teacher work, refers to as “reflection-in-action.” Another form is reflection-after-the-fact, a revisiting of what transpired, perhaps a reconstruction, or a comparative, as in comparing the mental record of what happened with the written guide or plan on which the actions were based, a lesson plan, for example. The purpose is ultimately to understand the actions in their particulars (i.e., the process engaged, outcomes sustained, reactions of those involved, etc.) and as the collective act. Metaphorically, it is like reviewing a performance, a play, for example. The actors, their actions, and each act of the play are the particulars; the experiencing of it renders it whole, and it can be revisited both as to its particulars and as a completed entity.

Summary and Conclusions

Curriculum and curriculum work are important in themselves, regardless of who does them and where they take place. Several points are important. Remember that

curriculum is framed by a set of general work functions: knowledge making, policy making, planning, creating curriculum, managing, and monitoring. Second, those functions are performed in different ways in places as diverse as the local school, a state department of education, a publishing house, and national organizations such as the Council of Chief State School Officers or the National Governors Conference. The terminology “performed in different ways” is used deliberately to emphasize the tendency of work activities to be more specific, detailed, or defined by the workers and the situation or place in which they are doing the particular curriculum work. Curriculum work has a rhythmic quality. The various functions are clearly separate but related, each a contributor to the overall effort. Metaphorically, the functions are much like the distinctions between brass, string, and other orchestral sections that constitute the whole orchestra and work together separately to create music. The conductor, the oboist, each individual as a person and as a member of a group of musicians, has a perspective on the music that takes in his or her part as well as the total collective contribution. Curriculum workers, like musicians, build a professional perspective and are mindful of their own personal perspective, both elements in a critical perspective that illuminates the various practice, activation, communication, envisioning, and reflecting aspects of curriculum work as it is done.

Critical Perspective

1. What does the term *culture of work* mean? Can you identify examples from your own experience?
2. Using the curriculum work categories, identify examples from your experiences or that you know about that fit under the various categories. Are there any other general categories you would add?
3. How do you define *expertise*? Identify several teachers or persons you consider to be experts. What are the salient features of their expertise and do those match your definition?
4. Settings for curriculum work are many and varied. Can you identify other settings than those discussed in the text?
5. The text mentions several ways of classifying knowledge: declarative, procedural, informal, formal, nonpropositional, and so forth. What other ways of classifying knowledge can you identify?
6. Doing curriculum work encompasses at least four actions: activating, communicating, envisioning, and reflecting. Can you identify any other actions?

Resources for Curriculum Study

1. Local school-community-work relationships often drive configuration of the curriculum. Few studies make the connection. The famous Lynd study of Muncie, Indiana, *Middletown: A Study in Modern American Culture* (1929), and Allan Peshkin's *Growing Up American* (1978) offer interesting insights into vocational and college curriculum orientations that relate to the work life of a small town and farm community.
2. Authors Kantor and Lowe (2004) point out that any intellectual excitement about what is to be learned or about knowledge itself is often canceled by the manner of instruction. Memorization and question-answer methods, for example, tend to dull student interest. This presents an interesting curriculum problem for study: How does organizing the curriculum in different ways encourage student motivation? Check out the authors' references for further exploration of this issue.
3. The literature on policy making in education is relatively new but growing. Probably the best sampling of the early efforts in educational policy work is *History, Education, and Public Policy*, edited by Donald Warren (1978). Sandra Stein's *The Culture of Education Policy* (2004) is the best since Warren's and covers particular federal initiatives since 1965. Two insightful articles are "State Authority and the Politics of Educational Change" (1991), by Thomas James, and "Curriculum Policy," by Richard Elmore and Gary Sykes (1992). James offers a good analysis of the state of policy work and summarizes it in terms of the larger educational field. The Elmore and Sykes contribution is one of the few to explore the status of policy work specifically in curriculum. These works taken together document the evolution of policy making in general educational matters and the transition into more specialized studies such as curriculum.
4. Curriculum policy making is not limited to the United States or Western nations. UNESCO, the United Nations Educational, Scientific, and Cultural Organization, an arm of the United Nations, studies international approaches and trends. A specific publication, *Processes of Curriculum Policy Change*, which summarizes the centralization and decentralization approaches to policy making in selected nations, can be found at http://www2.unescobkk.org/ips/ebooks/documents/building_curriculum/pt2.pdf
5. There is no uniformity across the 50 states about education; each state controls schooling in its own way. Using the Internet, sample state Web sites by region to find how they organize education. For example, you might go to the state sites of Idaho in the Rocky Mountain region, Virginia on the East Coast, Michigan in the upper Midwest, Oklahoma in the central Midwest, and perhaps Oregon on the

West Coast. At your selected sites, sample how individual states assign policy making in curriculum. Exploring what they are doing about policy to comply with the NCLB Act of 2001 is useful.

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78 THE WORLD OF CURRICULUM

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