People cannot intelligently discuss and communicate with others about curriculum without first making very clear what their interpretation of a curriculum is. In this chapter, we will be thinking of a curriculum as a written plan for the educational program of a school or schools. Curriculum design then will consist of those considerations having to do with the contents, the form, and the arrangement of the various elements of a curriculum. We distinguish between curriculum planning and instructional planning with curriculum planning being the antecedent task.

Curriculum planners are forced to make design decisions almost from the outset of their work. The design decisions revolve around three important considerations:

1. the range of school levels and schools to be covered by the curriculum,
2. the number of elements to be included in the curriculum, and
3. the nature and scope of each of those elements.

Each of these requires additional explanations. Decisions about the range of school levels and schools to be covered by the curriculum normally are not very complicated, and the range usually coincides with the sphere of authority of the board of education. Districts may elect to plan a curriculum from kindergarten through grade 12; they may elect to plan one curriculum for the elementary schools and one for the secondary schools; or they may elect to direct each school unit to plan its own curriculum.

Planning groups will have to decide about the number of elements to be included in the curriculum. Among the options for inclusion are:

1. a statement of goals or purposes,
2. a statement of document intent and use,
3. an evaluation scheme, and
4. a body of culture content selected and organized with the expectancy that if the culture content is judiciously implemented in classrooms through the instructional program, the goals or purposes for the schools will be achieved.

To this list, some would add suggested pupil activities, instructional materials, and so forth, but these matters belong more rightfully in the domain of instructional planning and we will not consider them here. A few comments about each of these four elements will be helpful to the reader in understanding their import for curriculum decisions.

Most curriculum writers would agree that it is desirable to include a statement of goals or purposes to be achieved by schools through the implementation of the planned curriculum. They may disagree as to what the goals ought to be, or they may disagree about the degree of specificity of the statements to be included. The most famous statement of goals or purposes for schools became known as the Seven Cardinal Principles of Education as formulated by the Commission on the Reorganization of Secondary Schools in 1918. They were health, command of the fundamental processes, worthy home membership, vocation, civic education, worthy use of leisure, and ethical character.

There is less consistency among curriculum writers in terms of their insistence upon including a statement of document intent and use in a curriculum, and, in practice many curricula do not contain such statements.

Curricula have, in the past, contained statements intended to reveal the philosophy or point of view of the planners but this is not what we mean by a statement of document intent and use. A statement of document intent and use should be forthright and direct about such matters as:

1. how teachers are expected to use the curriculum as a point of departure for developing their teaching strategies,
the fact that the curriculum is the official educational policy of the board of education,
the degree of universality in expectancy with regard to the discretion of teachers in
implementing the curriculum, and
the degree to which teachers are to be held accountable for the implementation of the
curriculum.

These are illustrative of the kind of statement that may be formulated, but each planning group
will have to decide on the number and character of such statements.

With the amount of emphasis put upon curriculum evaluation in recent years, some mandate with
respect to the curriculum evaluation is a very reasonable option for inclusion in a curriculum. The
most common method of pupil evaluation used in the past has been the standardized (norm
referenced) achievement test. In most cases, there were no deliberate attempts to relate
published curricula to the test batteries. Therefore, any leap in assumption about the directness of
the relationship between curriculum content and whatever was measured by the tests was likely
to be untenable. All the more reason for formalizing an evaluation scheme by including it in the
curriculum.

In one form or another, a curriculum must include a body of culture content that has been
deemed by the planners and directing authorities to be important for schools to use in fulfilling
their roles as transmitters of culture to the oncoming generations of young people. The basic
curriculum question is, and always has been, that of what shall be taught in schools, and a major
function of a curriculum is to translate the answer to that question into such forms that schools
can fulfill their commitment and demonstrate that they leave done so. Most of the remainder of
this chapter is devoted to discussion of this element of a curriculum; so we will leave it at this
point. But it should be made clear that from these options as potential elements of a curriculum,
there emerge two dimensions of curriculum design. One is the choice of and the arrangement of
the elements to be included in the curriculum. The other is the form and arrangement of the
contents of each of the elements internally. The design problem is greatest in the case of the form
and arrangement of the culture content and it is the one most frequently discussed under the
heading of curriculum design by curriculum writers past and present.

