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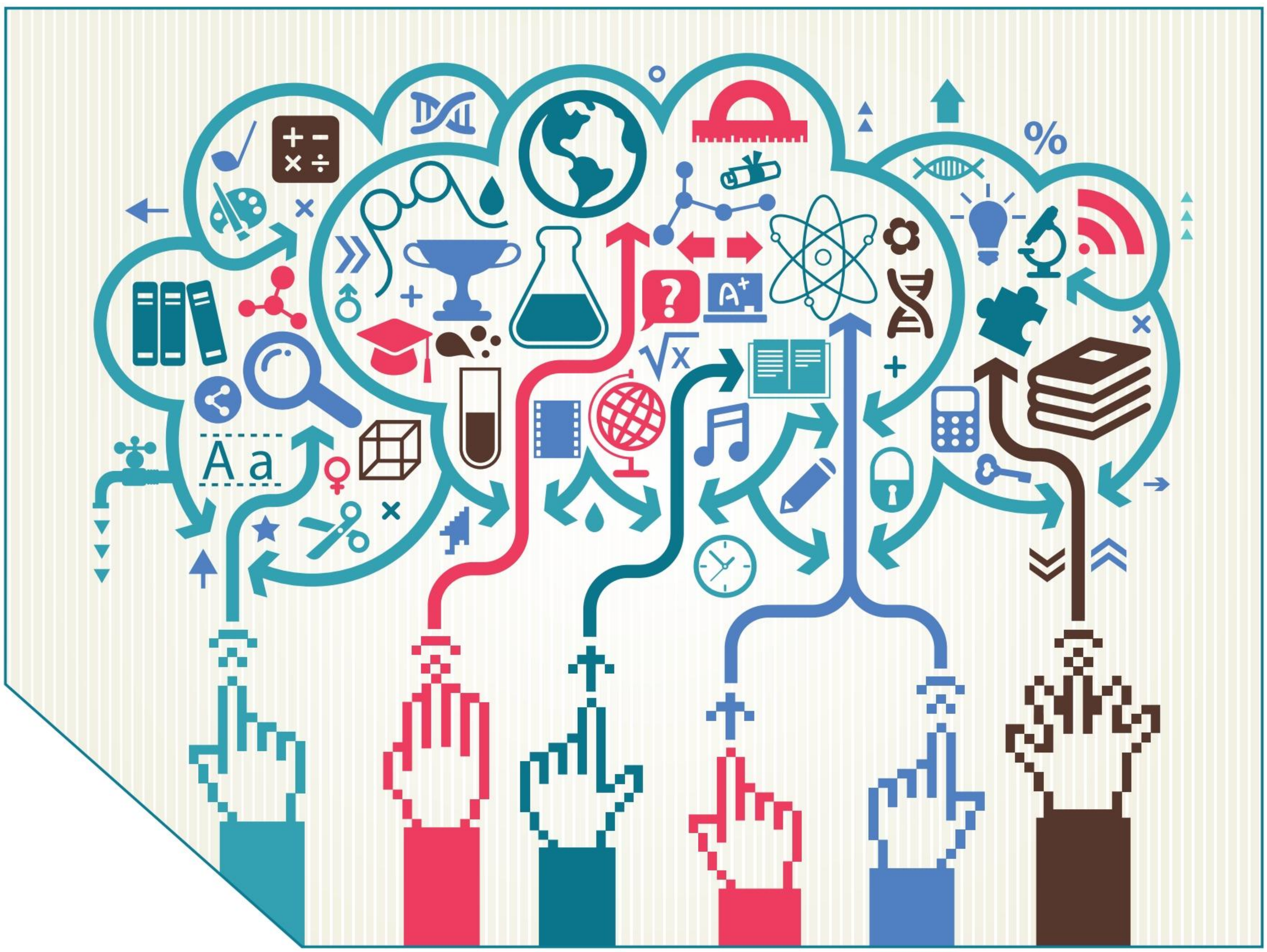
DEVELOPING THE CURRICULUM

Improved Outcomes Through Systems Approaches

NINTH EDITION



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In memory of Peter F. Oliva,
whose rich academic career contributed
to the development of curriculum leaders across
the United States and globally.

For my wife, Patty;
our children, Whitney and Trey;
and my mother and father,
Marcelyn and William;
and my sister, Pam; and my aunt, Mary.

William R. Gordon, II

For my son, Jay,
and education leaders who have
supported my continuous learning.

Rosemarye T. Taylor

ABOUT THE AUTHORS

William R. Gordon II has served as a teacher, instructional leader, and district-level executive leader in Florida. As both an elementary and high school principal, he became known for his deep understanding of curriculum and instruction, thought leadership, and systems approaches in the Orange County Public Schools (OCPS) school system. During his 11 year tenure as the principal of Winter Park High School, the school was named by the State of Florida as a "High-Performing School" due to the school's rigorous curriculum and outstanding student achievement. Additionally, *U.S. News and World Report* repeatedly ranked Winter Park High School in the top 1 percent of high schools in the nation. While in OCPS he became an area superintendent, where he was responsible for the curriculum, instruction and student and teacher performance in 29 diverse schools serving approximately 35,000 students. After serving in OCPS, he became the chief operations officer at Florida Virtual School (FLVS), the nation's oldest and largest public online public school system. While serving as an executive leader at FLVS he established an Analysis, Assessment, and Accountability (AAA) division in the district. The AAA division established enterprise-wide data collection, data analysis, and predictive analytics as a leader in the online industry. Additionally, he engaged with online curriculum, instruction, and professional learning. In 2017, he was selected as a member of the third class of the *Leadership Florida, Leadership in Education Program*, which is funded by the Florida Education Foundation, the Bill and Melinda Gates Foundation, and the Florida Department of Education. This program is established to build a corpus of highly effective educators to improve student learning outcomes in the State of Florida. He has also served as an adjunct professor in the College of Education at the University of Central Florida.

Rosemarye T. Taylor has a rich background in teaching and leading in Georgia and Florida. She also served as national director of professional development for Scholastic, Inc. Since joining the faculty at the University of Central Florida in Orlando, she has become known for expertise in instructional and curricular leadership through use-inspired research that influences improved educator practice. She has published numerous articles, chapters, and books addressing the alignment of curriculum, instruction, classroom and standardized assessment, professional learning, and evaluation to result in improved learning outcomes. She has also led innovations at the school, school district, and university level to leverage technology and digital tools to improve literacy and learning across student populations. Currently, she is professor of educational leadership working with master's degree and doctoral students, while continuing to actively support schools and school districts in their missions to serve all students.

PREFACE

The ninth edition of *Developing the Curriculum: Improved Outcomes Through Systems Approaches* continues to serve as a comprehensive analysis of systematic curriculum development to improve learner success. We are grateful to the readers who continue to use it to further the study of a continually evolving area in a time of standards implementation and accountability for student learning outcomes. In providing a comprehensive view of the field of curriculum development, by illuminating various historical and twenty-first century approaches to this field, we present evidence based content relevant to today's curriculum specialists and instructional leaders in school districts and schools.

NEW TO THIS EDITION

Although the same basic overall structure of previous editions remains in place; several changes have been made in updating this edition to make the text more current and applicable, both to instructors and students in a college or university setting and to curriculum specialists and instructional leaders in their practice.

