

The Program Audit

School systems forced because of budget cuts to lengthen the time between curriculum reviews can use program audits to monitor existing programs.

RICHARD D. KIMPSTON, DIANA J. BARBER, AND KAREN B. ROGERS.

Declining enrollments, diminishing revenues, increased operating costs, and teacher cutbacks and reassignments are issues familiar to anyone involved in public education today. The challenge is to deal with these issues without jeopardizing the quality of educational programs. How do we keep curricula up to date and effective in the face of mounting budgetary constraints?

Many school districts include some form of cyclical review in their curriculum development systems. The review may be only for textbook adoption, or it

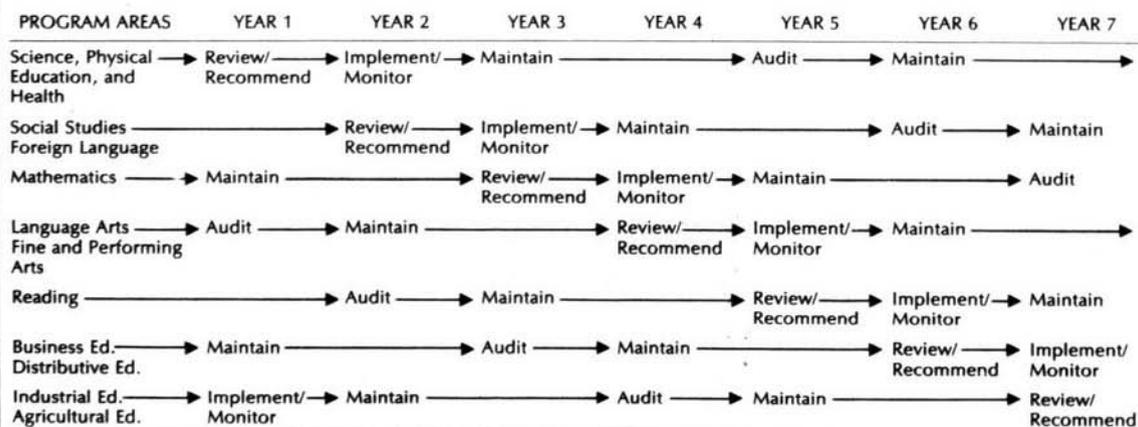
may encompass a thorough study of the curriculum. A basic approach might consist of four steps: (1) evaluate or review, (2) develop or adopt, (3) implement, and (4) maintain the curriculum.

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Some districts have chosen to lengthen the time periods, particularly the maintenance phase, in such a cycle to spread out major expenses. But knowledge is not stagnant and innovations may not appear on a schedule that coincides with a district's review cycle. How, then, can a district monitor its curriculum during an extended maintenance period to respond to such changes? Consider the following scenario.

¹Hilldale is not an actual school district, but represents a composite of several districts in which we have conducted the program audit.

Figure 1. Curriculum Review Cycle



The Hilldale school district¹ had been using a five-year review cycle for evaluating curriculum and selecting textbooks. Generally, three subject areas were scheduled for review each year. In recent years, however, the district experienced a marked decline in enrollment resulting in the closing of several buildings and teacher cutbacks and reassignments. Because parents and citizens were concerned about continued quality of education in the district, the board of education established a joint school-community task force of community members, teachers, and administrators to study the problem and recommend a way to ease demands on the budget while maintaining educational quality.

After careful study and consultation with local curriculum leaders, the task force recommended that subject area curricula should be reviewed and evaluated every seven years with no more than two subjects or programs reviewed in any given year. Several task force members expressed concern that many things can change over a seven-year period and that intermediary checks on the fidelity of curriculum implementation should be built into the process. In response to this concern, the task force designed an additional component: a *program audit*. The audit would be required during the fifth year but would also be used at other times should potential problems surface (Figure 1).

The task force's design indicated the sequence of major tasks to be accomplished during the audit (Figure 2); the person (by position) responsible for each task; the expectations of each position in accomplishing each task; and the time, space (location), and materials or resources necessary to carry them out.

The language arts and the fine and performing arts departments, which were scheduled to pilot the process, both followed the same sequence of procedures.

