

# Curriculum Change in Loosely Coupled Systems

Some curriculum specialists continue trying to use a change process that ignores the organizational structures and relationships of contemporary school systems. They act as if the schools were tightly coupled systems in which orders from the top are transmitted unchanged through channels until they are ultimately carried out by the classroom teacher.

Recent research suggests that school districts are loosely coupled systems composed of subsystems operating somewhat autonomously (Deal and Celotti, 1980). This general theory is supported by specific findings indicating that teachers are jealous of their autonomy in curricular matters and strongly resist attempts by district supervisors to control what they do day by day in the classroom (Wolcott, 1977; Goodlad, 1977).

This is not a situation that should disturb us unduly for there is great strength inherent in such organization. I value the ability of the teacher to respond to the ever-changing demands of the classroom without much concern about district guidelines and bulletins. Yet there remains a need for systematic curriculum improvement. Teachers are not always well informed about a given discipline, and in many areas there is a need for at least loose articulation from grade to grade and school to school. We need a process of curriculum improvement especially designed for loosely coupled systems.

I have found one such process useful in my own work with school districts. While the following example illustrates steps in improving a curriculum for English composition, I believe a similar process could be used effectively in other subjects, except perhaps those—such as ad-

vanced science and mathematics—where clearly defined structure makes the textbook especially important.

Let us assume that someone in a leadership position decides, "We need a composition curriculum." If we were to follow the standard process used in most districts, we would assemble a composition curriculum committee, pay them to work together over the summer to produce a composition curriculum guide, hand it to the teachers, and then conduct some inservice sessions to tell the teachers how to use it. But that process doesn't always work even in tightly coupled systems. So we tell the leader, "Perhaps you do need a composition curriculum, but let's start with some staff development instead."

We begin, then, by designing a staff development program that will impact directly on the "taught" curriculum—what teachers actually teach day by day. We design the program so that it reflects the best avail-

able knowledge about the characteristics of effective programs. Figure 1 is a list of such characteristics derived from a very useful summary prepared by the ERIC Clearinghouse on Educational Management (1980).

As we conduct the staff development program, we urge teachers to develop instructional materials, to share those materials, and to discuss curricular issues. In a sense the staff development program is a vehicle for beginning curriculum improvement while maintaining an emphasis on instruction. We have, then, teachers who are doing a better job of teaching composition; teachers who are informed by new perspectives and strengthened with new knowledge.

## The Mastery Curriculum

Our next step is to introduce to the teachers the concept of the "mastery curriculum" as a way of focusing their efforts. "Mastery curriculum" refers to that portion of the curriculum which meets two criteria: it is essential for all students; and it requires careful structuring if optimal learning is to take place. These criteria encompass the dimensions of essentiality and structure. The dimension of essentiality distinguishes between those learnings that are basic for all and those that are enrichment. That distinction is simple enough and can be made by any group of informed practitioners.

The dimension of structure divides the curriculum into structured and nonstructured learnings. Structured learnings require careful planning,

**Figure 1. Criteria for Effective Staff Development Programs.**

1. The programs should focus on concrete, specific skills, not theoretical outcomes.
2. The programs should emphasize demonstrations, with opportunities to practice new skills and receive feedback.
3. The programs should be individualized, responding to the special needs of each participant.
4. The programs should be continuous, not "one-shot" injections.
5. The programs should be based in a school, not in some other setting.
6. The programs should involve school principals as participants, but not as planners.
7. The programs should actively involve teachers in designing the sessions, monitoring their effectiveness, and making appropriate modifications.

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*A flexible approach to curriculum development begins with staff development, uses curriculum mapping, and results in a loose-leaf notebook useful to teachers.*

sequencing, and articulation if they are to be mastered. Nonstructured learnings can be mastered without such careful planning and specification.

Those two divisions yield four kinds of curriculums, represented in the diagram above Figure 2.

The *mastery curriculum* is that part of any curriculum that is both basic and structured. It requires careful planning and articulation. Sequence is important; objectives and textbooks are useful; testing is essential. The *organic curriculum*, on the other hand, is just as essential, but does not require careful structuring. It can be employed by a sensitive teacher who knows how to use classroom interactions to facilitate organic learning. The affective outcomes of the curriculum are organic: "enjoying reading" is not a third-grade objective arbitrarily placed in a scope and sequence chart; it is an organic objective nurtured at every opportunity.

The *team-planned curriculum* is not essential—it is enrichment and it also requires careful structuring. Since it is not basic, planning can be left to teams of teachers who negotiate informal agreements about the enrichment curriculum from grade to grade. The *student-determined curriculum* is neither basic nor structured; its enrichment aspects can be developed solely out of the interests of able students.

The point of this analysis is to focus the efforts of curriculum planners. Only the mastery curriculum needs careful planning by district teams. If teachers accept this model, their curriculum work will be greatly simplified.

#### Curriculum Mapping

Now we begin a process that English

		ESSENTIALITY	
		Basic	Enriched
Structure	Structured	Mastery	Team-planned
	Nonstructured	Organic	Student-determined

Figure 2. Composition Curriculum Mapping Form.

**To the teacher of English Language Arts:** The Composition Task Force wishes to determine what the teachers in this district are teaching in the area of English composition. We have listed below the categories we have decided to use in gathering our data. For each category listed, will you please tell us what writing skills you emphasize in the grade level for which you are responsible. Please list only the major skills you emphasize for all students. The data will be useful to us in making decisions about the optimal placement of skills.

