Goodlad, J. I., & Su, Z. (1992). Organization of the curriculum. In: Jackson, P.W (Ed.), Handbook of Research on Curriculum. (pp. 327 - 344). New York: Macmillan.

ORGANIZATION OF THE CURRICULUM

John I. Goodlad
UNIVERSITY OF WASHINGTON

Zhixin Su

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

There is a vast body of writing on the organization of the curriculum but little of it reports research, if one defines "research" as studies seeking to demonstrate or describe a relationship between, for example, some pattern of organization and such outcomes as the understanding of subject matter. Most such research is confined to studies into school subjects-mathematics, reading, history, and so on-and is reported elsewhere in this Handbook. Most of the writing and reporting on curriculum organization is either conceptual or descriptive. The former depends for its validity on argument, usually from a foundation of values or principles believed to be sound. The latter describes work in progress or completed—work usually involving a shift in emphasis from, for example, primary attention to the nature of the subject matter to greater attention to learners' interests or stage of development. Rarely does either rest its case on experiments or on reporting effects beyond the opinions of persons involved or affected.

Most of the literature reviewed in what follows represents, then, a broad conception of research best viewed as inquiry—fi-aquently, reasoned argument for a given approach to curriculum organization based on qualitative, contextual criteria. One argues for what one believes to be good and true and perhaps even beautiful and just: good for children and youths, good for society, true to the structure of the discipline, beautiful in its appeal to the senses, and just in that the organization of the curriculum denies no one access to first-class knowledge. One argues that the organizational pattern fits or follows from stated ends or values and may stop with an argument based on the face validity of

this or that proposition or go on to provide data supporting correlational relationships. Or one argues that the curricular arrangements commonly assumed (in the experimental paradigm) to be means justified only by their relationship to ends must be viewed as ends in themselves, to be justified by the criteria of good, true, beautiful, and just. Eisner (1977) refers to part of this process of judgment and justification as educational connoisseurship.

Various ways of organizing the curriculum have enjoyed attention for a period of time and then largely disappeared. Sometimes, a little of what was proposed was absorbed into conventional practice; sometimes a pattern of organization returned to popularity later in new dress. Because of this evolutionary character of patterns of curriculum organization, in particular, our inquiry is in large part historical in nature.

Needless to say, reasoned argument leads to reasoned counterargument. Consequently, a portion of the literature on curriculum represents ongoing debate over competing positions. There is much of it. The various approaches wax and wane in popularity, appearing and reappearing in discourse. When the nation's welfare appears to be at stake because of the perceived condition of our schools, organizational arrangements that stay close to the academic disciplines tend to be in favor. Tough, subject-oriented approaches in subsequent eras of reform are perceived to be shortchanging the needs and interests of students and tend to be followed by approaches appearing to be softer and more tender.

We endeavor in what follows to sift through this volu-

minous body of literature in search of patterns of curriculum organization based on careful consideration of the range of variables to be taken into account if the curriculum is to be coherent. In particular, we attempt to locate the concepts and elements considered central or unique to a particular form of curriculum organization. Our critique focuses more on the underlying rationale than on the debate among competing positions. In this way, we limit ourselves rather sharply, eschewing what would otherwise be an exhaustive, exhausting review of a rather diffuse body of literature.

DEFINITIONS AND CONCEPTS

The primary purposes of seeking alternative ways to organize the curriculum are to increase human accessibility to knowledge and ways of knowing and to foster understanding. The perspective one brings to the task is heavily influenced by one's conception of knowledge (see Chapter 10 in this Handbook), however well or ill formed. Ideally, the way the curriculum is organized should enhance students' effectiveness as citizens, workers, parents, and participants in the whole of life—their ability to take part in the human conversation (Oakeshott 1962, 199). Curriculum organization is intended to render knowledge in such way that it is readily accessible to large numbers of people (Cremin 1971).

Curriculum and Curriculum Organization

Skilbeck (1985) defines curriculum organization as

the manner in which the elements that constitute the curriculum of an educational System or institution are arranged, Interrelated, and sequenced. These elements comprise such general factors as teaching plans and schemes, learning materials, equipment and plant, the professional expertise of the teaching force, and the requirements of assessment and examinations bodies, (1229)

It is clear from Skilbeck's definition that his unit of selection and analysis is an institution such as a school, college, or university or even the educational system of a district or state. The elements of curriculum to be arranged, consequently, are very general and lie outside of what some other definitions embrace. For example, if the unit of analysis is confined to a subject only, such as mathematics, the curriculum planner's concentration narrows to the sequencing of mathematical topics and operations, estimates of student time required for mastery, possible integrations with other subjects, and the like. Clearly, then, the problems and issues of organizing curricula are shaped by one's definition of curriculum.

The range in definitions is enormous: from that of a common dictionary—the courses offered by an educational institution-to much broader ones, such as "planned ac-

tions for instruction" and "all the experiences a learner has under the auspices of a school" (Foshay 1969, 275-276). Connelly and Lantz (1985) posed nine discrete definitions However, over the years, definitions have tended to fall into four broad categories, each reflecting a different perspective and each having different implications for organizing curricula: (1) The curriculum is a design or plan of institutionalized education; (2) the curriculum consists of the actual learning opportunities provided at a given time and place: (3) the curriculum is an instrument for bringing about behavioral changes in learners as a result of their activities in an educational institution; (4) the curriculum is all the educational experiences that a learner has under the guidance of the school (Kearney and Cook 1960). The search for a single definition (occupying more than a little of the literature in the field of curriculum inquiry) is futile simply because widely differing phenomena are viewed—justifiably—as a curriculum or as curricula. Consequently, the phenomena of curriculum organization are not everywhere the same.

Goodlad (1966, 29-39; 1979, 33-37) attempted to sort out these different curricula according to their levels of remoteness from those for whom they were planned. He identified four: societal, institutional, instructional, and idealogical. The societal level is far removed from the intended learners and involves a sociopolitical process of determining goals and, usually, the subjects to be studied in schools. The country, province, or state often goes on to spell out in curriculum guides the topics to be studied, the time to be spent on them, and the books and other materials to be used (Klein and Goodlad 1978). In Denmark in 1986, for example, schools had on hand more than 40 guides for all of the subjects to be taught (Florander and Skov 1986, 173). The actors in determining goals, contents, and organization of the curriculum for children and youths in the schools are politicians, spokespersons for special interest groups and the general public, a variety of different kinds of administrators, and various professional specialists (van Bruggen 1986, 133).

The institutional curriculum is that of a school or college. This curriculum is constrained by the finite time limitations of year, week, and day, and it commonly is organized according to subjects derived from the major domains of knowledge and knowing, with the topics and themes to be studied specified for each of several grade levels. This curriculum is derived in large part from the societal curriculum specified by the state or province and modified by the school board, after varying degrees and kinds of input from school personnel and lay citizens. It is to this school curriculum that most curriculum reform is directed (Schaefer 1971, 15). Also, it is around this curriculum that most controversy swirls: How much of it should be commonly required for all? To what degree should students' interests be considered? Should each subject be taught as a separate discipline, or should efforts be made to combine those that are closely related? These are essentially questions of curriculum organization.

The instructional curriculum is the one that teachers

plan and endeavor to deliver to students. This one, too, is derived from specifications of the state but more directly from what has been determined necessary or desirable for each school by school authorities. In elementary and secondary schools—much, much more than in colleges and universities—liew teachers organize this instructional curriculum is restrained by an array of regulations and expectations coming down from more remote levels of decision making (McNeil 1986). The instructional level of curriculum planning and organization is also the frequent target of reform and criticism. Experts of all stripes from outside the school hesitate not at all in prescribing for teachers the educational objectives they should seek and how to organize the curriculum to attain them.

The societal, institutional, and instructional domains of curriculum planning and delivery are affected significantly by human circumstances: immediately available resources, power struggles, issues of authority and responsibility, teachers' skills, and more. Good ideas frequently are pushed aside by social, political, economic, and technical realities. There is a curriculum of ideas, however—the idealogical domain—in which the decisions of curricular goals, content, and organization are addressed in their pure state, so to speak. Literally thousands of "curricula of ideas" have been proposed and almost as many abandoned, frequently to be resurrected later in some form. These are most frequently directed to the institutional level, especially during eras of intense attention to educational reform. For example, during the 1960s, millions of federal and private philanthropic dollars were poured into efforts to bring together the best ideas of subject matter specialists and learning theorists in new curricular configurations for high school students (Bruner 1960; Goodlad 1964). Later in this chapter, we discuss these and other examples.