(continued on p. 54)

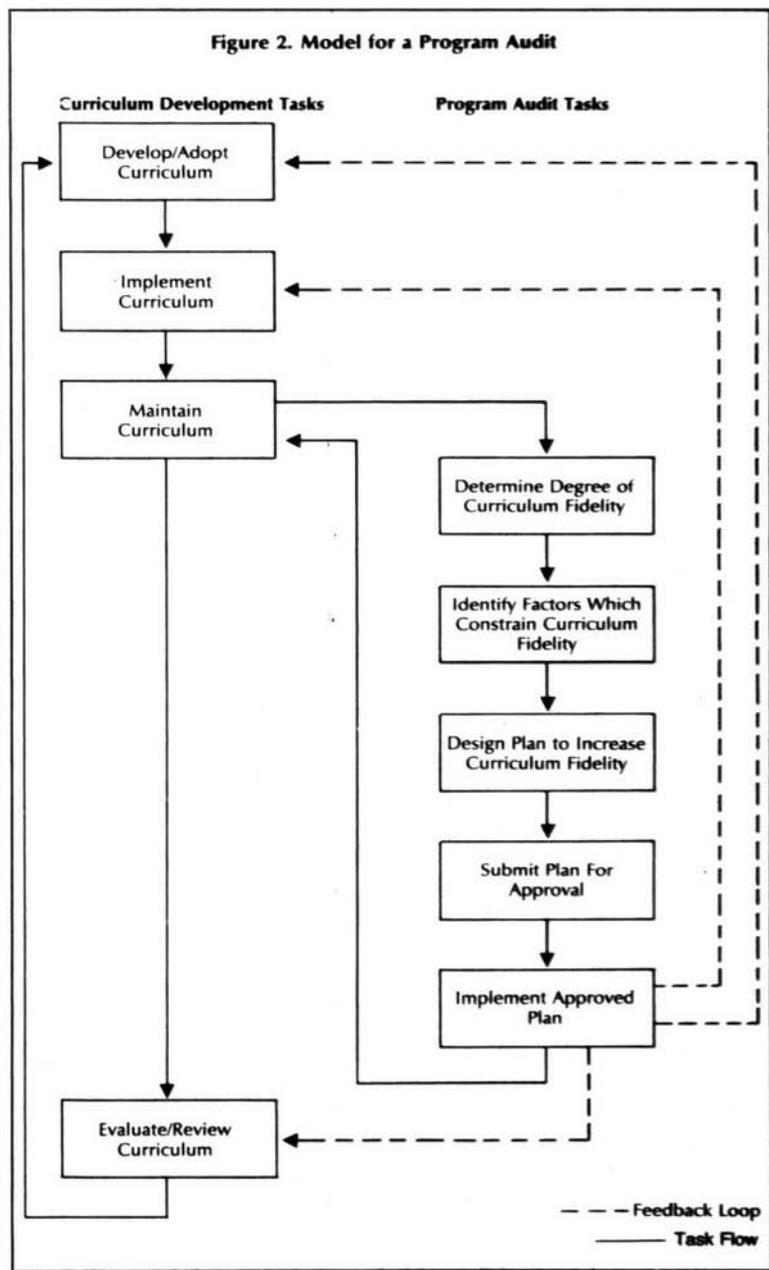


Figure 3. Program Audit System

TASK: DETERMINE DEGREE OF CURRICULUM FIDELITY

Expectations	Position	Time	Space	Materials/Resources
1. Explain purpose of audit to all professional staff.	Curriculum Coordinator *			
2. Develop assessment instrument to measure: a) Discrepancy between objectives as planned and implemented. b) Discrepancy between planned and actual emphasis given to objectives.	Audit Task Force ● Curriculum Coordinator ● Representative teachers		District central office	District curriculum guide(s) Reference materials on questionnaire construction Clerical assistance Duplication services
3. Administer Implementation Assessment (IA).	Curriculum Coordinator (responsibility may be delegated)	Concurrent with CISA ¹	School site(s)	Copies of IA
4. Analyze results of IA.	Curriculum Coordinator			Results of IA Clerical assistance Access to relevant computer resources
5. Develop interview questions based on results of IA.	Audit Task Force		District central office	Results of analysis Reference materials on interviewing Questions developed from results of CISA
6. Conduct interviews of representative teachers.	Curriculum Coordinator (responsibility may be delegated)	Concurrent with CISA interview	School site(s)	Interview format
7. Compare interview responses with IA results.	Curriculum Coordinator	Complete by November 15		Interview results IA results