Culture Content-Knowledge-Curriculum Content

A curriculum is an expression of the choice of content selected from our total culture content and,
as such, it is an expression of the role of the school in the society for which the school has been
established to serve. A word needs to be said here about the meaning associated with the
expression "culture content." Ralph Linton provided us with a classical and very useful definition
of "culture." He stated:

"A culture is the configuration of learned behavior and results of behavior whose
component elements are shared and transmitted by the members of a particular
society" (1945, p. 32).

The term "society" is ordinarily used to refer to a group of individuals who live together with
common norms and shared frames of reference. Societies tend to generate their own culture and
to transmit that culture to oncoming generations within that society. So long as societies and their
cultures remained in a primitive state, their cultures were simple and could be transmitted to
oncoming generations by direct contact between the young and the older members of the society.
But as societies became more complex and the scope of their culture content increased so that
the transmission of the culture content to the young could no longer be accomplished by direct
contact in daily living, societies were forced to create institutions to take on the responsibility for
all or part of the cultural transmission task. The school is one of those institutions. The church is
another. Both of these institutions have unique roles to play in society, and they tend to transmit
different culture content to the young. Parochial schools tend to do both.
As Smith indicated in Chapter 3 of this Yearbook (not in this reading – JG), the culture content selected to be included in the curriculum of the school may be thought of as equivalent to the knowledge to which school students are to be exposed. In any case, it is critically important to be aware that not all culture content, or knowledge, accumulated by society comes under the purview of the school; curriculum planning is a process of selecting and organizing culture content for transmission to student by the school. The process is very complex, involving input from many sources, but the organized end-result of the process is the design of the curriculum.

The most sophisticated mode of organization of culture content for purposes of teaching is reflected by the various disciplines such as history, chemistry, or mathematics. In addition to the established and recognized disciplines, school subjects have been created out of conventional wisdom in the applications of selected portions of the disciplines to applied areas of our culture such as vocational subjects, social studies, or reading and handwriting. In general, the separate subject organization of culture content has predominated in curriculum design.

Another way of speaking about curriculum content is to refer to cognitive content, skill content, and value or attitudinal content. As Smith discussed more fully in Chapter 3, all three types of content represent knowledge in some form from either in the form of direct knowledge or a knowledge base. The three forms have been used as a classification schema or a taxonomy for curriculum content formulation.

Historic Curriculum Design Conflicts

One must realize that the basic curriculum question is, and always has been, one of what shall be taught in the schools. An immediate corollary to that question has been that of how shall what has been chosen to be taught in the school be organized so as to best facilitate the subsequent decisions about teaching and learning. Those two questions are the primary curriculum questions, and the organized decisions made in response to them culminate in a curriculum design. A few reflections about our curriculum past will illustrate settle of the conflicts in curriculum design that have taken place.

In her study, Sequel observed that curriculum as we use the term today was not a subject of professional discussion until after 1890 (1966, p. 1). Rugg contended that decisions about curriculum content prior to the 20th century were decided primarily by textbook writers and textbook publishers (1926, Pp. III-11). It was not until 1918 that Bobbitt wrote the first definitive work on curriculum and since that time curriculum writers have directed their attention to the substance and organization of curriculum content (curriculum design) and to the processes of curriculum planning, implementing, and evaluating.

By the early 1900, the stage had been set for the separate subjects organization of the culture content to be used in schools. In our very early elementary or primary schools, for example, pupils were taught to read, to write, and to compute; the subjects were called reading, writing, and arithmetic. Much later such subjects as geography, history, and civics were added to the curriculum. In our early secondary schools, pupils were taught a selection of subjects (disciplines) that were directly associated with the disciplines taught at the college or university. Even though the separate subjects organization of culture content was used before curriculum became an area of professional study, it is still with us. True, subjects have been added and others altered, but it remains the dominant approach to curriculum design.

The separate subjects mode of curriculum design has been significantly challenged only once in our history. That challenge came with the advent of the Progressive Education movement. A principal belief of the Progressive Education movement was its dramatic emphasis on the learner in school settings. A substantial portion of the Progressive emphasis on the learner was stimulated by John Dewey’s (1916) call for more active and less passive learning in schools. This focus on the learner when applied to the organization of curriculum content led to endeavors remove away from the separate subjects organization of the curriculum content. The movement
away from the separate subjects organization (sometimes called subject-centered) was toward the integration, or fusion, of subjects under the assumption that such integration would not only facilitate learning on the part of pupils but would additionally make the knowledge, skills, and attitudes more easily available to the pupils in post-school life (the transfer problem).