The societal, institutional, and instructional levels of curriculum planning and organization devote attention to a curriculum of intentions for individuals other than those designing it. But there is, of course, that most important of all curricula—the one internalized and made personal (Tyler and Goodlad 1979; Tyler and Klein 1973). This is the *experiential level* that provides the final test of curriculum organization—how the individual learner is affected (L. L. Tyler 1978).

It is our intent to deal with curriculum organization as it gains increasing proximity to teachers teaching and students learning. Consequently, we focus on that technical-professional arena where specialized knowledge and skills are practiced. Here we have the domains of action in which scholars and teachers try to devise curricula of good ideas arranged according to their beliefs about how people learn, teachers and administrators endeavor to rearrange what they view as essential or important into finite periods of time, and teachers plan and carry out an instructional curriculum (Goodlad, Klein, and Tye 1979, 43–76). This chapter addresses the more traditional questions of curriculum organization as they apply to the institutional, instructional, and idealogical domains of curriculum inquiry.

Commonplaces of Curriculum Organization

Fields of inquiry are characterized by certain elements commonly addressed by individuals professing to be scholars in or of them. For example, learning theorists differ in their views on transfer of training, but they include this topic as a commonplace of their field.

By "topics" or "commonplaces" I mean those foci of attention within an area of interest which fulfill two conditions: (a) They demand the attention of serious investigators; (b) their scrutiny generates diverse investigations and consequent diversities of definitions, doctrines, and emphases. (Schwab 1964, 5-6)

The curriculum field of inquiry is made up of a number of such commonplaces (Goodlad 1985). How each is addressed ultimately determines the curriculum resulting from inquiry, be it at the societal, institutional, or instructional level of discourse and action or strictly ideational. Some curriculum theorists simply reject the concept of organizing curricula around a framework or scaffolding designed to hold the pieces together in an organized way. For example, a teacher might begin with a social problem such as drug abuse and proceed to take a group of students through a process of inquiry designed to come to some conclusions regarding the nature of the problem and how it might be constructively addressed. But some theorists would argue that this approach still involves commonplaces of curriculum organization: The canons of inquiry constitute organizing elements; the problem of drug abuse, itself of significance, is the organizing center. (Organizing elements and centers are defined below.) Our perspective is that curriculum decisions and actions inescapably involve curriculum commonplaces—by both omission and commission.

Schwab (1973) identified four major curricular commonplaces: learners, teachers, subject matter, and milieu. According to Schwab, all curriculum development, including organization, must deal in some way with these elements since they are common to all curriculum discourse. In other words, they are "places" where curriculum theorists must commonly stand and address each one from his or her conceptions of education and curriculum. There are subcategories of each of these, which in turn have commonplaces of their own. Moreoever, there is not full agreement on commonplaces among curriculum theorists. For Ralph Tyler (1949, 1), for example, curriculum commonplaces presumably are purposes, experiences, organization, and evaluation. It is to the commonplaces of curriculum organization that we now turn.

The organization of the curriculum of a school or class, for example, represents decisions of scope, continuity, sequence, and integration—all commonplaces of curriculum organization. Scope refers to breadth: A school curriculum might be confined to mathematics, the natural sciences, the social sciences, and the humanities. The natural sciences might be confined to biology, and a course to human biology. Decisions of scope are designed to determine the

breadth of a curriculum at a given time—that is, it is viewed horizontally across, for example, the array of courses offered by a secondary school in a given year or those taken or to be taken by a given student. *Continuity* and *sequence*, in contrast, are commonplaces of vertical organization; the school's or a student's curriculum is viewed over time—perhaps over the entire length of elementary and secondary education.

Continuity in the organization of the curriculum seeks to assure students' revisitation of a theme or skill; sequence, to build on what preceded: Students add two-digit numbers, for example, and use what they learn in moving on to the addition of three-digit numbers. Teachers' guides to series of reading textbooks identify skills of reading and seek to show how these are built up through step-by-step activities. The 1958 Yearbook of the Association for Supervision and Curriculum Development (ASCD) is a model effort to demonstrate continuity in school programs from level to level of schooling, with provision for broadening at each level to ensure sequence.

Sequence, one of the most complex commonplaces, is not just the recurrence and repetition of a skill or concept but the deepening of it, so that each successive encounter builds on the preceding one (Leonard 1950). Philosophers, psychologists, and curriculum theorists have stressed curricular sequences tied to successive stages of human development (Piaget 1926, 1962 [1928]; Whitehead 1957), to a combination of materials and increasing complexity of subject matter (Sullivan 1967), and to successive steps of subject matter complexity tested against experimental studies of students' successful progression through them (Gagné 1977; Klausmeier 1976). Bruner (1960) gave credibility to the discredited concept of intuition in proposing a curricular sequence based on the marriage of intuition and "the structure of the discipline." The massive curricular reform projects of the 1960s drew heavily on Bruner's ideas. Smith, Stanley, and Shores (1950, 233) identified four sequential approaches to the exposition of content: from the simple to the complex, the successive identification of prerequisites, from the whole to the part, and the chronological. From studies of curriculum practice, Leonard (1953) extracted the following approaches to effecting curricular sequence: time or chronological order, logical order, difficulty, geographical expansion, and the unfolding of the child.

Armstrong (1989) has summarized four of the most frequently used approaches to sequence in curriculum organization:

- The chronological approach, in which content elements are sequenced in terms of calendar time. The sequence may be from past to present or from present to past. This approach makes sense only when the subject matter to be treated has some logical connection to chronological time (e.g., history and English literature).
- The thematic approach, in which content elements first are organized under any one of several major themes. Decisions about which themes are to be taught first,

- second, third, and so forth may be left entirely to the discretion of the instructor (e.g., elementary school language arts programs may feature such thematic topics as short stories, creative writing, plays, and poetry—none of the topics necessarily builds on any of the others).
- The part-to-whole approach, in which topics or units are sequenced so that basic elements of content precede more complex elements (e.g., math and foreign language programs).
- 4. The whole-to-part approach, which reverses the sequencing order used in part-to-whole course planning. In this design, general information is typically introduced first, providing class members with a broad overview of what they are to learn. Only after they have a good grasp of this overview is more specific information introduced that allows them to study smaller parts of this "whole" (e.g., geography). (78–80)

Integration of the curriculum is intended to bring into close relationship such elements as concepts, skills, and values so that they are mutually reinforcing (Aceland 1967). The ultimate integration is in the learner, of course; the process is aided presumably by the way in which the curriculum components are organized. This organization is more readily done in elementary schools, where teachers are responsible for all or most of the subjects. At the secondary and tertiary levels, however, collaborations among teachers are commonly required for curriculum integration. For many teachers, the time and energy involved in the logistics outweigh the perceived advantages. Universities such as Chicago, Michigan, and Western Washington have developed whole undergraduate curricula designed for optimal integration by students—in separate colleges in the case of the last two.

Although there have been many attempts to develop curricula in accordance with principles of continuity, sequence, and integration that include considerations of students' developmental and learning sequences (Dressel 1958), these have been confined almost exclusively to relatively short, vertical time periods (e.g., a few grade levels) and a few subjects (such as the visual arts and the social studies). Interesting exceptions are found in the work of Hilda Taba, who joined with schoolteachers (circa the mid-1940s) in her project on intergroup education (Taba, Brady, and Robinson 1952) and later in another project in Yolo and Contra Costa Counties, California. Her more theoretical work (Taba 1962) was deeply influenced by these and other experiences and is revealed particularly in her definitions and treatment of commonplaces of curricular organization. There is a clear overlap between her conceptualization of curriculum organization and that of Ralph Tyler's (1949) Basic Principles of Curriculum and Instruction, presumably resulting in part from their colleagueship during the earlier Eight Year Study (discussed later).

A somewhat less ambitious but nonetheless thorough effort is represented by the Annehurst Curriculum Classification System (Frymier 1977). Again, there is close atten-

tion to the commonplaces of curriculum organization; again, the integration is of learners and subject matter. The contributions of both Taba and Frymier represent close collaboration between university-based and school-based educators.