- William R. Gordon, II, a former practitioner leader in the field of education, shares his contemporary experience and knowledge of leading traditional and virtual education in this edition. With the passing of the original author, Peter F. Oliva, Dr. Gordon replaces him as the lead author.
- Rosemarye T. Taylor, professor of educational leadership and former practitioner, is new to this edition bringing with her expertise in curriculum systems that include instruction, assessment, and evaluation.
- About 35 percent new content has been added. While maintaining the rich historical perspective, topics like ESSA, digital directions, English Learners, science of learning, and standards based curriculum systems (instruction and assessment) have been added or expanded upon. Academic language and literature throughout the text has been updated to reflect twenty-first century curriculum system thinking.

The Digital Curriculum chapter in the 8th edition has been updated to Trends in Digital Curriculum and Instruction which reflects trends and research in this dynamic area of educational curriculum, instruction, delivery, assessment, and data analysis. The concepts of innovative practices in digital and technological literacies are introduced and an analysis of areas such as online learning, blended learning, and mobile learning is provided. Additionally, an overview of how computer based assessments are being used to gather student performance data to inform curricular and instructional practices is presented. Furthermore, a new forum for free digital content, Open Education Resources, as well as a section on digital ethics, are featured.

- Chapter 8 has been deleted and content has been infused throughout other chapters as appropriate.
- Chapter 15 has been deleted and future directions in curriculum development, implementation, and assessment are infused as appropriate throughout the text and in the last chapter.
- References now appear at the end of each chapter and are in APA 6th edition format to aid the reader by more easily situating authors and the time of their work.

- Suggested Readings are before each Reference list at the end of each chapter and therefore, the Bibliography has been deleted.

Like preceding editions, this book is intended to address the learning needs of graduate students in courses such as curriculum development, curriculum planning, curriculum and instruction, curriculum improvement, and instructional leadership. School district-level curriculum specialists, preservice and in-service curriculum coordinators, principals, assistant principals, curriculum resource teachers, department chairpersons, instructional team leaders, and grade-level leaders will benefit from this practical guide to curriculum development.

The six sections of the book follow a particular sequence and have numerous examples of practices of actual schools and school districts. The text begins with an examination of the theoretical dimensions of curriculum development, reviews the various personnel who have the primary responsibility to develop the curriculum, and describes various models of curriculum development, including the Gordon Taylor Model of Curriculum System Development, which is designed to positively influence student learning outcomes in a time of standards. The process of curriculum development is examined from stating philosophical beliefs and broad aims of education to specifying curriculum and instructional goals and objectives, implementing curriculum and instruction, and evaluating instruction and the curriculum.

The chapters are designed to provide in-depth information that relates to the cognitive objectives of the chapter. Each contains a great deal of information and suggestions as well as inquiry and reflection, along with applications that reinforce the objectives and extend the treatment of topics beyond the text.

As in the past, we have tried to provide a synthesis of theory, research, and practice that is clear and readable. Furthermore, we have zealously researched and analyzed the content of this text to provide a quality learning experience for our readers. We acknowledge that we need more educators to take a leading role in the complex field of curriculum development. It is our goal to encourage and nurture such possibilities by providing a helpful teaching aid for those who are involved in the process of curriculum development.

ACKNOWLEDGMENTS

The authors of this text wish to express their deep appreciation to all the people who have contributed to the writing and publishing of this and earlier editions. Insights of the teachers, administrators, students, and colleagues with whom we have worked and of those who have reviewed the text have helped to shape our thinking on the challenging process of curriculum development. We wish to especially thank Julie Peters, our editor, Faraz Sharique Ali, our content producer, and Jessa May Dales, our project manager for the assistance they provided us.

Colton Tapoler assisted with the transitioning of notes and bibliography to references in APA format for each of the chapters. We appreciate his assistance with this tedious task.

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PART I

The Curriculum

Theoretical Dimensions

CHAPTER 1

Curriculum and Instruction Defined

Learning Outcomes

After studying this chapter, you should be able to:

1. Define curriculum for your context.
2. Distinguish between curriculum and instruction.
3. Explain the ways curriculum can be considered a discipline.
4. Create or select a model showing the relationship between curriculum and instruction supported with evidence.

CONCEPTIONS OF CURRICULUM

Gaius Julius Caesar and his cohorts of the first century BC had no idea that the oval track on which the Roman chariots raced would bequeath a word used almost daily by educators 21 centuries later. The track—the *curriculum*—is a major focus of today's educational leaders as they seek to create and implement the curriculum that best aligns with the needs of students and to increase successful student learning outcomes on the accountability metrics that apply in their unique contexts.

It is important to note the pragmatic implications of curriculum in serving the students' needs and in making progress with student learning as measured officially, which may be different requirements. Curriculum theorists recognize that theory and practice are not necessarily separate and should be connected (Wright, 2000). In fact, Wright discusses how curriculum theorists are wrestling with the inclusion of curriculum in non-traditional learning environments, such as museums, community centers, and in various locales which may be virtual or real. Theorists are also considering the technological opportunities for learning that are reflected in changes in brick and mortar schools, virtual schools, and in curriculum development, implementation, and evaluation (Wright, 2000). These and other contemporary curriculum concepts are addressed throughout chapters in this text.

Various definitions of curriculum have been generated since as long ago as 1976, when Dwayne Huebner (1976) ascribed ambiguity and a lack of precision to the term *curriculum* (p. 156). In 1988, Madeleine R. Grumet (1988) labeled curriculum a "field of utter confusion" (p. 4). At the turn of the twenty-first century Arthur W. Foshay (2000) attributed a lack of specificity to the curriculum (p. xv). Indeed, curriculum seems at times analogous to the blind men's elephant. It is the pachyderm's trunk to some; its thick legs to others; its pterodactyl-like flopping ears to some people; its massive, rough sides to other persons; and its ropelike tail to still others. Herbert K. Kliebard (1998) observed that "what we call *the* American curriculum is actually an assemblage of competing doctrines and practices" (p. 21).

Until the development and various implementations of the Common Core State Standards (CCSS) in the United States (US), curriculum was thought to be the written plan provided by the local education agency (LEA) or even by the state education agency (SEA). In 2010 the CCSS or a variation had been implemented in 45 states making curriculum across the US more alike than previously (Common Core State Standards Initiative, 2010). However, as an observer of teachers the authors note that in every school and in individual classrooms (virtual or traditional), the real curriculum is the interpretation of the curriculum through instruction. What an observer immediately perceives is that the interactions between the teachers and students (instructional learning experiences) actually provides evidence of the real curriculum. Because of the practical implementations or interpretations of the official curriculum by the teachers through their instruction with students, curriculum and instruction cannot be completely separated. Officially, curriculum is the *what* and instruction is the *how*.

Professional Licensure and Curriculum

State professional licensure or certification governance documents set professional standards for educators. These requirements, whether in statute, rule, or policy, compound the problem of defining curriculum because few professionals can become licensed or certified in *curriculum.* Whereas most education professionals in preparatory programs take courses of one type or another called *curriculum,* there is generally not a certifiable field labeled *curriculum.* Professionals are typically licensed or certified in areas such as educational leadership, counseling, school psychology, elementary education, or secondary education content areas. But in *curriculum* per se? Not as a rule, although courses in the field of curriculum are often required for most education areas, including educational leadership.