TASK: IDENTIFY FACTORS THAT CONSTRAIN CURRICULUM FIDELITY

Expectations	Position	Time	Space	Materials/Resources
1. Administer CISA.	Curriculum Coordinator (responsibility may be delegated)	Concurrent with IA	School site(s)	Copies of CISA
2. Analyze results of CISA.	Curriculum Coordinator			Results of CISA Clerical assistance Access to relevant computer resources
3. Develop interview questions based on results of CISA.	Audit Task Force		District central office	Results of analysis Reference materials on interviewing Questions developed from results of IA
4. Conduct interviews of representative teachers.	Curriculum Coordinator (responsibility may be delegated)	Concurrent with IA interview	School site(s)	Interview format
5. Compare interview responses with CISA results.	Curriculum Coordinator	Complete by November 15		Interview results CISA results

Figure 3. Program Audit System (continued).

TASK: DESIGN PLAN TO INCREASE CURRICULUM FIDELITY

Expectations	Position	Time	Space	Materials/Resources
1. Identify curriculum modifications required/ desired to increase fidelity.	Audit Task Force		District central office	Results of CISA, IA and interviews District curriculum guide(s)
2. Identify support system modifications required/ desired to increase fidelity.	Audit Task Force			Various aspects of the support system, e.g., • staff development program • evaluation and testing program • instructional resources
3. Provide rationale for changes.	Audit Task Force			
4. Recommend time-line for implementation of plan.	Audit Task Force	Complete by January 1		

TASK: SUBMIT PLAN FOR APPROVAL

Expectations	Position	Time	Space	Materials/Resources
1. Request endorsement from teachers in the department.	Audit Task Force		School site(s)	Copies of the plan
2. Request administrative endorsement.	Audit Task Force		District central office	
3. Submit plan with endorsements to board of education for approval.	Audit Task Force	At the January Board meeting	Board Room	

TASK: IMPLEMENT APPROVED PLAN

Expectations	Position	Time	Space	Materials/Resources
1. Distribute approved plans to all affected staff members.	Curriculum Coordinator	According to approved timeline	School and/or district central office site(s)	Copies of approved plan
2. Plan meetings to interpret plan to affected staff members.	Curriculum Coordinator			
3. Determine whether and/or where to re-enter curriculum development system with approved curriculum changes.	Curriculum Coordinator			
4. Communicate approved plan to person(s) responsible for designated aspect(s) of the support system targeted for change.	Curriculum Coordinator			

¹Curriculum Implementation System Assessment, developed by and available from Richard D. Kimpston.

“As an intentional, systematic check on curriculum implementation, the program audit can be readily adapted to the policies and procedures of any district.”

How To Conduct A Program Audit

To ensure that the district's specified curriculum is being implemented, the program audit must focus on such concerns as:

- Is the curriculum being used?
- Is there congruence among the written goals and objectives and what teachers are teaching?
- Are teachers emphasizing the curriculum's objectives and concepts?
- What factors constrain implementation?

Determining the Degree of Fidelity

The curriculum coordinator and task force members determined that their first tasks were to find out how closely teachers were implementing the objectives specified in the district curriculum guide, and how much emphasis teachers gave to the specified objectives. An implementation assessment instrument was developed to measure the discrepancy between actual and specified implementation of the curriculum objectives. The district curriculum guide

specified various levels of emphasis by grade for each objective (Figure 4). The task force selected a sampling of objectives that were to receive major emphasis ("Focus") at each unit level (primary, intermediate, junior high, and senior high). Four strands were identified for the language arts program: Structure of Language, Writing, Literature, and Communication. The coordinator was careful to select "Focus" objectives for each strand at each level. A separate instrument was then developed for each

Figure 4. Levels of Emphasis on Selected Curriculum Objectives (Examples from the Language Arts Curriculum)