This discussion on organization of the curriculum is resurrecting, to a considerable degree, commonplaces that have received little attention in recent scholarly work beyond the domains of the school subjects. That is, whereas curriculum thought and practice in a field such as mathematics give a great deal of systematic attention to the commonplaces of vertical organization in particular (Gagné 1967), such approaches to entire institutional curricula are much less common. Two essentially related commonplaces—organizing element and organizing center—receive even less attention, whether at the institutional or the instructional level. Both receive a good deal of attention, however—much of it intuitive—in practice. Curriculum theorists would be well advised to observe practitioners carefully.

Organizing elements might be compared to steel fibers in a concrete tower—not seen but necessary to the tower's strength. An organizing element is what the curriculum maker or teacher has in mind in selecting the next topic or unit of work: a concept such as energy, a skill such as legible handwriting, or a value such as respect for one another. The experiment chosen, the exercise required, or the interpersonal anecdote to be analyzed constitutes the organizing center to be used in seeking to understand energy, advance the skill of handwriting, or increase awareness of and sensitivity to others. An inanimate book on a shelf in the classroom comes to life when the teacher chooses and reads an anecdote sharrly highlighting the sad consequences of people's inhumanity. Organizing centers have been described as "curriculum carriages for our students to ride in" (Goodlad 1988, 180)—the curricles of the curriculum. The organizing element is the path they follow, sometimes a deepening rut from which there is no escape.

Ralph Tyler (1949) gives us a rather clear sense of the organizing element and its function in the organization of the curriculum in a quotation from a school's social studies curriculum committee:

The Committee on the Social Studies has developed a list of common elements of the social studies curriculum that can serve as the threads running from the nursery-primary through the middle school and the high school to provide the basis for continuity, for sequence, and for integration in the curriculum. The Committee identified three kinds of common elements: concepts, values, and skills.(87)

A conference held at the University of Chicago over four decades ago was virtually summative in its conceptual treatment of generic principles of curriculum organization and the commonplaces discussed above (Herrick and Tyler 1950). At least three papers addressed organizing elements and the matter of obtaining sequence in their curricular development. it was here that Herrick (1950, 46) directed

attention to the fact that justification of the organizing centers selected to foster sequence and integration on the basis of their relationship to ends alone is not sufficient. His paper suggests the genesis of work that was to occupy his attention later—the determination of factors to be taken into account in designing effective organizing centers, whatever the subject matter. This is a topic very much neglected in the general curriculum literature.

Subsequently, Herrick (1954, 1962, 1965) worked with teachers in developing the qualities most likely to characterize good organizing centers, that is, centers that would be "friendly" to both teachers and learners. The characteristics that emerged reinforced the importance of learners' interests but went far beyond them, into considerations of subject matter, relationships among subject matters, practical considerations of the accessibility of materials and other resources, the likelihood of the activities leading to others, and so on.

The effort to identify commonplaces of curriculum organization and inquire into different ways of addressing them has not extended far beyond the K-12 system. Colleges and universities rarely get beyond the construction of individual courses (and undoubtedly some professors do pay attention to such matters as sequence and integration) and the order in which they are to be taken. Usually, criteria for the arrangements decided on are not specified or clear. A notable exception was the complete redesign of the nursing education curriculum at the University of Washington, a five-year project that paid attention to all of the commonplaces discussed above (Sand 1958). The so-called Tyler rationale of curriculum questions and how to go about answering them (R. W. Tyler 1949) was used later by the National League for Nursing (1977) in a relatively long-term, continuing effort to develop accreditation criteria.

Viewed over several decades, the efforts of curriculum theorists, developers, and practitioners to organize curricula for effective student learning have been quite prodigious, resulting in an extraordinary array of patterns and accompanying analyses and categorizations. Much of this work has remained in the conceptual stage; some of it has been incorporated into textbooks and other learning materials, state and district curriculum guides, and courses of study, losing much in the translation process.

Before turning to this area, it is necessary to look at what might be called the roots or sources of the ideas that came to dominate in a given pattern of organization, setting it apart from another just enough to give it a different name or so much that it must be recognized as of another genre. Education is a normative enterprise, driven by values. Values are deeply embedded in patterns of curriculum organization. Ways of organizing survive because they consistently reflect values that come to dominate in our society's struggle over the curriculum. These ways are replaced—often only temporarily—by alternatives representing values that compete successfully with those prevailing previously (Kliebard 1986). We turn now to some ways of thinking, of viewing the world, that lie behind ways of organizing curricula

INTELLECTUAL SOURCES OF CURRICULUM ORGANIZATION

We return to Schwab's (1973) major curricular commonplaces: learners, teachers, subject matter, and milieu. These are the components that come together to determine the nature of the learning—the experiential curriculum. They are also the components that provoke profound differences in regard to which pattern large numbers of people would prefer to be the dominant orientation. We will see that child-centered and subject-centered advocates, for example, have provided the major pull-and-tug debate over the organization of the curriculum. Consequently, it appears that Schwab's commonplaces reflect curriculum discourse—as they should if they are to meet Schwab's criteria of commonplaces cited earlier.

But Schwab's criteria differ from Ralph Tyler's (1949), if we assume that Tyler's selection of four critical topics—purposes, experiences, organization, and evaluation—infer that these, for him, are major curricular commonplaces. It is important to note that Tyler draws on the Schwab commonplaces (without identifying them as such) in seeking to answer his own questions regarding purposes, experiences, organization, and evaluation.

This is not the place to argue the relative significance or relevance of the two formulations, an exercise more appropriately left to their creators. There is a difference between the two, however, that helps to frame what follows. For Tyler, data are of paramount importance: Knowledge about learners, subject matter, and society are the sources consulted in determining purposes. The curriculum makers seek agreement on normative matters (their philosophy) to determine consistencies and inconsistencies among a preliminary list of objectives after these have been determined by examining the three sources. Their philosophy serves as a screen through which the list is sifted (R. W. Tyler 1949, 33). Once determined, these objectives guide the other curricular decisions, including organization. That is, objectives guide essentially analytical and technical operations; there is no further reference to philosophical considerations. Means are justified by their relevance to ends.

Schwab's (1973) formulation leaves open the flow of norms and philosophical orientations into all four of his commonplaces. Were he to address the selection and organization of learning activities in Tyler's rationale, for example, presumably he would raise questions about the moral meanings embedded in choices and not merely check relevance to stated purposes. In other words, the ends do not fully justify the means; the virtue of means must be determined quite apart from their efficacy in the attainment of objectives.

Ralph Tyler's (1949) four-step formulation of curriculum development is a reasonable reflection of the social, political, and technical processes that characterize the societal, institutional, and instructional levels of decision making. Schwab's (1973) four commonplaces identify the essential

ingredients, almost invariably addressed from varying perspectives as these processes proceed—processes so charged with conflicting values that agreement is difficult to achieve and then is achieved only temporarily. The Tyler rationale becomes most useful after consensus has been reached and its implementation lies ahead.

We turn now to some of the differing conceptions that make the achievement of consensus in curriculum matters difficult to achieve and maintain (see Chapter 1 in this *Handbook*).

Sources Influencing Curriculum Thought

Schubert (1982, 421–422) identifies three general modes of thought having profound implications for curriculum organization that had emerged by the turn of the century: the intellectual traditionalist, the social behaviorist, and the experientialist. Each embodied certain assumptions about knowledge and their implications for the curriculum. Each persists today, although the labels may differ.

Intellectual traditionalism, the dominant mode of thought before 1900, was sometimes referred to as the "mental disciplines approach." This mode likened the mind to muscles that improved with the exercise of such faculties as reason or imagination, achieved through the study of subjects derived from the classical trivium (grammar, rhetoric, and dialectic) and quadrivium (arithmetic, geometry, astronomy, and music). It encouraged the development of a subject-oriented curriculum.

Although strong intellectual currents have buffeted the so-called separate subject pattern of organization, it has remained the rocklike structure at the center of the stream. All efforts to crack or crush it have been little more than eddies, accompanied by the cries of many birds, swirling around its edges. It is fair to say that the proposed alternatives, to the degree that they have survived at all, have developed apart—in a few private schools, occasionally a university-connected laboratory school, and today most of all in magnet or alternative schools. In higher education, experimental colleges with differing patterns of curriculum organization have operated side by side with the "regular" college, the latter often hardening itself against intrusions from its radical neighbor. Curricula organized around subjects and forwarded through topics remain alive and well today: In 1987, a book advocating a long list of topics for all people became a nonfiction best seller in the United States (Hirsch 1987).