Nevertheless, numbers of curriculum specialists, coordinators, developers, digital designers, supervisors, consultants, and even professors of curriculum can be identified. These curriculum specialists, many of whom may hold licensure or certification in one or more fields, cannot customarily hang on the wall a certificate that shows that they are certified in a field called *curriculum.*

Though a certifiable field of specialization called curriculum may be lacking, the word itself is treated as if it had tangible substance, for it can undergo a substantial variety of processes. Curriculum—or its plural, curricula or curriculums (depending on the user's penchant or abhorrence for the Latin)—is built, planned, designed, and constructed. It is improved, revised, and evaluated based on the implementation's learning outcomes or change in results on accountability metrics. Like muscles that are developed to become stronger and provide more power, the curriculum is developed. It is also organized, structured, and restructured, and, like a misdirected child, reformed. With considerable ingenuity, the curriculum planner can mold, shape, and tailor the official curriculum. However, with the implementation of CCSS and its variations across the states, the public school curriculum may be perceived to have become less creative and more straightforward with defined and expected student learning outcomes across many states. Charter school, for profit school, and private or independent school curriculums may have more flexibility as they have different accountability measures than their public school counterparts.

Interpretations of Curriculum

The amorphous nature of the word *curriculum* has given rise over the years to many interpretations. Depending on their philosophical beliefs, persons have conveyed these interpretations.

- Curriculum is that which is taught in school.
- Curriculum is a set of subjects or content areas.

- Curriculum is a program or course of study.
- Curriculum is a set of materials and resources.
- Curriculum is a sequence of courses.
- Curriculum is a set of performance standards.
- Curriculum is everything that goes on both academic, social, and otherwise, inside and outside of classes.
- Curriculum is that which is officially taught both inside of school and outside of school.
- Curriculum is everything that is planned by school personnel.
- Curriculum is a series of experiences undergone by learners in school.

In the foregoing definitions, you can see that curriculum can be conceived in a narrow way as the official curriculum of the standards that are to be taught in specific grade levels and content areas or the unofficial or hidden curriculum of the other experiences that students have in school, both during instruction and beyond instruction. The implications for instructional leaders to be drawn from the differing conceptions of curriculum can vary considerably. The instructional leader who accepts the definition of curriculum as standards to be learned, faces a much simpler task than the school leaders who take responsibility for experiences of the learner both inside the classrooms and beyond, maybe even to what is learned outside of school.

Historical Conceptions of Curriculum

A variety of nuances are perceived when professional educators define curriculum. Trace how a number of writers between the early twentieth and early twenty-first centuries conceptualized curriculum. Franklin Bobbitt (1918), one of the earliest writers on curriculum, perceived curriculum as:

> that series of things which children and youth must do and experience by way of developing abilities to do the things well that make up the affairs of adult life; and to be in all respects what adults should be. (Bobbitt, 1918, p. 42)

Hollis L. Caswell and Doak S. Campbell (1935) viewed curriculum not as a group of courses but as "all the experiences children have under the guidance of teachers" (p. 66). Ralph W. Tyler's (1949) writings pointed the way to "educational objectives" that "represent the kinds of changes in behavior that an educational institution seeks to bring about in its students" (p. 6). Hilda Taba (1962), in a discussion of criteria for providing sets of learning opportunities for curriculum development, said, "A curriculum is a plan for learning" (p. 11). She defined curriculum by listing its elements. Taba (1962, p. 10) explained that every curriculum globally contains common elements, such as goals and objectives, and distinct content selections and organizational approaches that inform styles of learning and teaching, concluding with an assessment methodology to determine whether the objectives were met.

A different approach to defining curriculum was taken by Robert M. Gagné (1967, p. 21), who wove together subject matter (content), the statement of ends (terminal objectives), sequencing of content, and preassessment of entry skills required of students when they begin the study of the content. Mauritz Johnson Jr (1967), agreed basically with Gagné (1967) when he defined curriculum as a "structured series of intended learning outcomes," (p. 130). Johnson perceived curriculum as "the output of a 'curriculum development system' and as an input into an 'instructional system'" (p. 133).

Albert I. Oliver (1977) equated curriculum with the educational program and divided it into four basic elements: "(1) the program of studies, (2) the program of experiences, (3) the program

of services, and (4) the hidden curriculum," (p. 8). The programs of studies, experiences, and services are readily apparent. To these elements Oliver added the concept of a hidden curriculum, which encompasses values promoted by the school, differing emphases given by different teachers within the same subject areas, the degree of enthusiasm of teachers, and the physical and social climate of the school.

J. Galen Saylor, William M. Alexander, and Arthur J. Lewis (1981) offered this definition: "We define curriculum as a plan for providing sets of learning opportunities for persons to be educated," (p. 8–9).

As the years progress you will notice a broadening of some conceptions of the school curriculum. Geneva Gay (1990), writing on desegregating the curriculum, offered a more expansive interpretation of curriculum: "If we are to achieve equally, we must broaden our conception to include the entire culture of the school—not just subject matter content" (pp. 61–62).

Expressing the view that the word "'curriculum' has come to mean only a course of study," D. Jean Clandinin and F. Michael Connelly (1992) held curriculum to be no less than "a course of life" led by teachers as curriculum makers (p. 393).

Ronald C. Doll (1996) defined the curriculum of a school as: "the formal and informal content and process by which learners gain knowledge and understanding, develop skills, and alter attitudes, appreciations, and values under the auspices of that school" (p. 15).

Departing from a definition of curriculum as "school materials," William F. Pinar, William M. Reynolds, Patrick Slattery, and Peter M. Taubman (1996) described curriculum as "symbolic representation," (p. 16). These authors said:

> Curriculum understood as symbolic representation refers to those institutional and discursive practices, structures, images, and experiences that can be identified and analyzed in various ways, i.e., politically, racially, autobiographically, phenomenologically, theologically, internationally, and in terms of gender and deconstruction. (Pinar et al., 1996, p. 16)

Have definitions changed in writings of the early twenty-first century? Examine a few. Allan C. Ornstein and Francis P. Hunkins (2004) considered curriculum as "a *plan* for action or written document that includes strategies for achieving desired goals or ends," (p. 10).

Emphasizing the role of curriculum in the continuing growth of learning and learners, Daniel Tanner and Laurel N. Tanner (2007) proposed the following definition: "The authors regard curriculum as that reconstruction of knowledge and experience that enables the learner to grow in exercising intelligent control of subsequent knowledge and experience" (p. 99).

Jon Wiles and Joseph Bondi (2007) also saw "the curriculum as a desired goal or set of values that can be activated through a development process culminating in experiences for students" (p. 5).

James McKiernan (2008) saw curriculum "concerned with what is planned, implemented, learned, evaluated, and researched in schools at all levels of education" (p. 4).

Regarding the various interpretations of curriculum, Peter Hlebowitsh (2005) commented, "When we begin to think about the curriculum as a strictly professional and school-based term, a number of different interpretive slants on what comprises the curriculum comes into play" (p. 1).

Definitions by Purposes, Contexts, and Strategies

Differences in substance of definitions of curriculum, while they exist, are not as great or as common as differences in the components that the curriculum theorists include in their conceptions of the term. Some theorists elaborate more while others combine elements of both curriculum and instruction, a problem that will be examined later in this chapter. Others find a definition of

curriculum in (a) purposes or goals of the curriculum, (b) contexts within which the curriculum is found, (c) instructional strategies used, or (d) standards to be learned.

PURPOSES. The search for a definition of curriculum is clouded when the theoretician responds to the term, not in the context of what curriculum is, but in what it *does* or *should do*—that is, its purpose. On the purposes of the curriculum varying statements can be found and confusing. An example is when curriculum is conceptualized. The statement: Curriculum is the development of reflective thinking on the part of the learner, is not concrete. The same statement could be stated more specifically: The purpose of the curriculum is the development of reflective thinking on the part of the learner. A statement of what the curriculum is meant to achieve does little to help us sharpen a definition of curriculum and clarifying and specifying the purpose of the curriculum is a wise move for curriculum developers.