The basic process involved here was the fusion of the contents of two or more of the separate subjects into another organization in which the individual subjects lost their separate identities. As one might expect, names were associated with the various integration or fusion attempts. Figure 1 adapted from Hopkins (1941, p. 18) illustrates the variety of names associated with curricula resulting from integrative or fusion processes. Hopkins here polarized the subject curriculum and the experience curriculum. The broad fields curriculum was placed in the center so as to show that it had a reasonable number of the characteristics of the two extremes. Others as indicated on either side depending on emphasis.

<table>
<thead>
<tr>
<th>Subject Curriculum</th>
<th>Integrated</th>
<th>Correlated</th>
<th>Fused</th>
<th>Coordinated</th>
<th>Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Fields</td>
<td>(1) Subject Type</td>
<td>(2) Experience Type</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Coordinated Unit of Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Core Functions of Social Life</td>
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</tbody>
</table>

**Figure 1. A Scale of Types of Curriculums**

Space in this volume will not permit extensive description of curricula developed as part of the efforts to move away from separate subjects organization. The best we can do here is to identify some of them and cite sources for further investigation on the part of the reader. For example, in their hook *The Child-Centered School*, Rugg and Shumaker (1928) presented brief descriptions of the curricula of the Lincoln School, The Frances Parker School, and others of that time. In most cases, the curricula were built around child-centered units of work, but attention was focused as needed on such basic subjects as reading, mathematics, history, geography, and so forth.

One of the most extreme departures from separate subjects organization was proposed by Stratemeyer and others (1957). The authors proposed the "persistent life situations" concept as a basis for dealing with the curriculum building issues of scope, sequence, continuity, balance, and depth.

At the junior and senior high school levels, special mention should be made of the core curriculum. The core curriculum idea was to get away from nothing but the discipline-centered curriculum. Most core programs were organized around larger and more flexible blocks of time, and the content was generally centered on personal and social problems and problems of living. In many respects the core curriculum idea was an attempt to solve the general education problem in our upper schools.

It is important to note that in practice in schools, curriculum design failed to get very far away from the subject- or discipline-centered design. The most lasting effect of the movement was the broad fields idea as represented by social studies, language arts, and general science, and they have persisted mostly in curricula for elementary and junior high schools.

**Contemporary Arguments About Curriculum Design**

Probably the most persistent movement in curriculum design in recent years has been the proposed use of specific behavioral objectives as a basis for curriculum organization. Curriculum writers have long proposed that curricula ought to contain statements of goals or objectives, but not as the only content of a curriculum. Some contemporary writers have proposed that curricula should be thought of in terms of the anticipated consequences of instruction, or intended learning outcomes. (For example, see Popham and Baker, 1970; Johnson, 1977). The culture content in such cases would either be implied in the objectives or be considered as an instructional
decision. A distinct advantage of this type of curriculum design is that supervision of the implementation and of the evaluation of the curriculum is simplified and facilitated.

Such proposals are in direct contrast to a proposal that a curriculum should be composed in four parts:

1. a statement of goals,
2. an outline of the culture content that has the potential for reaching the goals,
3. a statement of the intended use of the curriculum, and

They are in even greater contrast to those who would include instructional considerations such as suggested activities for learners and instructional materials to be used. Curriculum planners should be warned that the inclusion of all of these things produces fat and unmanageable curricula.

With respect to the culture content of curricula, two organizational concepts persist both in the literature and in the practice of writing curricula. The first is the tendency to continue with the basic framework of the subjects, or disciplines, that are to be taught. The second is to break the subject areas down into three identifiable components:

1. cognitive,
2. inquiry and skill, and
3. affective (value, moral, attitudinal).

Curriculum planners will probably wish to begin their thinking about design with the familiar, which will unquestionably be the conventional school subjects. They will consist of mathematics, social sciences (including social studies as a subject), the natural sciences, fine and applied arts, health and physical education, communications, and other languages. At the secondary school level, planners will add to these whatever vocational and technical subjects they may wish to offer. Some planners will wish to add an area that may be termed social problems, moral problems, or problems of living that may call for applications of elements learned in various conventional subjects.