Social behaviorism was a rather natural accompaniment of growth in business, industry, and science during the first quarter of the century. It combined precise explanation, technological efficiency, and social utility. Bobbitt (1924) pioneered the "activity analysis" through which the curriculum maker defined precise objectives, which virtually determined the selection and organization of everything in the curriculum. These objectives were reduced increasingly to smaller and smaller ones, to the point where each became the organizing center for learning—a process that was essen-

tially the precursor of teaching machines and programmed instruction (Pressey 1960). Charters (1923) saw the whole as a nearly scientific process of first gathering data regarding human activities—such as what nurses and secretaries do—translating these into specific objectives, and organizing learning activities geared to mastering these operations. Both Bobbitt and Charters stayed largely away from normative questions about the goodness or rightness of these specifics. They assumed that the principles of engineering would remain the same regardless of ideology. Using these processes, the curriculum of a totalitarian regime and of a democratic one could be engineered with equal efficiency.

Ralph Tyler's later attention to stating desired behaviors in objectives earned for him the title "father of educational objectives"—a misnomer, given the earlier work of Bobbitt and Charters. Tyler was directly influenced by the latter, but he eschewed the elaborate process of reductionism, recommending that a dozen or so broad statements should suffice, each containing both a general behavior and the content or area of life in which that behavior was to be developed or to operate (R. W. Tyler 1949, 46-47). He saw the objective as a general guide to curriculum organization but a very precise guide to curriculum evaluation—a point he makes clear in discussing the procedures for developing the tests initially used in the National Assessment of Educational Progress (R. W. Tyler 1973, 109-110). It was to aid the process of evaluation that elaborate taxonomies of educational objectives were constructed (Bloom 1956; Krathwohl 1964).

It fell to Mager (1962) and Popham (Popham, Eisner, Sullivan, and Tyler 1969) to resuscitate the behavioral objective to the position of power in the organization of the curriculum given to it by Bobbitt and Charters. For both, it became the organizing element and a major component of the organizing center. In other words, it became the focal point and, therefore, both the ends and the means of the entire curriculum domain (Baker and Popham 1973; Popham and Baker 1970).

It is worth noting that this spur of behaviorism, which found rich soil in curriculum theory and development, departs rather markedly from the work of the noted behaviorist B. F. Skinner (1971), for example. Indeed, relatively late in his career, Skinner appeared to go out of his way to disassociate himself from the limitations of behavioral objectives, which appeared to him to fall short of providing the array of contingencies necessary to human conditioning.

Experientialism emphasized the notion of "apperceptive mass"—the accumulated results of a repertoire of experiences. Schubert (1982) concludes that this orientation marked the beginning of a science of teaching method based on interest. The task of curriculum development was to arrange knowledge to which students could relate systematically, building up their apperceptions and, therefore, the array of interests to which the teacher might respond. We see here the roots of a problems-oriented approach to curriculum organization that begins with problems already experienced by students (Dewey 1902). The scientific as-

pect of curriculum development becomes that of synthesizing different kinds of knowledge of learners, subject matter, and milieu so that a sequence of problem-solving experiences results.

There have been periods during the 20th century when the orientation to students' interests appeared to be the dominant approach to curriculum organization for and in the schools. Except in the primary grades and a few private and laboratory schools around the country (including the Dewey School at the University of Chicago and the Francis W. Parker school), the subject-oriented curriculum prevailed, however. Nonetheless, there has been throughout much of the century a debate between child-centered advocates and subject-centered advocates sufficient to suggest that the two positions are about equally represented in curricular and instructional theory, if not practice.

Cremin's (1990) depiction of the intellectual differences between John Dewey and Robert Hutchins nicely illustrates the fundamental differences between the traditionalist position and the experimentalist position (as it matured in the 20th century) and the curricular orientations that stemmed from them:

For Dewey, education was a process of growth that had no end beyond itself, a process in which individuals were constantly extending their knowledge, informing their judgments, refining their sensibilities, and illuminating their moral choices. For Hutchins, education was nothing more or less than the cultivation of the intellect, the training of the mind, and there was a group of what he called "permanent studies" that had long been of proven value in achieving that end, namely, the arts of reading, writing, thinking, and speaking, together with mathematics, which he saw as "the best exemplar of the processes of human reason." (7–8)

Social reconstructionism must be added to Schubert's three modes of thought that have influenced curriculum organization. The experientialist position can be pushed to include this fourth orientation but not without doing considerable violence to the strong role of students' lives and interests in the position of many experientialists. Indeed, it was a perception of "a one-sided absorption in the individual pupil" that pushed some critics, already looking for alternatives to subject-centered perspectives, toward a curriculum oriented to the requirements of education in a democratic society (Bode 1938, 54).

Educational and curriculum theorists who found an intellectual home in curricula devoted to education for citizenship in a democratic society varied widely in their attitudes toward reconstruction. Positions ranged from advocating curricula to prepare children and youths to cope with American civilization (Rugg 1926) to advocacy of school programs addressed to reconstructing the social order (Counts 1932). There is little in Schwab's (1973) concept of curriculum commonplaces to suggest that "milieu" might be extended from the immediate circumstances of the learning environment to considerations of the social order as a whole, but neither does his formulation preclude them.

Critical inquiry (Habermas 1971, 1973, 1975) is not precluded in any of these intellectual orientations, either. Indeed, it is central in the thinking of reconstructionists, in particular. Consequently, as we shall see, some proposals for curriculum organization focus on a process that, like Dewey's process of inquiry, is imbued with moral choice (Giroux, Penna, and Pinar 1981). Moral issues in the social context are more likely to be the organizing centers of the curriculum than topics extracted from subject disciplines or students' interests.

Reflections in Curriculum Modes of Organization

Only rarely have real curricula in real schools reflected nearly sole dependence on one of these intellectual roots or any other. Most schools and colleges retain through successive eras of reform a curriculum organized around the subject disciplines, some rhetorically committed to breaking down the subject divisions in favor of patterns organized with more attention to human development or the social context, for example. Nonetheless, conceptual alternatives always attract a following, even when there is no great pressure resulting from public anxiety over the performance of our schools.

There follows a loose classification of patterns of curriculum organization, each of which retains a primary orientation to subject disciplines, students' interests and life experiences, problems of living posed by the environmental milieu, and reconceptualization or revision of the social order. This is a very arbitrary classification scheme, fuzzy around the edges. Indeed, some patterns classified at the margins of one category might well be classified at the margins of another that has different intellectual roots. Neither the classification scheme nor the patterns of curriculum organization encompassed by it is intended to be exhaustive.

PATTERNS OF CURRICULUM ORGANIZATION

Tanner and Tanner (1975, 10-19) have cut through a rather vast body of curriculum writing to remind us that only a very few conceptions of curriculum have prevailed to determine the various patterns of organization that have enjoyed recognition over the past 50 years or so. Their analysis provides a kind of bridge from the educational modes of thought presented by Schubert (1982) to the curricular modes of thought represented in the many patterns of organizing the curriculum that have enjoyed long or brief periods of attention.

Major Themes of Curriculum Organization

Curriculum as the cumulative tradition of organized knowledge continues to prevail, as it did during the early years of the century. The perennialist position holds that the

curriculum should consist principally of the "permanent studies"—the rules of grammar, reading, rhetoric, logic, and mathematics and the greatest books of the Western world (Hutchins 1936). The essentialist position holds that the curriculum must consist essentially of disciplined study in the major domains of human conversation: command of the mother tongue and the systematic study of grammar, literature, and writing; mathematics; sciences; history; and foreign languages (Bestor 1956, 48-49). The discipline doctrine holds to the position that the mind is best disciplined in a school curriculum organized around the subject disciplines. The curriculum reform movement of the 1960s made much use of the term "the structures of the disciplines," but it made relatively little progress in determining precisely what these are and in organizing learning activities around them (Schwab 1962, 197).

The second persisting conception, according to Tanneand Tanner (1980, 10), is oriented to a curriculum organized around modes of thought. "The curriculum is considered to be the increasingly wide range of possible modes of thinking about men's experiences—not the conclusions, but the models from which conclusions derive, and in context of which these conclusions, these so-called truths, are grounded and validated" (Beith 1965, 262). Again, this conception emerges over and over, but there has been relatively little transfer from concept to practice. Because the demands on scholarship are high, it is not surprising that such approaches are sometimes found in experimental colleges inside of the traditional schools and colleges of the arts and sciences.