CONTEXTS. Definitions of curriculum sometimes state the settings within which it takes shape. When theoreticians speak of an essentialist curriculum, a student-centered curriculum, or a re-constructionist curriculum, they are invoking two characteristics of the curriculum at the same time—purpose and context. For example, an essentialistic curriculum is designed to transmit the cultural heritage to students in the organized disciplines, and to prepare them for the future. This curriculum arises from a special philosophical context of the essentialist school of philosophy.

A learner-centered curriculum clearly reveals its orientation: the learner, who is the primary focus of the progressive school of philosophy. The development of the individual learner in all aspects of growth may be inferred, but the plans for that development vary considerably from school to school. The curriculum of a school following re-constructionist philosophical beliefs aims to educate in such a way that learners will be capable of solving some of society's pressing problems and, therefore, change society for the better.

STRATEGIES. While purpose and context are sometimes offered as definitions of curriculum, an additional complexity arises when the theoretician equates curriculum with instructional strategy. Some theoreticians isolate certain instructional variables, such as processes, strategies, or techniques, and then proceed to equate them with curriculum. The curriculum as a problem-solving process illustrates an attempt to define curriculum in terms of an instructional process—problem-solving techniques, the scientific method, or reflective thinking. The curriculum as personalized learning, perhaps delivered digitally or online is a system by which learners encounter curricular content through a mode of instruction. Neither purpose, nor context, nor strategy provides a clear basis for defining curriculum.

CURRICULUM OBJECTIVES OR STANDARDS

Among prominent conceptions of curriculum is the classification of curriculum as curriculum objectives or standards to be learned or mastered. This text will use both terms of curriculum objective and standards synonymously, as well as other traditional based academic language and standards based academic language, due to some educational organizations using one or the other or both. Originally, the term used was performance or behavioral objective. Tyler's advocacy in mid-twentieth century was for educational objectives to be written in behavioral terms. W. James Popham and Eva L. Baker (1970) held that "Curriculum is all the planned learning outcomes for which the school is responsible," (p. 48). In designing the curriculum, planners would cast these learning outcomes or objectives in operational or behavioral terms.

The behavioral objectives may also be called performance or operational objectives and in effect are instructional objectives. According to the proponents of behavioral objectives, a compilation of all the behavioral objectives of all the programs and learning experiences of the school would constitute the curriculum. The curriculum would then be the sum of all instructional objectives. You will encounter in this text an approach that distinguishes curriculum goals (overarching ideas) and curriculum objectives (standards) from instructional goals (essential questions, big ideas) and objectives (learning targets). You will see later that standards are derived from overarching ideas and aims of education (mission or purpose), and learning targets are derived from essential questions or big ideas and from overarching ideas and standards. Both standards and learning targets can be stated in behavioral terms. To assist you with the multiple and changing terms related to the curriculum system that includes curriculum, instruction, and assessment, Table 1.1 is provided. Table 1.1, Traditional versus Standards Based Academic Language, shows the alignment between the more traditional terms and terms that apply in the standards based environment. These terms may be helpful as you continue to read this text.

Some advocates of behavioral objectives seem comfortable with the notion that once the expected learning outcomes (learning targets) are clearly specified, the curriculum has been defined. From that point on instruction takes over. This view of curriculum as specification of standards or objectives is quite different from the big concept of the curriculum as a plan, a program, or a sequence of courses.

In this text, the official curriculum is perceived as a plan or program for all the experiences that the learner encounters under the instructional leadership of the school or school district. This official curriculum includes the curriculum objectives or standards that students are expected to master within a specific grade level or content area, and are often those for which educators are held accountable through various metrics. As curriculum is presented within the text, think about the official curriculum and not all the extensions or experiences that students may have while moving through their schooling or education. In practice, the official curriculum consists of a number of plans, in written form and of varying scope, that delineate the intended student learning outcomes. The curriculum, therefore, may be a unit, a course, a sequence of courses, the school's or school district's entire program of studies—and may be encountered inside or outside of class or school when led by the personnel of the school.

TABLE 1.1 Traditional versus Standards Based Academic Language

Traditional Academic Language	Standards Based Academic Language
Aims	Mission or purpose
Curriculum goals	Overarching idea
Curriculum objectives	Standards
Instructional goals	Essential question (big idea)
Instructional objectives	Learning targets (short-term measurable outcomes)
Measures	Success criteria (evidence)
Assessments/tests	Formative assessments (informal or formal check on progress towards standard, goal, or learning target to inform instruction) Summative assessment (measure of progress toward proficiency on a standard, goal, or learning target)

RELATIONSHIP BETWEEN CURRICULUM AND INSTRUCTION

The search to clarify the meaning of curriculum reveals uncertainty about the distinctions between curriculum and instruction and their relationship to each other. Simplistically, curriculum can be viewed as that which is taught, and instruction as the means used to teach that which is taught. Even more simply, curriculum can be conceived as the "what," or intentions and instruction as the "how," or means. You may think of the curriculum as a program, a plan, content, and learning experiences, whereas you may characterize instruction as pedagogy, methods, delivery mode, strategies, and implementation.

Historically, distinguishing instruction from curriculum, Johnson (1967) defined instruction as "the interaction between a teaching agent and one or more individuals intending to learn" (p. 138). James B. Macdonald and Robert R. Leeper (1965) viewed curricular activity as the production of plans for further action, and instruction as the putting of plans into operation. Thus, according to MacDonald and Leeper, curriculum planning precedes instruction, a premise with which this text is aligned (McDonald & Leeper, 1965, pp. 5–6).

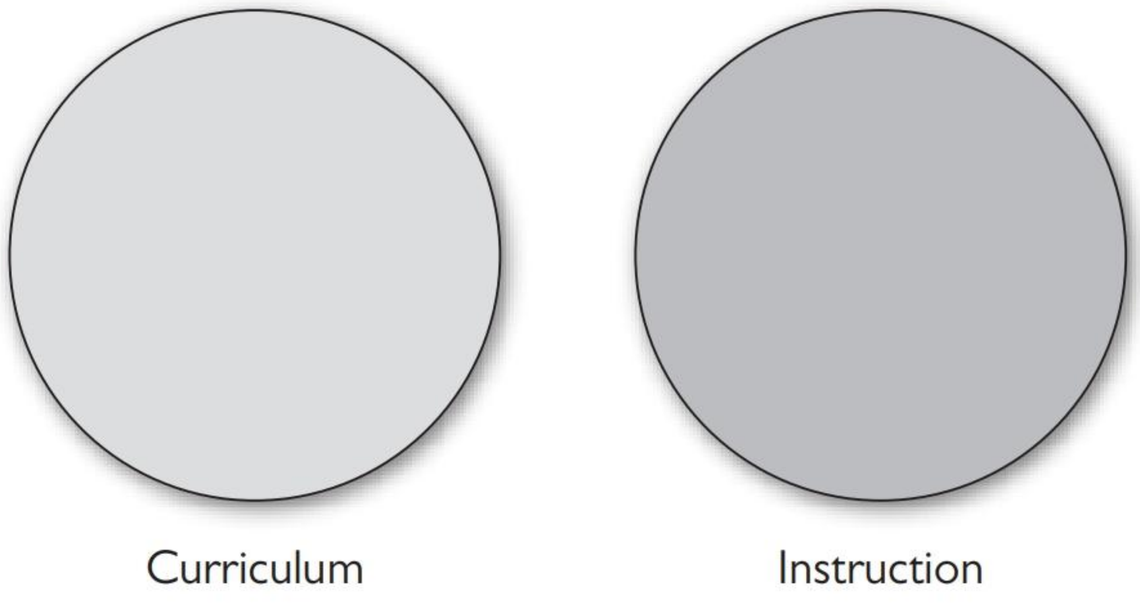
In the course of planning for either the curriculum or instruction, decisions are made. Decisions about the curriculum relate to plans or programs and thus are *programmatic.* Whereas, those decisions made about instruction (and thereby implementation) are *methodological and pedagogical.* Both curriculum and instruction are subsystems of a larger system of education.