Objectives	Grades								
	K	1	2	3	4	5	6	7-8	9-12
The learner will:									
Demonstrate skill in nonverbal communication.	F	F	F	F	F	F	F	F	F
Apply basic rules of grammar to daily written and oral assignments.	E	E	I	F	F	F	F	F	F
Recognize relationship between speech and writing.	E	I	F	M	M	M	M	M	M
Use nonfiction books as sources of information in content areas.	E	I	F	F	F	F	F	F	F
Key:									
E = Teacher provides experiences					F = Teacher focuses				
I = Teacher introduces					M = Teacher reviews and extends (maintains)				



Figure 5. Sample Items From the Implementation Assessment Instrument

Objective	Teaching Emphasis					
	No Exposure	Exposure	Introduction	Major Emphasis	Review	Extend
The learner will:						
1. Demonstrate skill in nonverbal communication.	0	1	2	3	4	5
2. Apply basic rules of grammar to daily written and oral assignments.	0	1	2	3	4	5
3. Recognize relationship between speech and writing.	0	1	2	3	4	5
4. Use nonfiction books as sources of information in content areas.	0	1	2	3	4	5

Figure 6. Sample Comparison of Actual and Specified Implementation of Curriculum Objectives

Grade	Objective Item Number			
	1	2	3	4
Kindergarten (Actual)	2.0	2.0	1.0	1.0
Comparison with specified	-	+	~	~
Grade 4 (Actual)	2.4	3.0	4.0	3.9
Comparison with specified	~	~	~	~
Grade 8 (Actual)	1.5	4.0	4.0	3.7
Comparison with specified	-	~	~	~
Grade 12 (Actual)	2.2	3.0	2.5	3.6
Comparison with specified	-	+	~	~

Emphasis Ranges:

- 0 = No Emphasis (0)
- E = Exposure (.5-1.4)
- I = Introduce (1.5-2.4)
- F = Major Emphasis (2.5-3.4)
- M = Review (3.5-4.4)
- Ex = Extend (4.5-5.0)

Key:

- + = More than specified emphasis
- = Less than specified emphasis
- ~ = Match between specified and actual emphasis

level with the number of objectives ranging from 25 to 35 on the four instruments. A six-option Likert scale was used so that teachers could accurately report the amount of emphasis they placed on each objective listed in the assessment instrument (Figure 5).

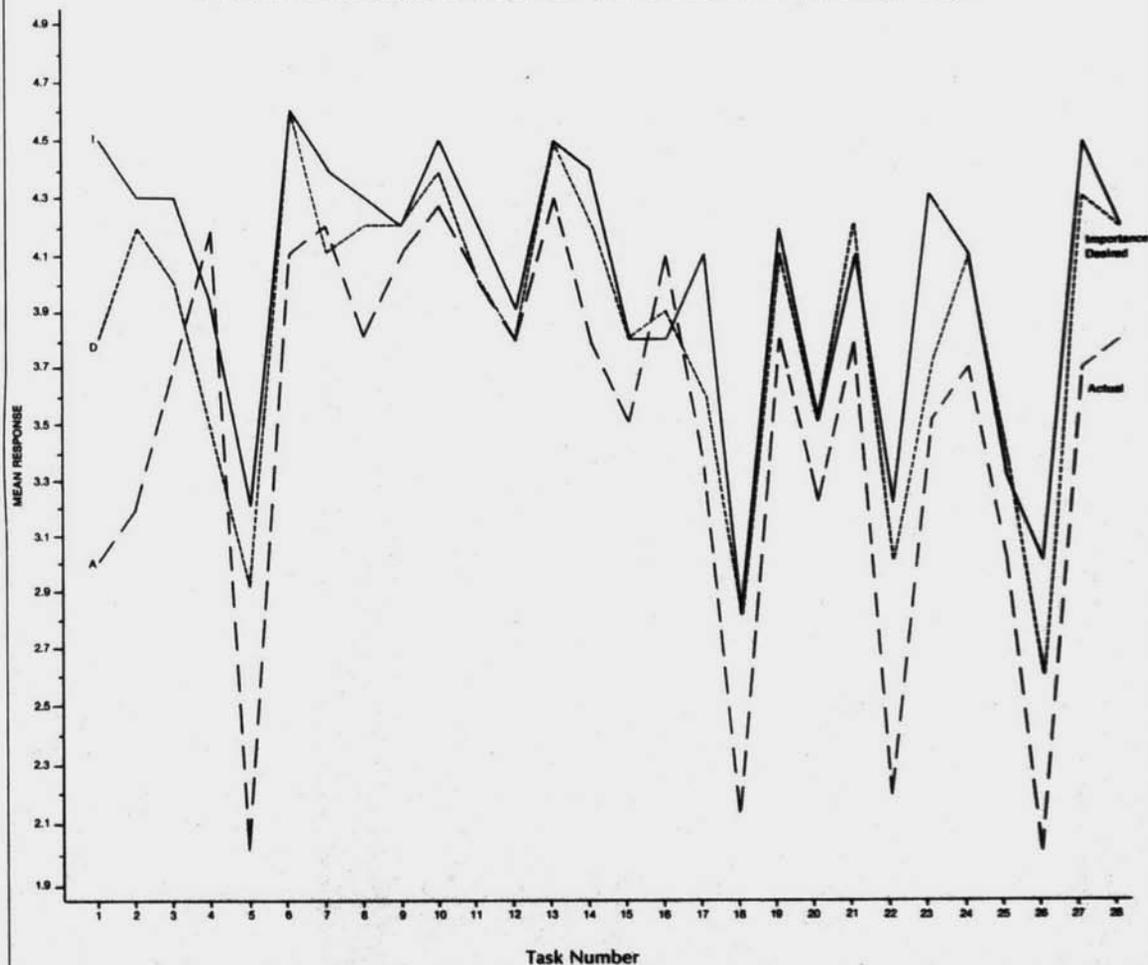
Once mean responses to the implementation assessment for teachers at each grade level (K-12) had been computed, the coordinator found it a simple matter to compare reported (actual) emphasis with the emphasis specified in the curriculum guide. An easy-to-read table (Figure 6) allowed the task force to quickly pinpoint discrepancies between actual and specified emphasis.