The concept of curriculum as experience never emerges as dominant in practice but always seems to have its advocates (Dewey 1938). It has sponsored controversy between the child-centered and the subject-centered rationales. The child-centered orientation has significantly contributed to a definition of curriculum as "all the experiences a learner has under the guidance of the school" (Foshay 1969, 275). This makes sense to a good many educators. But when practice turns to the organization of the curriculum, what comes out usually has little relationship to this definition but a great deal to the tradition of organized knowledge in a subject curriculum.

The field of curriculum has been described as moribund (Huebner 1982; Schwab 1970). This description is in some ways puzzling, in view of the degree to which differing conceptual orientations have clashed. Just as there has been a political struggle for the curriculum, there has been an idealogical one (Kliebard 1986). There appears to have been over the years considerable intellectual debate, with stagnation occurring at the points of implemention of a given conception. Eisner and Vallance (1974) have provided an interesting analysis of differing curricular orientations and their implications for tasks such as organization. But finding these implications in practice is more often than not a disappointing pursuit.

The development of cognitive processes is primarily concerned with the refinement of intellectual operations. It

refers only rarely to curriculum content, focusing instead on the "how" rather than the "what" of education. The central #sk of the curriculum is to sharpen the intellectual processes and to develop a set of cognitive skills that can be applied to learning virtually anything. This orientation to curriculum focuses on the child and refers to the learning process per se rather than to the broader social context in which i occurs. The research and thinking of Piaget (1962 [1928]) in particular, had a tremendous impact on the organization of curricula worldwide, especially in elementary school science. Although the work of Piaget was slow to have an impact in the United States, it was beginning to influence the curriculum projects of the 1960s before these began to fade into obscurity (Goodlad 1964; Goodlad, von Stoephasius, and Klein 1966). The cognitive processes approach was a particularly salient orientation in curriculum thinking in the mid-1970s, when psychologists developed greater confidence in their ability to identify the mechanisms through which thinking proceeds and to translate them in to curricular operations (Bruner 1960; Gagné 1967).

Curriculum as technology, like the cognitive processes approach, also focuses on process. It is concerned with the technology by which knowledge is communicated and learning is facilitated. Again, it is concerned with the "how" rather than the "what" of education. The function of curriculum is to find efficient means to a set of predefined and, usually rather simple ends. The focus is on the practical problem of efficiently packaging and presenting the material to the learner but not on the individuality of the learner or the content. The technologists claim to be developing a value-free system.

This approach speaks the language of production; curriculum technologists see curriculum as an input to supply and demand systems. The impact on curriculum materials and their use as the basis for organizing the curriculum has been substant'al. Tyler, Klein, and Michael (1971) and Tyler, Klein, and associates (1976) made an evaluative effort to develop criteria that would require a more comprehensive approach to the development of curriculum materials.

The self-actualizing curriculum is directed toward clarifying personal purpose and toward personal integration. The function of the curriculum is to provide personally satisfying experiences for each individual learner, leading to increased self-understanding (Association for Supervision and Curriculum Development 1962). It is child-centered, viewing education as an enabling process that provides the means to personal development and liberation (Greene 1969, 1971; Maslow 1968).

These conceptions of education and curriculum have found their way at various times and in various forms into rather specific patterns of curriculum organization that make clain s of uniqueness. Some of them have barely taken form in curricular practice; some began and then faded; some faded and then came back, clothed in new rhetoric. We have endeavored to identify the various patterns with the descriptive words and phrases most commonly attached to them.

Organization Primarily Around Subject Disciplines

The single-subject pattern of organization emphasizes a presumed logical organization of each subject, with no deliberate attempt to interrelate several (Hunkins 1980). Each subject is treated as a discrete component of the curriculum. In the 1920s, attempts to make the subjects progress through the grades in orderly, sequential fashion were a natural extension of the growing interest in curriculum making as a kind of science. The work of Thorndike (1910, 1913) during the previous decade was becoming powerfully compelling in developing what might be referred to as "the new scientifically designed textbooks." Although Dewey is more often cited than Thorndike in discussions of influences on American schooling, it is probably fair to say that Thorndike's work much more determined the actual educational experiences of children and youths by virtue of its influence on textbooks. Later, textbooks in the separate subjects for teachers as well as for students became big business. Professors of education wrote them with considerable enthusiasm and often enjoyed substantial financial return. Books on the mathematics curriculum, the language arts curriculum, the social studies curriculum, and the science curriculum, for example, endeavored to join subject matter and suggestions for how to teach it.

Beginning in the 1950s (with roots in the 1940s for mathematics), curriculum developers in an array of subjects sought to select organizing centers around their elements and to combine their so-called structures with conceptions of how students might best understand and use them. What was meant by "structure of the discipline" was not always clear to those involved, let alone to the teachers who were to use the materials produced. Nonetheless, the curriculum reform movement that these ideas propelled represented a refreshing recognition of the fact that attention to subject matter alone is an insufficient basis for organizing an effective curriculum. Translating the interesting experimental patterns of curriculum organization into materials to be used by teachers and students proved to be a challenge that resulted in considerable loss of the fundamental concepts, some of them backed by research (Goodlad, von Stoephasius, and Klein 1966; Schaffarzick and Hampson 1975).

This approach faded away in the 1970s. Some critics argued that the programs were too heavily oriented toward the interests of the college-bound learner. Others found it difficult to find consensus among professionals in some fields about the nature of the structure of their discipline. Still others felt that the approach placed too much emphasis on academic disciplines and that other topics and subjects deserved more attention in school programs.

Fraser (1962) reviewed the special projects and studies dealing with the academic subjects in the school curriculum in the late 1950s and early 1960s. Her review covered more than 40 projects in science, mathematics, English, foreign languages, and social studies. Her recommendations from studying the projects included the need to maintain balance and continuity in the student's total school experience and to provide effective education for all children and youths. Educational reform, she concluded, ultimately rides on the back of the separate-subjects pattern of curriculum organization—a pattern to which teachers resonate most easily.

Some years later, Welch (1979) looked back on the precollege science curriculum development projects funded by the National Science Foundation—all discipline-oriented approaches to curriculum organization. His conclusion was that in spite of the expenditures of millions of dollars and the involvement of some of the most brilliant scientific minds, the science classroom in the late 1970s was little different from that of 20 years before. Although there may be new books on the shelves and clever gadgets in the storage cabinets, the day-to-day operations of classes are largely unchanged—curriculum and instruction are organized and conducted around the separate school subjects, a pattern of organization that remains little changed over the years.

Correlated-subject designs address the integration of relationship of learning experiences in two or more areas. These designs attempt to build on relationships between and among subject areas but continue to emphasize the identities of the individual subjects. For example, an English teacher and a social studies teacher might decide to develop part of the English program and part of the social studies program in a correlated manner. The intent is to broaden learners' understanding by providing a concurrent treatment of a common topic from the perspectives of two subjects (Armstrong 1989).

Klein (1985) describes this pattern as the multidisciplinary or correlated variation of the subject-oriented curriculum. It occurs when several subject areas are interrelated for study, but the separate subject's identity is protected to a considerable degree (Hunkins 1980). Through this approach, it is hoped that students will experience a greater degree of unity in knowledge derived from the content of the subject fields.

The fused curriculum is similar to correlated designs in that it attempts to build on relationships between and among two or more separate subjects. However, whereas correlation designs preserve the identities of the individual subjects, in fusion design these identities tend to disappear. Related content from several subjects is joined under a new label. For example, a course in Western civilization might well fuse such subjects as history, geography, music, and literature. Elementary school mathematics and science projects sometimes have represented an effort to fuse concepts from both subjects (Tanner and Tanner 1980, 472). Fusion designs are not common. A major barrier to their development has been the difficulty of achieving agreement on theoretical rationales to justify the blending of contents from disciplines commonly viewed as independent of each other.

The broad-field patterns of organization seek to create a unity that cuts across an entire domain of knowledge. The intent is somewhat the same as in fusion designs: to create a new unity from constituent subjects that lose their individ-

ual identities during the process of fusing them in the selected organizing center. However, the scope of broad-fields design is grander: All the domains of knowledge and knowing-not merely related subjects-are synthesized in class projects such as "westward migration in America during the 19th century." As Tanner and Tanner (1980) point out, there is not a broad-fields program when a department of social studies continues to offer separate courses in history, economics, and geography. To be a broad-fields program, these subject labels must disappear and content from many different sources must be integrated. It is intended that this design will assist the student in achieving a high degree of integration of the separate subjects so that the content is related to life. A commonly recognized limitation of this approach, however, according to critics, is the danger of a superficial encounter with content (Hunkins 1980).