Models of the Curriculum–Instruction Relationship

Definitions of the two terms are valuable but can obscure the interdependence of these two systems. That the relationship between the *what* and the *how* of education is not easily determined can be seen in several different models of this relationship. For lack of better terminology, academic language for these models are: (a) dualistic model, (b) interlocking model, (c) concentric model, and (d) cyclical model. Each curriculum–instruction model has its champions who espouse it in part or in whole, and in theory or in practice.

DUALISTIC MODEL. Figure 1.1 depicts the dualistic model. Curriculum is on one side and instruction on the other and they remain separate. Between the two entities lies a great abyss. What takes place in the classroom seems to have little relationship to the master plan of curriculum or learning intentions. The curriculum developers or designers do not engage with the instructors. Discussions of curriculum are divorced from their practical classroom implementations. Under this model the curriculum and the instruction may each change without significantly affecting one another.

FIGURE 1.1
The Dualistic Model



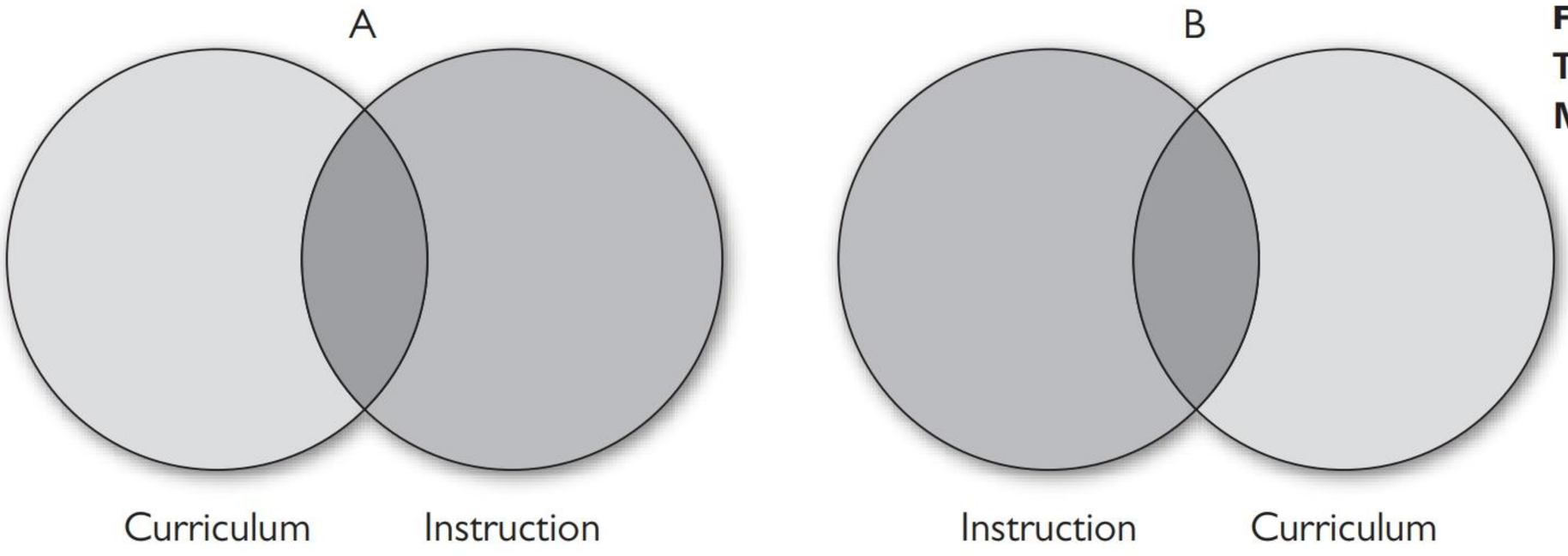


FIGURE 1.2
The Interlocking Model

INTERLOCKING MODEL. When curriculum and instruction are shown as systems entwined, an interlocking relationship exists. No particular significance is given to the position of instruction or curriculum in either of the versions of this model presented in Figure 1.2. The same relationship is implied no matter which element appears on the left or the right. These models clearly demonstrate an integrated relationship between these two entities. The separation of one from the other would impact effectiveness of both.

Curriculum developers would find it difficult to regard instruction as paramount to curriculum and to determine teaching methods before program development. Nevertheless, some instructors may proceed as if instruction is primary by dispensing with advance planning of instruction based on the curriculum and by letting curriculum develop as learning proceeds in the classroom.

CONCENTRIC MODELS. The preceding models of the relationship between curriculum and instruction reveal varying degrees of independence, from complete detachment to an interlocking relationship. Mutual dependence is the key feature of concentric models. Two conceptions of the curriculum–instruction relationship that show one as the subsystem of the other can be seen in Figure 1.3. Variations A and B both convey the idea that one of the entities occupies a superordinate position while the other is subordinate.

Concentric model A makes instruction a subsystem of curriculum, which is itself a subsystem of the whole system of education. Concentric model B subsumes curriculum within the subsystem instruction. A clear hierarchical relationship is in both these models. Curriculum ranks above instruction in model A and instruction is predominant in model B. In model A, instruction