Curriculum planning is an educative process. For this reason classroom teachers should be involved in the undertaking. A very important reason for their involvement is that the process of curriculum planning presents an opportunity for them to engage in analysis of the culture content so that they may be more effective in their classrooms at the level of instruction. The analytic process of breaking down the culture content into cognitive, affective, and inquiry and skill components is one way that teachers may become more knowledgeable about what they do. Also in this process of analyzing the culture content, the content is more specifically related to goals and at the same time it fosters better curriculum implementation. For these reasons, teachers' participation in curriculum deliberations has been proposed frequently as a needed dimension of continuous teacher education.

In Chapter 3, Smith raised the very important question of the utility of the culture content selected to be part of the curriculum content, and he posed several ways in which the utility of knowledge can be emphasized. In a more specific vein, Broody, Smith, and Burnett (1964) suggested on, potential uses of learnings acquired in school to be taken into consideration. They are the associative use, the replicative use, the applicative use, and the interpretive use (pp. 43-60). Very briefly, the associative use of knowledge refers to the psychological process of responding to a new situation with elements of knowledge previously acquired. The replicative use refers to situations that call for direct and familiar use of schooling such as when we read a newspaper, write a letter, or balance a checkbook. The applicative use occurs when an individual is confronted with a new problem and is able to solve the new problem by the use of knowledge acquired in the study of school subjects through previous experience in solving problems demanding similar applications. The interpretive use of schooling refers to the orientation and
perspective the individual brings to new situations because the individual has acquired ways of conceptualizing and classifying experience.

Much of the discussion about uses of schooling (especially use external to the school) is an elaboration of the transfer problem that has plagued educators ever since Edward Thorndike first set forth his theory of transfer through the existence of identical elements in 1908. The most easily explained is the replicative use as described above because of the direct similarity between the use external to the school and the mode of learning and practice in school. Take reading for example. Reading from school materials is directly similar to reading of materials outside the school. But when it comes to applying knowledge or making new interpretations or associations between knowledge required in school and life situations external to schools, a more complicated transfer situation exists.

Unfortunately, many of the questions raised about utility and uses of schooling have not been answered through curriculum design. Nor are they likely to be because so much is dependent upon classroom teaching technique and the design of instructional strategies. The best efforts in curriculum design have been through the generation of new courses (subjects if you please) in which the content is purportedly more like life external to the school. Reference here is made not only to specialized courses such as technical, vocational, commercial and occupational courses but also to courses designed around molar problems, problems of living, and core programs. In many respects, the broad fields courses were designed for purposes of saving time during the school day and to facilitate the transfer of knowledge acquired. But whatever the curriculum design, if teachers are not aware of and sensitive to the kind of analyses of the content to be taught as we have been discussing it, the uses of schooling will not be maximized. All the more reason why teachers should be part of the curriculum planning effort and participate in the required dialogue.

In summary, then, what courses of action with respect to curriculum design appear to be the most appropriate for today's curriculum planners? The most important aspect of curriculum design is the display to be made of culture content once the content has been selected. The total amount of culture content is constantly growing thus making the problem of selection for curriculum content more difficult as time goes on. Unquestionably, the role of those schools (elementary and secondary) that operate under compulsory school attendance laws must constantly be examined in terms of what they should or should not offer in their curricula. The elementary school curriculum has always been designed with general education in mind. In our contemporary society, the secondary school seems to be moving in that same direction. Both, however, have seen fit to divide the content selected into realms or courses as appropriate.

Scope and sequence have long been two major problems in curriculum design. The display of course content into topical outline is one way planners can watch for discrepancies in scope and sequence. It also helps with horizontal articulation among the various subjects.

To help teachers generate greater insight into the content outline, it is desirable that the curriculum design reveal the expected cognitive, inquiry or skill, and affective outcomes. These are conventionally arranged in the design of the content in parallel with the topics in the outline. Flow behaviorally the outcomes are to be stated is optional to the planners. These outcomes should also be thought of in terms of any goals or purposes that may be stated in the curriculum.

What else to include in the design is optional to the plan. It has become quite conventional to think of goals or purposes first and then to select the content. Such procedure is quite arbitrary because all content is selected with some purpose in mind. Nonetheless, a statement of goals and purposes is a useful element in curriculum design.

I would add to the topic outline and the expected outcomes a directive statement about the intended use to be made of the curriculum and a statement outlining a scheme for evaluating it.