We thus see a kind of progression from each wel' established subject (such as history and geography) organized separately to two or more subjects deliberately related (as when the history and geography of a country are taught side by side or together) to the fusion of both and other subjects (such as composition and literature) so that the identity of each subject disappears. The organizing center used to involve students almost invariably grows larger and occupies increasingly longer periods of time in the school year. The increasing complexity of organizing the curriculum becomes intimidating. Patterns that go beyond single subjects require exceedingly competent teachers and considerable flexibility in the organization of the school as a whole to accommodate the demands created. Not surprisingly, there have been over the years relatively few ventures into correlated, fused, and broad-fields patterns of curriculum organization. Yet there seem always to be teachers who are intrigued by such arrangements and who are willing to spend the additional hours of planning with others that are invariably involved.

Patterns of Organization Oriented to Students' Interests and Development

There have been proposed at various times curricula organized around the present interests of students. Efforts to implement such proposals fall into three traps almost immediately. First, schools are agencies charged by society with quite specific educating functions. Any group of curriculum planners that abandons the specifications of the societal level of curriculum making crosses the bounds of convention, often to the point of being out of compliance with state requirements and in danger of loss of funds or accreditation. Second, the depth of students' interests is not easily identified; a student asked to state interests today may deny them tomorrow and substitute new ones. Third, it is unreasonable to expect students to express interest in something they know nothing about, and so the very learning most needed to broaden their perspectives goes by the board because they expressed no interest in it.

Most teachers conscientiously try to deliver the curriculum already specified. They depart from it at their risk. Given the preceding traps and teachers' propensities, we should not be surprised to learn that curricula organized around students' interests are nonevents. This conclusion does not negate another conclusion: Many teachers do attempt to motivate learning by endeavoring to connect what they want to teach to students' expressed interests. However, such efforts are pedagogical devices designed to attract students to a prearranged (and usually subject-oriented) curriculum. They fall short of providing alternative patterns of organization.

It is fair to say that curriculum designs organized around students' interests represent a contradiction. Once designed, curricula are rarely redesigned as part of an ongoing interaction between teachers and students. Rather, students' interests, at best, become a component of an organizing center containing other components, including subject matter.

The activity curriculum represents one such pattern and the project method an approach to it. Kilpatrick (1918) identified the "purposeful act" as the building block for the curriculum and "child purposing" as the key to learning. The curriculum took the form of projects rather than formal school subjects; the school program resembled a series of workshops. Arithmetic, reading, history, science, and other subjects were brought in as needed to flesh out a given project. The idea behind this approach was that children would learn to think if they worked on problems of genuine interest to them.

Kilpatrick (1918) wanted to develop a pedagogical theory that would combine educational psychology and philosophy—Dewey's method of intelligence. For him, a project was "a wholehearted purposeful activity proceeding in a social environment" (320). The project method was proposed as a complete theory for curriculum development as well as a method. A series of projects was to constitute the curriculum—an arrangement almost directly opposite to a curriculum organized around behavioral objectives, for example.

Less ephemeral than patterns springing from students' interests have been those based on analyses of their general developmental sequences. Organization around the developmental tasks commonly confronted in growing up is somewhat more student-oriented than organization around the situations that one's culture presents, but both give priority attention to learners. The former is classified in the curriculum literature as organization around developmental tasks; the latter, as organization around persistent life situations.

Daniel Prescott (1938) had been deeply affected by his experiences in World War II, experiences that sensitized him to the need for educational programs to relate in constructive, supportive ways to the tasks young people face simply in growing up. Drawing on his prewar work, he devised an in-service, carefully sequenced educational program for teachers. During the first year, a teacher studied the progression of one child through the school year, carefully documenting classroom events (with that child as the unit of selection). During the second year, the teacher focused on

that child's interactions and relationships with peers. The third year was devoted to observation of a small group of children. Teachers became sensitized in their analyses of these records in seminars with other teachers who were maintaining parallel accounts (all under the direction of a child-study leader trained by Prescott and his associates). By the late 1940s and early 1950s, thousands of teachers in all sectors of the United States were enrolled in the Prescott child-study program.

Educational research was not at the time a high priority of most schools of education, and there was little effort to document and evaluate the program. But it did contribute to an initiative designed not only to define the theoretical roots of an approach to curriculum organization based on the developmental tasks of children and youths but also to catalog the most frequently encountered developmental tasks. Tryon and others (1950), in the 1950 Yearbook of the Association for Supervision and Curriculum Development, presented the results of an impressive analytical and documentary effort. There was in this work a close identification with Prescott's (1938) earlier explorations of the mental health and stress of children and youths in schools.

The yearbook represented a significant curricular breakthrough in that it provided a relatively orderly approach to curriculum development and implementation closely allied with sequences of human development—a pattern that ensures considerable security and direction for teachers. At any rate, large numbers of teachers resonated with the Prescott version. Nonetheless, what was once a near-national movement quickly faded into obscurity, to be remembered almost entirely and exclusively by those teachers, principals, and study-group leaders who participated in it

Almost simultaneously, large numbers of teachers were influenced by the persistent life situations approach being developed by Florence Stratemeyer and her colleagues at Teachers College, Columbia University (Stratemeyer, Forkner, and McKim 1947). There were in this work echoes of earlier curriculum patterns based on life needs (Bonser 1932), especially on series of projects or student-oriented activities.

A tremendous amount of analysis went into the identification of these persistent life situations. A revised version of the 1947 volume that introduced and amply illustrated the concept provided page after page of practical illustrations of life situations emerging from individuals seeking to satisfy their physiological, emotional, and social needs; make moral choices; develop aesthetic expression and appreciation; establish person-to-person relationships, membership in groups, and intergroup relations; deal with natural phenomena; use technological resources; and so on (Stratemeyer, Forkner, McKim, and Passow 1957).

Although there may appear to be some kinship between the persistent life situations approach to curriculum organization and various patterns organized around goals and objectives, the connection ends quickly. Stratemeyer and her associates attempted no reductionism in regard to human drives. Rather, after defining them, they moved immediately to curricular situations derived from the life situations gen-

erally encountered in growing up. The kinship is much closer to the work of Tryon and her associates (1950) in attempting to define developmental tasks as the organizational foci.

Organization Around Major Social Issues

Whereas curricula organized around both developmental tasks and persistent life situations took their cue from analyses of human encounters in growing up—with individuals and groups as the units of selection—somewhat parallel kinds of patterns grew out of analyses of society's problems. Organizing the curriculum to prepare students to adjust to or improve the larger social context becomes the orientation. Content is derived from conditions and circumstances in a society, societies, or the world. Students study the characteristics of societies—particularly their own—the function of institutions, the major activities of social life, the persistent problems of students and humankind, and so on (Smith, Stanley, and Shores 1950).

Some advocates proposed a critical orientation and the need to develop a consciousness of dangers to the tenets of a democratic society, to the environment, to peace, and to world order (Counts 1934; Rugg 1931). The concepts underlying curricula organized around major social issues spawned proposals for reorganizing the high school and especially its social studies curriculum. Recognition of the need to orient local and national circumstances to the nature and common problems of humankind has emerged with increasing intensity in recent years (Becker 1979; Goodlad 1986; Goodlad, Klein, Novotney, Tye, and associates 1974).