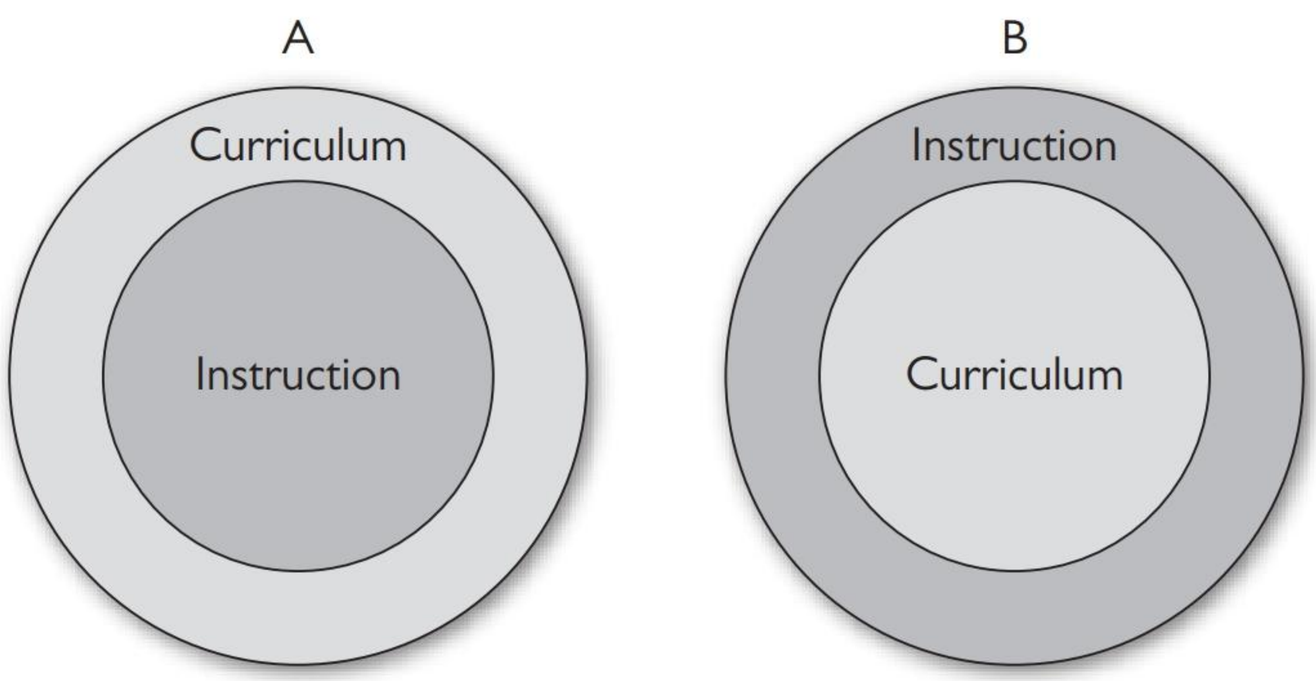
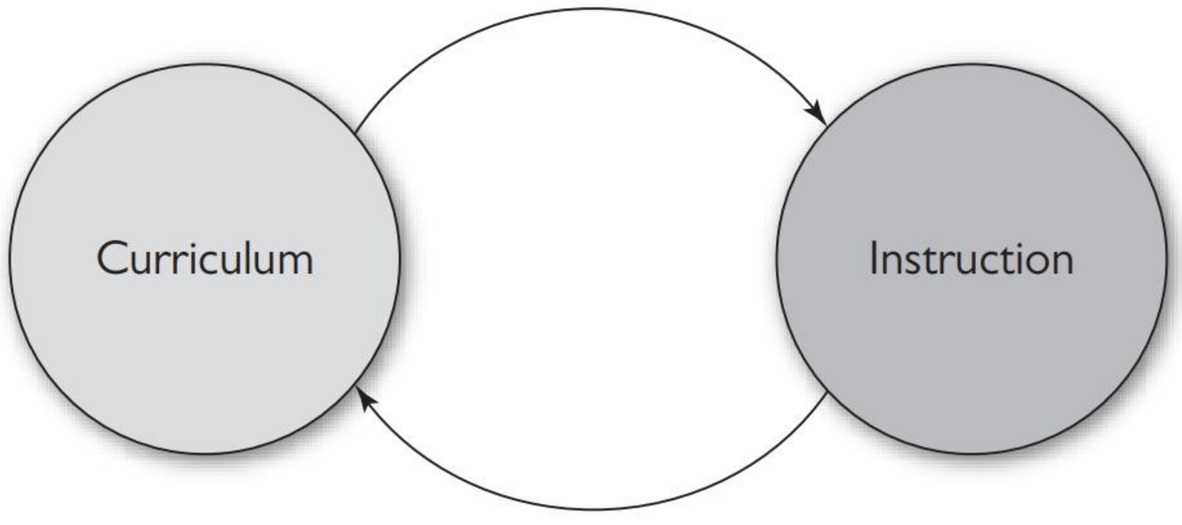


FIGURE 1.3
The Concentric Model

is a very dependent portion of the entity curriculum. Model B makes curriculum subservient to and a derivative of the more global instruction.

CYCLICAL MODEL. The cyclical conception of the curriculum–instruction relationship is a simplified systems model that stresses the essential element of feedback. Curriculum and instruction are separate entities with a continuing circular relationship. Curriculum makes a continuous impact on instruction and vice versa; instruction has impact on curriculum. This relationship can be schematically represented as in Figure 1.4, The Cyclical Model implies that instructional decisions are made after curricular decisions, which in turn are revised after student learning outcomes are evaluated. This process is continuous, repetitious, and never-ending. The evaluation of instructional effectiveness affects the next round of curricular decision making, which again affects instructional implementation. While curriculum and instruction are diagrammed as separate entities, with this model they are not to be conceived as separate entities but as part of a sphere—a circle that revolves, causing continuous adaptations and improvements of both entities, based on learning outcome metrics.

FIGURE 1.4
The Cyclical Model



COMMON BELIEFS. As research findings add new insights on teaching and learning and as new ideas are developed, beliefs about curriculum and instruction also undergo transformation. The "rightness" or "wrongness" of concepts such as curriculum and instruction cannot be established by an individual or even by a group. One index of "correctness" might be the prevailing informed opinion at a particular stage in history—a rather pragmatic but nevertheless a viable and defensible position. Most theoreticians today appear to agree with the following comments.

- Curriculum and instruction are related but different.
- Curriculum and instruction are interlocking and interdependent.
- Curriculum and instruction may be studied and analyzed as separate entities but cannot function in isolation from one another.

Problems may be posed by the dualistic conceptual model of the relationship between curriculum and instruction, with its separation of the two entities. With creation of the CCSS and each state's specific implementation or variation in standards, there is a trend towards the concentric model that makes instruction a subsystem of curriculum with the curriculum standards being the driver. This is the case in many public school districts. Some curriculum developers and designers are comfortable with an interlocking model because it shows a close relationship between the two entities with the feedback loop that includes metrics of student learning outcomes to inform revisions. Given the accountability for student learning outcomes of teachers and administrators, it may be that the cyclical model has advantages. With simplicity and clarity of the importance

of continuous improvement of both curriculum and instruction informed by feedback (data and evidence), this model may hold the most promise for practitioners in roles that include or relate to curriculum development and design.

CURRICULUM AS A DISCIPLINE

In spite of its elusive character, curriculum is a discipline or a major field of study in higher education and curriculum is then both a field within which people work and a discipline to be taught. Graduate and undergraduate students may take courses in curriculum development, curriculum theory, curriculum evaluation, secondary school curriculum, elementary school curriculum, middle school curriculum, community college curriculum, and—on fewer occasions—university curriculum.