TEACHER'S NAME \_\_\_\_\_ GRADE \_\_\_\_\_

Word Choice \_\_\_\_\_

Sentence Correctness, Sentence Combining \_\_\_\_\_

Paragraph Development \_\_\_\_\_

Personal and Creative Writing \_\_\_\_\_

Writing About Literature \_\_\_\_\_

Argumentation \_\_\_\_\_

Exposition \_\_\_\_\_

Applied Writing \_\_\_\_\_

Writing in Other School Subjects \_\_\_\_\_

(1978) calls "curriculum mapping." While English advocates the use of mapping to establish "quality control" of the curriculum, it may also be used to systematize the taught curriculum. We map the taught curricu-

lum by distributing forms such as those shown in Figure 2; the items on the form depend, of course, on which subject is being mapped.

After collating the mapping data, a committee of teachers evaluates the

results. Figure 3 is a sample set of criteria for evaluating the scope and sequence of a composition curriculum. The intent here is to be sure that the taught curriculum meets certain tests of quality and responds adequately to external constraints. If committee members find any major problems, they meet in small groups with teachers to resolve those difficulties. The revised data are then displayed in a scope-and-sequence chart.

The result is a scope and sequence that reflects the informed practice of teachers, responds adequately to state guidelines and parent expectations, and is in consonance with major research findings. But obviously, we need more than a chart. We need materials that will help teachers translate the scope-and-sequence chart into effective plans for learning. At this point we can forget the standard curriculum guide, since its format is not very useful for the classroom teacher. A better alternative is a loose-leaf curriculum notebook containing only the bare essentials: (1) A copy of the scope-and-sequence chart; (2) A summary of major research findings in the field, such as those shown in Figure 4 for composition; and (3) The objectives for each unit on the scope-and-sequence chart for each grade level. Objectives need not be written in strict behavioral language. They should be organized as student assignment sheets, such as the one shown in Figure 5.

We distribute the loose-leaf notebook to the teachers and tell them to make it their own, adding articles from the journals, classroom exercises they have developed, materials their colleagues have shared with them, and any materials developed in the inservice sessions. The loose-leaf format allows room for the guide to grow and change.

In summary, there are five important steps in developing a curriculum for loosely coupled systems:

1. Begin with staff development that focuses on instruction but raises curricular issues.

2. When the inservice is finished, map the existing or taught curriculum.

3. Use the mapping data to develop the final draft of a scope-and-sequence chart.

**Figure 3. Criteria for Evaluating Scope and Sequence of a Secondary Composition Program.**

1. Does the composition curriculum reflect the best available knowledge about language development, the composing process, and the teaching of writing?
2. Is the scope of the program sufficiently comprehensive so that all modes of discourse and elements of composition are emphasized?
3. Does the sequence of units from level to level provide for systematic development of important skills without excessive repetition?
4. Is the sequence of units of study sufficiently responsive to the changing interests and needs of adolescents?
5. Do the scope and sequence of the composition program make adequate provision for any basic competencies mandated by the state or local district?
6. Does the curriculum respond adequately to the reasonable expectations of local citizens and employers and emphasize for college-bound students the skills required for successful performance in college?
7. Is the scope and sequence plan easy to understand and implement, focusing only on the essential learnings that require systematic planning?
8. Is the distribution of skills and concepts grade-by-grade balanced in terms of the expectations for a given grade?

**Figure 4. The Teaching of Writing: Findings Gleaned from Research.**

1. The study of grammar is an ineffective way to teach writing and takes time away from reading and writing (Petrosky, 1977).
2. Frequency of writing is not associated with improved writing (Haynes, 1978).
3. There is a positive relationship between good writing and increased reading (Blount, 1973).
4. Beneficial results accrue from the use of such prewriting procedures as thinking, talking, working in groups, role playing, interviews, debates, and problem solving (Haynes, 1978).
5. "Teachers should give greater emphasis to the guiding of careful development of a limited number of papers, with attention given to direct methods of instruction and to the solving of communication problems before and during the writing process, rather than on the hurried production of a great number of papers" (Haynes, 1978, p. 87).
6. There is some evidence that sentence-combining practice, without instruction in formal grammar, aids syntactic fluency (Haynes, 1978).
7. While there does not seem to be any evidence to support one revision process over another, there is substantial evidence that the revision process itself is critical in improving writing (Bamberg, 1978).
8. The type or intensity of teacher evaluation of composition is not related to improved writing skill (Bamberg, 1978).
9. Written language is closely related to oral language. Teaching should emphasize and exploit the close connection between written and oral language (Lundsteen, 1976).
10. The quality of students' writing is not affected by positive or negative criticism, but positive comments are more effective than negative ones in promoting positive attitudes towards writing (VanDeWeghe, 1978).
11. Peer evaluation and editing are effective in improving writing skills (VanDeWeghe, 1978).

4. Evaluate the taught curriculum by measuring it against several criteria and modify it accordingly.

5. Use the revised scope-and-sequence chart in developing a loose-leaf curriculum notebook, which includes only the essentials.

It's a relatively simple and economical process—one that produces materials that will be used, not filed. ■

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### Figure 5. Expository Essay Assignment.

**The Assignment.** You are an expert about many things—how to play a certain sport, how to do some craft or hobby, how to make something, how to achieve some school or personal goal. Identify a process that you know especially well. Choose an audience you would like to address. Then write an essay explaining the process. If you have trouble thinking of a topic, complete this statement: "I know how to. . ." The essay should contain 4-6 paragraphs.

**Objectives:** Your essay should demonstrate that you know how to achieve the following writing objectives:

1. Select an appropriate topic for the essay and identify the audience.
2. Develop a plan for the essay, using chronological order.
3. Begin the essay so that it arouses interest and makes clear the main idea.
4. Identify the skills, materials, equipment, or special preparations required for the process.
5. Explain the steps in the order in which they are done.
6. Define and illustrate any terms not likely to be clear to the audience.
7. Provide enough detail in terms of the audience's knowledge and interest.
8. Conclude the essay.

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