The reconceptualist or revisionist movement in curriculum development does not fit nicely into the "social issues" pattern. Nonetheless, its attention to social problems such as inequality and to developing the power of critical inquiry in students establishes a kinship with earlier curriculum reformers in this mode. In the 1970s, in particular, a group of theorists played a significant role in reconceptualizing the major issues, concerns, and modes of inquiry to provide new foci for curriculum thought and practice (e.g., Apple 1979; Greene 1973; Huebner 1975; Macdonald 1975; Pinar 1975). Drawing selectively on such European intellectual traditions as existentialism, phenomenology, psychoanalysis, and neo-Marxism (Habermas 1971, 1973, 1975), these theorists attempted to counter the relatively apolitical, technological, and instrumental orientation they perceived to have characterized the curriculum field for at least 50 years. They were particularly critical of the Ralph Tyler (1949) rationale and of the mechanistic justification of means by their efficiency in attaining ends characterizing curriculum patterns organized around behavioral objec-

In general, the reconceptualists represent a mode of theorizing whose supporters reject the positivistic and conservative nature of existing curriculum theory and practice. At its core is an attempt, which takes many forms, to make the human subject a primary focus of concern and to develop modes of criticism and social practices directed toward dismantling what these theorists refer to as forms of false consciousness and idealogically frozen social relations (Giroux, Penna, and Pinar 1981). Giroux (1981) attempted to sum up the views of these conceptualists as follows:

The new sociology of curriculum group strongly argues that schools are part of a wider societal process and that they must be judged within a specific socioeconomic framework. In addition, the curriculum itself is viewed as a selection from the larger culture. From this perspective, the new critics argue for a thorough reexamination of the relationship between curriculum, school, and society. This reexamination focuses on two broad interrelationships. On the one hand, the focus is on the relationships between schools and the dominant society . . . on the other hand, the focus is on how the very texture of day-to-day classroom relationships generates different meanings, restraints, cultural values, and social relationships. Underlying both of these concerns is a deep-seated interest in the relationship between meaning and social cont (103)

For a decade beginning in the 1970s and extending into the 1980s, the views of the reconceptualists appeared to be the dominant theoretical position, virtually taking over the curriculum field and replacing the highly behaviorist-driven period that preceded. There was very little attention to the more traditional and conventional commonplaces of curriculum development and organization. Indeed, the reconceptualists eschewed these commonplaces in discourse dealing with the whole of education rather than with what large numbers of curriculum theorists had conventionally regarded as the domains of curriculum as a field of study; the reconceptualists were succeeding in their stated intent. The vigor appeared to go out of the movement during the 1980s, but the fundamental concepts are too powerful and have too long a history simply to fade away.

Hybrid Organizational Patterns

In practice, virtually all patterns of organizing curricular are hybrid, especially in the rhetoric of documents developed at the societal and institutional levels of planning. Patterns clearly oriented toward subjects stress the importance also of students' interests and motivation. Patterns organized around students' interests almost always move to considerations of relevant subject matter and how to join the two. One of the major contributions of the Ralph Tyler (1949) rationale is the degree to which it seeks a balance of attention among learners, subject matter, and society, all of which are considered legitimate sources of curriculum decisions.

The core curriculum, as commonly viewed today, fits solidly into the subject-oriented organizational patterns: a specification of those fields deemed essential for all students (usually geared to college admission requirements), most often mathematics, science, English, and social studies. Much contemporary debate over the secondary school curriculum focuses on the question of how much of this core should be required of all students (Adler 1982; Powell, Farrar, and Cohen 1985; Sizer 1984). In spite of specification of subjects in this version of the core curriculum, frequent stress on the importance of pedagogy in seeking to engage students supports once again the hybrid character of most patterns of curriculum organization. Nonetheless, the mode of educational thought brought initially to the process of curriculum organization slants the outcomes almost invariably toward emphasis on the subject, the learner, or society.

Where is today's conception of a common core puts the subject first, the core curriculum of the 1940s and 1950s attempted to combine almost equally students' needs and society's problems (Alberty 1947; Harap 1952); students were to consult subject matter only after an organizing center directed to students and society had been selected—usually through a process in which students played a major role (Bossing 1949). The interplay between the concept of learners having common needs and that of recurrent social issues that should be addressed in the curriculum becomes apparent in the following series of quotes spread over a period of nearly 20 years:

The emphasis upon the development of a unified program of studies... has resulted in the organizing of a common core of experiences drawing content from all the major areas of human living, a curriculum which disregards subject matter lines and which is generally required of all pupils a substantial part of each day. (Brown 1938, 210)

The core program then is made up of those educational experiences which are thought to be important for each citizen in our democracy. Students and teachers do not consider subject matter to be important in itself. It becomes meaningful only as it helps the group to solve the problems which have been selected for study. (MacConnell 1940, 25)

A core represents the sum total of personal youth problems and the problems of social significance encountered by youth. It exists without relation to subject lines and is organized around problems. (Smith 1945, 164)

The term core has come to be applied in modern education to those types of experiences thought necessary for all learners in order to develop certain behavior competencies considered essential for effective living in our democratic society. (Bossing 1949, 394)

A true core curriculum attacks the problems common to all youth. It is a functional approach to harmonizing the concerns of youth, on the one hand, with the demands of society, on the other, without unduly emphasizing one or neglecting the other. (Burnett 1951, 97)

The core curriculum may be regarded as those learning experiences which are fundamental for all learners because they are drawn from their common individual and social needs as competent citizens of a democratic community. (Kessler 1956, 43)

All of these comments are a far cry from the core curriculum frequently proposed for high school students after publication of *A Nation at Risk* (National Commission on Excellence in Education 1983): a core of courses in the fields of the natural sciences, the social studies, mathematics, and English required for admission for college.

Perhaps the most hybrid patterns of all are those appear-

ing to grow out of the experientialist mode of thought. The implementation of Dewey's (1897) pedagogical creed in the laboratory school of the University of Chicago fits this mode, as does Summerhill (Neill 1960). In more recent times, the high school in Rabun Gap, Georgia (commonly connected with the Foxfire Experience), comes to mind (Wigginton 1985). The critical assumption is that learning is part of living; the experiences one has in life should be brought into the school curriculum, where they become organizing centers for exploring these experiences and coming to understand them and one's life better (Dewey 1902).

Progressive educators have always wanted to design school curricula around the life experiences of their students. This design has seldom proved to be easy; consequently, the few reasonably successful efforts have attained considerable attention. Usually, however, the concepts are threatening to those who believe that curricula organized around anything other than the subject disciplines are "soft" and, in the long run, dangerous for students and society.

COMMENTARY ON RESEARCH

As stated at the outset, almost all the literature on curriculum organization is conceptual or prescriptive and rarely experimental. In this review, we have relied rather heavily on secondary materials that analyze the various approaches because the body of descriptive writing is so vast.

Needless to say, empirical studies have used almost exclusively the model that compares the effectiveness of differing curriculum designs in producing various student outcomes (Cronbach 1957, 1975). Dissertation Abstract International identifies a number of such studies conducted over the past two decades in particular. This paradigm enables doctoral students to conduct relatively tight studies within the time constraints of earning their degrees. More often than not, the differences in outcomes are relatively insignificant. Even when statistically significant differences are obtained, the results are not socially significant—that is, the gains do not compensate for the difficulties inherent in launching experimental programs or may not be significant enough to readdress major learning problems. As the problems addressed become more complex and of more social significance, the problems of controlling an increasing number of variables become more complex, place increasing demands on researchers, and almost invariably require substantial funds for research. The common limitation in this research is the necessity of using some kind of standard measure of achievement to determine the effectiveness of a given program. Other outcomes such 25 students' attitudes or students' mental health tend to be ignored.

The 1950s and 1960s saw the entry of psychologists into the field of curriculum organization. Work such as that of Gagné (1977) focused on the careful. sequential organization of "learning sets"—precise units of work designed to

be cumulative over a period of time. This approach suited very well single-subject patterns of curriculum organization. Glaser (1966), in particular, engaged in extensive research to support the development of materials arranged in this sequential, orderly fashion-materials that encouraged individual progress and appeared to fit into extant research on individual differences and continuous pupil progress. This approach was most easily applied to mathematics and the sciences, but associates connected with the Learning Research and Development Center at the University of Pittsburgh pursued such other fields as reading and social studies. The materials developed included opportunities for branching, so that students who had completed part of a basic sequence could enrich their work by branching out into related areas. Glaser stressed the importance of learning processes being specific to subject fields (23).

Two practical problems emerge from this paradigm. First, the progression of students through very carefully organized sequential materials allows little opportunity for the intuitive leaps favored by some psychologists and others whose work undergirded the curriculum reform movement of the 1960s. Not surprisingly, although research showed significant advances in average achievement, the range between bottom and top students tended to narrow. It became necessary, therefore, in seeking to challenge all students, to enrich the program through discussion and inquiry sessions of various kinds. The second problem is related and grows out of the difficulty teachers have finding things to do for students who progress quickly through such material. Teachers often were negative toward the technology used to control progress through the sequences of subject matter (Jamison, Suppes, and Wells 1974). Students dealing with materials most competently quickly finished and sat idle while others were endeavoring to catch up. This is one of the many problems Bloom (1981) endeavored to address in "mastery learning." The most able students manage to extend their insights and competence by tutoring the slower ones.

It becomes clear that tightly organized curricular sequences tend to produce organizing centers characterized by a rather narrow range of difficulty. The presupposition is that all students who are ready will be tackling the same task at once. The handling of individual differences therefore becomes a highly individualized process governed by the materials themselves.