The Characteristics of a Discipline

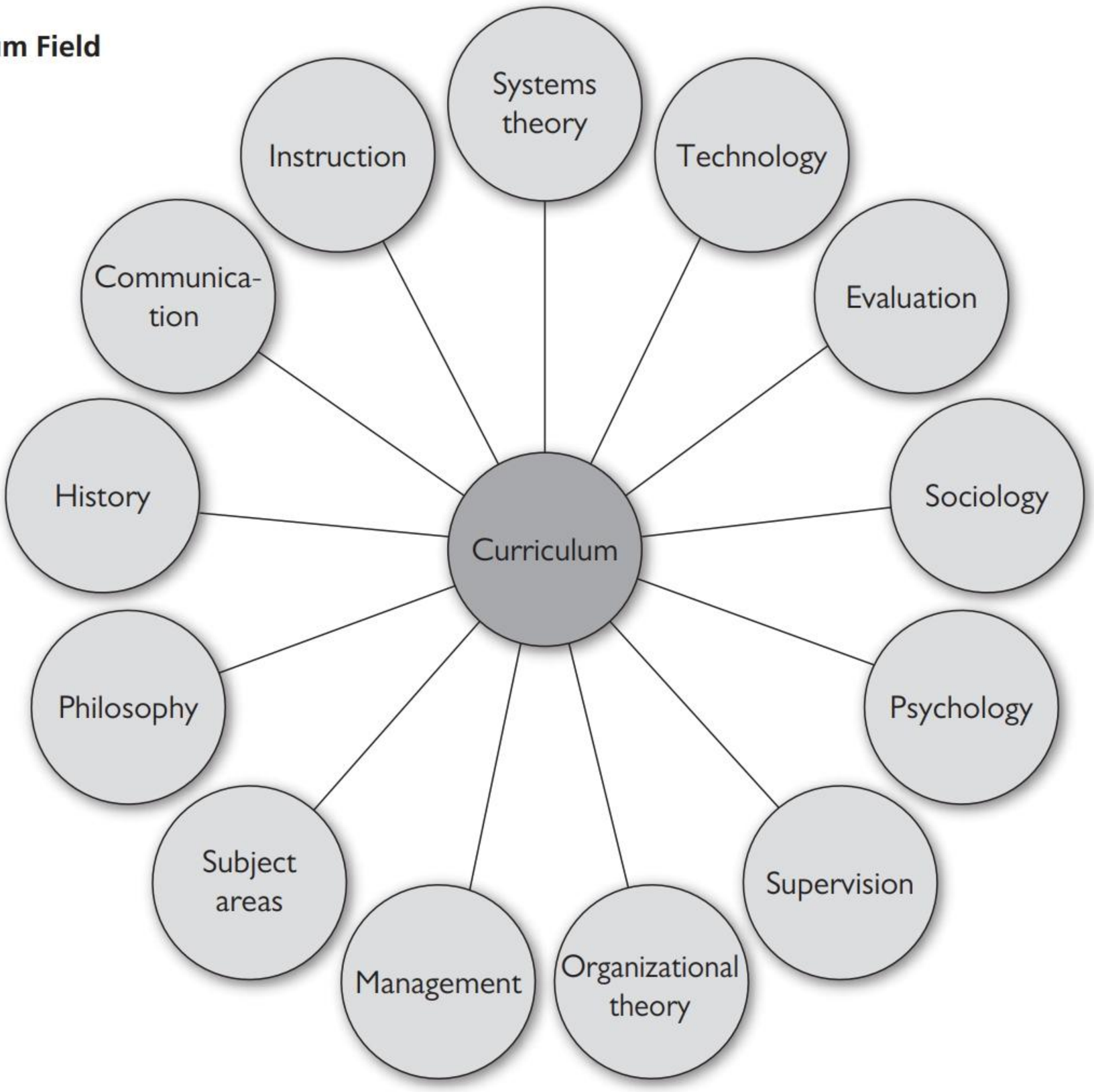
To arrive at a decision as to whether an area of study is a discipline, the question might be raised, "What are the characteristics of a discipline?" If the characteristics of a discipline can be spelled out, it can be determined whether or not curriculum is a discipline.

PRINCIPLES. *Any discipline worthy of study has an organized set of theoretical constructs or principles that governs it.* Certainly, the field of curriculum has developed a significant set of principles, tried and untried, proven and unproven, many of which are appropriately the subjects of discussion in this text. Balance in the curriculum, discussed in Chapter 2, is a construct or concept. Curriculum itself is a construct or concept, a verbalization of an extremely complex idea or set of ideas. Using the constructs of balance and curriculum, a principal can be derived that stated in simple terms, says, "A curriculum that provides maximum opportunities for learners incorporates the concept of balance." Sequencing of courses, behavioral objectives, integrated studies, and multiculturalism are examples of constructs incorporated into one or more curriculum principles.

A major characteristic of any theoretical principle is its capacity for being generalized and applied in more than one situation. Were curriculum theories but one-shot solutions to specific problems, it would be difficult to defend the concept of curriculum as a discipline. The principles of curriculum theory are often successful efforts to establish rules that can be repeated in similar situations and under similar conditions. Generally, the concept of balance should be incorporated into every curriculum. However, controversy may arise over a principle that might be stated as, *The first step in curriculum planning is the specification of behavioral objectives*. Though some maintain this principle has become universal practice and therefore might be labeled "truth," it has been tried and accepted by many educators, rejected by some, and tried and abandoned by others; therefore, it cannot be applied consistently.

KNOWLEDGE AND SKILLS. *Any discipline encompasses a body of knowledge and skills pertinent to that discipline.* The field of curriculum has adapted and borrowed content from a number of pure and derived disciplines. Figure 1.5 schematically shows areas from which the field of curriculum has borrowed constructs, principles, knowledge, and skills. Selection of content for study by students, for example, cannot be done without referring to the disciplines of sociology, psychology, and specific core content like mathematics. Organization of the curriculum depends on knowledge from organizational theory and instructional leadership, which are aspects of school

FIGURE 1.5
Sources of the Curriculum Field



leadership. The fields of communications, supervision, systems, instructional technology, and digital design are called on in the process of curriculum development. Knowledge from many fields is selected and adapted by the professionals within the curriculum field.

The *learner-centered curriculum* as a concept draws heavily on what is known about learning, growth, and development (psychology and biology), on philosophy (particularly from one school of philosophy, progressivism), and on sociology. The *essentialist curriculum* borrows from the areas of philosophy, psychology, and sociology, as well as the academic disciplines.

You might ask whether the field of curriculum contributes any knowledge of its own to that borrowed from other disciplines. Certainly, a good deal of thinking and research is going on in the name of curriculum. New curricular ideas are being generated continuously, such as those emerging from social and political theories related to multi-culturalism and culturally relevant curriculum and pedagogy (Wright, 2000). New ideas, whether they be character education, technical education, or Science, Technology, Engineering, and Mathematics (STEM) education, borrow heavily from other disciplines.

As those who study educational leadership you will be familiar with an example from the field of social psychology. Generally accepted is the notion that a curriculum changes only when the people affected have changed. This principle, drawn from the field of social psychology and

applied in the field of curriculum development, was perhaps most dramatically demonstrated by the Western Electric research studies conducted in the 1930s (Popham & Baker, 1970). In the Hawthorne Plant of Western Electric in Chicago researchers discovered that factory employees assembling telephone relays were more productive when they were consulted and made to feel of value to the organization. Making the employees feel important resulted in greater productivity than manipulating the physical environment (e.g., lighting in the factory). The feeling of being important to the research studies also created its own aura, the so-called Hawthorne Effect, named for the Hawthorne Plant of Western Electric. Because the feeling of being valued can in itself contribute to motivation and productivity, this effect is one that researchers may discount, for it can obscure the hypothesized or real causes for change. However, the educational leader who is aware of the Hawthorne Effect may take advantage of it to motivate students to engage in learning and teachers to engage in collaboration to improve effectiveness.

An instructional leader is the person who acts as a catalyst or agent for bringing about change in effectiveness of teachers and improvement in student learning outcomes by focusing on the creation of an environment with the priority of learning (Hattie, 2009). How does the instructional leader do this? He or she makes use of knowledge and skills from a number of fields: communication theory, leadership theory, organizational theory, psychology of groups, research, and other areas. How does the instructional leader help teachers to carry out the change once they have subscribed to it? He or she applies principles and skills from leadership, professional learning, knowledge of the structure of disciplines, and from other areas.

Consequently, the field of curriculum requires the use of an amalgamation of knowledge and skills from many disciplines. That curriculum theory and practice are derived from other disciplines does not in any way diminish the importance of the field. The observation of its derived nature simply characterizes its essence. Curriculum's synthesis of elements from many fields in some ways makes it both a demanding and an exciting arena in which to work.