Identifying Factors That Constrain Implementation

The next step was to assess teachers' attitudes on specific curriculum tasks that were important during implementation, and to identify constraints. To accomplish this, each department was to employ the Curriculum Implementation System Assessment which had been developed by one of the authors (Kimpston) in 1982. Using that instrument, teachers were asked to rate 28 generic curriculum implementation tasks according to: (1) importance of the task, (2) their desired participation in the task, and (3) their actual involvement in each task. The 28 tasks were grouped into four categories: selection of objectives, development of instructional plans, application of theory to practice, and formulation of evaluation processes.

Results from the assessment provided the task force with a clear picture of teachers' attitudes toward curriculum implementation tasks. The comparative mean responses of teachers for each task for perceived importance, desired participation, and actual involvement were graphed. A separate comparison was made for each level: primary, intermediate, junior high, and senior high. Figure 7 shows the junior high comparison graph.

Figure 7. Comparisons of Perceived Importance, Desired Participation, and Actual Involvement in Curriculum Implementation Tasks. (junior high level)



When *perceived importance* was rated significantly higher for a task than *actual involvement*, the task force concluded that teachers were calling attention to constraints on their ability to implement the curriculum. To identify potential implementation problems, responses to the *constraints* portion of the system assessment were tabulated. Conversely, when the task force found that *actual involvement* significantly exceeded *desired participation* or *perceived importance*, the task force took a closer look at the actual tasks of implementation.

The results of both the implementation and system assessments raised many questions. For example, at the junior high level, why were communications and literature objectives consistently underemphasized? Why did 4th grade teachers consistently exceed specified emphasis in the structure of language strand? Why were "application of theory to practice" tasks rated low in perceived importance by junior high teachers? Why did language arts teachers consider objectives and evaluation tasks to be important, yet rate their *desired participation* in these tasks so significantly low?

Issues such as these were the focus of the structured interview questionnaire developed next by the task force. This questionnaire covered the utility, appropriateness, and flexibility of the language arts curriculum guide, as well as the adequacy of the support system. This support system provides instructional resources, staff development activities, and student evaluation and testing procedures. Once the interview format was designed and revised, the task force selected a stratified sample of teachers across grade levels in the program area to be interviewed.