In contrast, the paradigm guiding efforts to organize curriculum around a core of developmental tasks, social problems, and the like tends to result in very large or broad organizing centers, often involving a diverse group of students over a period of several weeks. Students have an opportunity to read widely, take field trips, confer with resource people, prepare reports in the library, and so on (Herrick 1965). Under these circumstances, the range of individual accomplishments seems to widen without endangering the average of the whole group. The major difficulty encountered in such approaches, however, is that of justifying results on the basis of students' scores on standardized achievement tests. Because students in such programs have

been spending their time in a good many areas, they often are not as well prepared for the narrow range of achievement measured by the tests. More sensitive evaluation would tap into the full range of their learnings.

One of the most massive and impressive efforts to use hybrid curricular approaches of this kind and to develop appropriate evaluative methods was demonstrated by the so-called Eight Year Study, extending from 1933 to 1941 (Aiken 1942; Thomas 1990). The study attempted to compare a group of secondary schools freed of the usual college subject matter entrance requirements for traditional secondary schools. The study and its results were presented in several volumes. In general, students in the experimental group performed about as well as those in the control group on achievement in the various subjects covered by standardized tests. However, the experimental group in general performed better on broader educational goals determined by the schools themselves—goals representing the stated goals of schooling in the United States (Boyer 1983; Goodlad 1984).

Revisiting and reflecting on the story of the Eight Year Study helps us to realize why there is so little research on major projects seeking to redesign institutional and instructional curricula. As stated, the demands on time, people, and money are high; university-based researchers can advance up the ladder toward tenure and other rewards more rapidly by doing individual, short-term, small-sample studies. We begin to understand how fads can run rampant, unchecked by research findings simply because the resources (and rewards) for large-scale studies are not readily obtained (Slavin 1989). Then, because policymakers and funding agencies often are skeptical of educational research and reluctant to support it, costly fads resurface in every educational reform movement and are tried and abandoned without a discovery of what might give sensible guidance the next time around.

If efforts to design better curricula must always be judged according to the results of narrowly focused studies based on standardized achievement tests of students coming through these programs, innovative and experimental efforts are likely to be stifled. Evaluations conducted must conform to the educational goals established in the first place, not be determined on the basis of other criteria simply because they are easily measured. Although conceptions of such evaluation are well developed, conventional policy and practice still hold to performance on standardized achievement tests as the sine qua non of excellence (Sirotnik and Goodlad 1985). Consequently, curricular patterns not organized around subjects tend to be eschewed or approached with great caution. The central dilemma of research to determine the effectiveness of various patterns of curriculum organization is a moral one—clearly confronted, for example, in the effort of Lois Nelson (1964) to compare two quite different patterns at the instructional level. Partway through her effort, she became convinced that one, much more than the other, was more compelling for students and for her. To continue would have contaminated the results because of her own conversion. She became convinced of the immorality of continuing with a pattern she regarded as inferior to the other and not in the best interests of the children. Consequently, she redesigned the study along the lines of a more naturalistic methodology and abandoned the experimental paradigm.

Alternative patterns of organizing the curriculum have built into them the alternative beliefs and values held by those individuals advocating them. These values and beliefs drive the engages of those engaged in developing a given alternative. It should not surprise us, then, that efforts so driven, probably more than attributes inherent in the alter-

native curricular mode, account for any advantages ultimately realized. That is, the alternative introduced does better what was intended for it than does the alternative with which it is placed in competition: "When curricula have different effects, the differences are roughly what we should expect to find if we simply compared, in a commonsense fashion, their content and objectives" (Walker 1976, 273). This conclusion does not negate, however, the proposition that some patterns of curriculum organization are more beautiful and more just than others.

References _____

- Aceland, R. 1967. A Move to the Integrated Curriculum. Exeter, England: University of Exeter.
- Adler, Mortimei J. 1982. The Paideia Proposal. New York: Mac-
- Aiken, Wilford M. 1942. The Story of the Eight-year Study. New York: Harper & Row.
- Alberty, Harold. 1947. Reorganizing the High School Curriculum. New York: Mocmillan.
- Apple, Michael. 1979. Ideology and Curriculum. Boston: Routledge & Kegan Paul.
- Armstrong, David G. 1989. Developing and Documenting the Curriculum. Nee tham Heights, MA: Allyn & Bacon.
- Association for Supervision and Curriculum Development. 1958. A Look at Continuity in the School Program. Yearbook of the Association for Supervision and Curriculum Development. Washington, DC: ASCD.
- Association for Supervision and Curriculum Development. 1962. Perceiving, Behaving, Becoming: A New Focus in Education. Yearbook of the Association for Supervision and Curriculum Development. Washington, DC: ASCD.
- Baker, Eva L., and W. James Popham. 1973. Expanding Dimensions of Instructional Objectives. Englewood Cliffs, NJ: Prentice Hall.
- Becker, James M., ed. 1979. Schooling for a Global Age. New York: McGraw-Hill.
- Belth, Marc. 1965. Education as a Discipline. Boston: Allyn & Bacon.
- Bestor, Arthur. 1956. The Restoration of Learning. New York: Knopf.
- Bloom, Benjamin S., ed. 1956. Taxonomy of Educational Objectives: Cognitive Domain. New York: McKay.
- Bloom, Benjamin S. 1981. All Our Children Learning: A Primer for Parents, Teachers, and Other Educators. New York: McGraw-Hill.
- Bobbitt, Franklin. 1924. How to Make a Curriculum. Boston: Houghton Mifflin.
- Bode, Boyd H. 1938. Progressive Education at the Crossroads. New York: Newsom.
- Bonser, Frederick G. 1932. Life Needs and Education. New York: Bureau of Publications, Teachers College, Columbia University.
- Bossing, Nelson L. 1949. Principles of Secondary Education. Englewood Cliffs, NJ: Prentice Hall.
- Boyer, Ernest L. 1983. High School. New York: Harper & Row.
- Brown, William B. 1938, May. The core is not all of the curriculum. Curriculum Journal 9: 210.

- Bruner, Jerome. 1960. The Process of Education. Cambridge, MA: Harvard University Press.
- Burnett, Lewie W. 1951, February. Core programs in Washington State junior high schools. The School Review 59: 97-100.
- Charters, W. W. 1923. Curriculum Construction. New York: Macmillan.
- Connelly, F. Michael, and O. Lantz. 1985. "Curriculum, Definitions of." In International Encyclopedia of Education, edited by Torsten Husén and T. Neville Postlethwaite, 1160-1163. Oxford: Pergamon.
- Counts, George A. 1932. Dare the Schools Build a New Social Order? New York: John Day.
- Counts, George A. 1934. The Social Foundations of Education. Part IX, Report of the Commission on the Social Studies, American Historical Association. New York: Scribners.
- Cremin, Lawrence A. 1971. Curriculum-making in the U.S. Teachers College Record 73:207-220.
- Cremin, Lawrence A. 1990. Popular Education and Its Discontents. New York: Harper & Row.
- Cronbach, Lee J. 1957. The two disciplines of scientific psychology. The American Psychologist 12:671-684.
- Cronbach, Lee J. 1975. Beyond the two disciplines of scientific psychology. The American Psychologist 30: 116-127.
- Dewey, John. 1897. My Pedagogical Creed. The School Journal 54: 77-80.
- Dewey, John. 1902. The Child and the Curriculum. Chicago: University of Chicago Press.
- Dewey, John. 1938. Experience and Education. New York: Macmillan.
- Dressel, Paul L. 1958. The Integration of Educational Experience. Fifty-seventh Yearbook of the National Society for the Study of Education, Part III. Chlcago: University of Chicago Press.
- Eisner, Elliot W. 1977, February. On the use of educational connoisseurship and educational criticism for evaluating classroom life. Teachers College Record 78: 345-358.
- Eisner, Elliot W., and Elizabeth Vallance. 1974. "Five Concepts of Curriculum." In Conflicting Conceptions of Curriculum, edited by Elliot W. Eisner and Elizabeth Vallance. 1-19. Berkeley, CA: McCutchan.
- Florander, Jesper, and Paul Skov. 1986. "Curriculum Planning and Development in Denmark." In Views on Core Curriculum, edited by Rudd J. Gorter, 173-176. Enschede. The Netherlands: National Institute for Curriculum Development.
- Foshay, Arthur W. 1969. "Curriculum." In Encyclopedia of Educa-