In a cyclical fashion, the derived discipline of *curriculum* in turn makes its own potent impact on the disciplines from which it is derived. Through curricular research, experimentation, and application, content areas are modified; learning theories are corroborated, revised, or rejected; leadership and supervisory techniques are implemented or changed; and philosophical positions are examined.

THEORETICIANS AND PRACTITIONERS. *A discipline has its theoreticians and its practitioners.* Certainly, the field of curriculum has an array of people laboring in its name. Mention has already been made of some of the titles they go by: developers, digital designers, consultants, coordinators, directors, and professors of curriculum, to name but a few. This text will include them under the generic title of *curriculum specialist*.

Curriculum specialists make a number of distinctive contributions to their field. Specialists know the types of curricula that have worked in the past, under what conditions, and with whom success resulted. Since continuous improvement is expected, specialists must be well grounded in the historical development of the curriculum and must possess the capacity to use that knowledge to help practitioners avoid historical pitfalls.

Curriculum specialists generate or help to generate new curriculum concepts. In this capacity specialists draw on the past and conceive new arrangements, adaptations of existing approaches, or completely new approaches. Alternative forms of schools, for example, are newer arrangements and approaches for the same general goal of education.

While curriculum specialists are engaging in the process of thinking beyond what is already known, hoping to bring to light new theories; perhaps more curriculum specialists are more likely

to be experts in application of theory and research. These experts know the techniques of curriculum development that are most likely to result in higher achievement on the part of learners. They are familiar with variations in the organizational patterns. Such experts must be not only knowledgeable but also open to research-based innovations that give promise of bringing about higher achievement in learners.

CURRICULUM SPECIALISTS

Curriculum specialists often make a unique contribution by creatively transforming theory and knowledge into practice. Through their efforts a new approach, at first experimental, gradually becomes a widespread practice after data gathering, analysis, and revision until the approach yields satisfactory results. As students of the discipline of curriculum, they also examine and reexamine theory and knowledge from their field and related fields. Awareness of past successes and failures elsewhere helps those who work in the field of curriculum to chart directions for their own curricula.

Curriculum specialists are in the best position to stimulate research on curricular problems. Specialists carry out and encourage study of curricular problems, comparisons of plans and programs, results of new patterns of curriculum organization, and the histories of curriculum experiments, to indicate but a few areas of research. Specialists encourage the use of results of research to continue efforts to improve the curriculum.

While classroom teachers daily concern themselves with problems of curriculum and instruction, the curriculum specialist is charged with the task of providing leadership to administrators and teachers. Since there are many different types of specialists in many different locations, you will find it difficult to generalize on their roles. Some curriculum specialists are generalists whose roles may be limited to leadership in curricular or programmatic planning or whose roles may also encompass instructional planning and decision making.

Some curriculum specialists confine themselves to certain grade levels or content areas, such as elementary, middle, or secondary school; community college; special education; reading, science; early childhood; and any content area that may be taught. What can be observed is that the roles the curriculum leader plays are shaped by the supervising administrator, the school or school district needs, and by the specialist himself or herself. At varying times, the curriculum specialist must be:

- a digital designer,
- a human relations expert,
- a theoretician,
- a data analyst,
- a subject matter expert,
- an evaluator,
- a researcher, and
- an instructor.

Curriculum Supervisors

An additional clarification should be made at this point that is, the relationship between the roles of persons designated as curriculum specialists and those persons who are called curriculum supervisors. Depending upon the context the titles may be synonymous.

In this text, a curriculum *supervisor* is perceived as a specialist who works in three domains: instructional development; curriculum development; and teacher professional learning (Macdonald & Leeper, 1965). When the supervisor works in the first two domains, he or she is an instructional/curriculum specialist or is often referred to as an "instructional supervisor or coordinator" (Macdonald & Leeper, 1965, pp. 5–6). Thus, the curriculum specialist is a supervisor, one with more limited responsibilities than a general supervisor, like a principal. Both the curriculum specialist and the supervisor fulfill similar roles when they work with teachers in curriculum development and instructional development, but the curriculum specialist is not primarily concerned with such activities as evaluating teachers, which are more properly responsibilities of the general supervisors.

Role Variations

As with so many jobs in the field of education, difficulty arises in attempting to draw firm lines that apply under all conditions and in all situations. To understand more fully the roles and functions of educational personnel, examine local practice. Teachers, curriculum specialists, and supervisors all engage in activities to improve both curriculum and instruction. At times, their roles are different and at other times their roles are similar. These personnel, all specialists in their own right, frequently trade places to accomplish the task of improvement in learning outcomes. Sometimes they are one and the same person—the teacher who is his or her own curriculum specialist and supervisor. Whatever the structure of leadership for the improvement of curriculum and instruction, all teachers and all specialists must ultimately participate in this challenging task. Because curriculum and instruction are the heart of schooling, all personnel participate in the improvement of curricular offerings and how these offerings are implemented.

Chapter 3 will describe roles of personnel involved in curriculum development, including teachers, students, department chairs, lead teachers, team leaders, grade coordinators, administrators, curriculum specialists, digital designers, supervisors, and stakeholders.

Summary

Curriculum and instruction are viewed as separate but dependent concepts. Curriculum is defined in a variety of ways by theoreticians. This text follows the concept of curriculum as a plan or program for the learning experiences that the learner encounters under the direction of the school. Curriculum is guided by the objectives and standards adopted by the school, school district, or educational organization.

Instruction is perceived in these pages as the means for making the curriculum operational, that is, the techniques that teachers use to make the curriculum accessible to the learners. In short, curriculum is program and instruction is method.

A number of models showing the relationship between curriculum and instruction have been discussed. While all models have their strengths and weaknesses, the cyclical model seems to have particular merit for its emphasis on the reciprocity between curriculum and instruction.

Planning should begin with the programmatic, that is, with curriculum decisions, rather than with instructional decisions. Appropriate planning begins with the broad aims of education and proceeds through a continuum that leads to the most detailed objectives of instruction.

Curriculum is perceived as a discipline, albeit a derived one that borrows concepts and principles from many disciplines.

Many practitioners work in the field of curriculum, including specialists who make a career

of curriculum planning, development, and research. Teachers, curriculum specialists, and instructional supervisors share leadership responsibilities in efforts to develop the curriculum.

As a discipline, curriculum possesses (a) an organized set of principles, (b) a body of knowledge and skills for which training is needed, and (c) its theoreticians and practitioners.

Application

1. Identify the foundations upon which your state, school district, or organization based its curriculum. Investigate the influences of this curriculum and their expertise in education, leadership, and learning.
2. Unlike many entities that are held up as examples for the US to emulate in terms of student learning, there is not a national curriculum. Ascertain how one of the highly achieving countries globally develops and implements a unified curriculum. Compare the variables involved in the US and the country of your selection.

Reflection and Inquiry

1. Review the curriculum for a grade or course in an education organization. From the review determine how the education organization defines curriculum. What changes in the definition are needed to influence development of more meaningful learning experiences for the students?
2. Think about the knowledge and skills needed to be an effective curriculum specialist. Develop criteria for the selection of an effective curriculum specialist based on the knowledge and skills you selected.

Websites

Association for Supervision and Curriculum Development: ascd.org

National Association of Elementary School Principals: naesp.org

National Association of Secondary School Principals: principals.org

National Governors Association: nga.org

Association for Middle Level Education: amle.org

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