Designing a Plan to Increase Curriculum Fidelity

With the data from the interviews, the task force made a more thorough interpretation of earlier questionnaire results. They discovered that the underemphasis of literature objectives was due to the lack of available printed materials for all students. Likewise, teachers indicated a lack of clarity and direction in the communication objectives, which led ultimately to their not giving appropriate emphasis to these objectives. To address these problems, the task force recommended purchase of additional literature anthologies and a series of teacher-led inservice sessions on illustrative communication learning activities. (continued on p. 60)

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New! **THE MAKING OF A PRINCIPAL** edited by John J. Lane. Contributors examine the process by which public and private school principals are educated, certified, and inducted into school systems. They explore shortcomings associated with the formal training and certification of principals and recommending improvements, and they share their first-year experiences as school administrators. Training parochial school principals and obtaining the first administrative appointment also are discussed. '84, \$19.50

New! **THE GREAT EDUCATION DEBATE: Washington and the Schools** by Benjamin D. Stickney and Laurence R. Marcus. The authors put the current debate over federal involvement in education into a historical and legal perspective. They summarize the recent trend challenging federal influence; examine budget reduction, program consolidation, and deregulation prompted by the Reagan administration; discuss the influence of the courts on education; and consider the appropriate role of the federal government in education. June '84, about \$22.75

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New! **ART AND MAINSTREAMING: Art Instruction for Exceptional Children in Regular School Classes** by Claire B. Clements and Robert D. Clements. This is not a book just for art teachers; special education and elementary teachers also will appreciate the teaching suggestions and activities presented. The authors discuss and illustrate the ways in which art can enhance the lives of handicapped children, and they include methods for involving non-handicapped students in the mainstreaming process. '84, \$17.50

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THE RIGHTS OF CHILDREN: Legal and Psychological Perspectives edited by James S. Henning. Contributors discuss children's rights through identification and examination of children's problems, and they describe effective methods of implementing direct services to children and their families. Among the many areas covered are diagnosis and treatment of child abuse, child custody, and needs of educationally handicapped and chronically ill children. '82, \$29.75

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Clarification of the issues concerning the low perceived importance of translating principles of learning theory into practice and the low desired participation in objective and evaluation tasks could be reduced to two factors: the language arts teachers felt they did not have the knowledge or skills to carry out the former and did not have the time for the latter. The curriculum coordinator and task force, therefore, recommended that districtwide inservice programs be planned to update teachers' knowledge of recent developments in educational psychology. The task force recommended further study concerning the curriculum development system itself to determine who should be responsible for the development of objectives and evaluation procedures, for which teachers had indicated a lack of time. The task force would ultimately determine if teachers would be given release time or additional pay for these tasks or if the coordinator or a designated administrator might be in a better position to complete these tasks.

Future Audits

The program audits of the language arts and the fine and performing arts departments provided the district with useful information about the status of curriculum implementation. The recommendations for change made in the plan should serve to increase the quality of education in both departments. In addition, the groundwork has been laid for the next program audit scheduled for reading. The board of education anticipates that, by comparing the results of the program audits from year to year, interdepartmental problems may be identified and provide input to district long-range plans for instructional improvement.

As an intentional and systematic check on curriculum implementation, the program audit's usefulness is not limited to the Hilldale school district. The model is a generic one, and the system designed for carrying it out can be readily adapted to the policies and procedures of any district. When designing a program audit a district must give careful consideration to who should be involved in each task and what the district expects of them. Once adaptations are made and the process approved and interpreted, the district will have a useful procedure for monitoring its curriculum during the maintenance phase. □

CALL FOR MANUSCRIPTS

We are tentatively planning the following theme issues of *Educational Leadership* in 1984-85:

Month	Theme	Including	Deadlines for manuscripts
September	Thinking Skills Throughout the Curriculum	What is meant by <i>teaching thinking</i> ? What kinds of thinking can be taught? What is being done and what are the results? (Most articles in this issue will come from papers presented at an ASCD-sponsored invitational conference.)	(May 1, 1984)
October	National and State Education Policy	On the eve of national elections, consideration of the federal role. Effects of deregulation and block grants on federally supported programs. Status of bilingual and multicultural education. Progress of recent state initiatives. Policy analysis as a planning tool.	June 1, 1984
November	(Theme to be selected later.)		
December/January	Teachers and Their Education	Differentiated roles. Proposals for changes in selection and training of teachers. Teacher motivation and working conditions. Examples of intensive staff development programs that have made a difference in student learning.	August 1, 1984
February	Language and Communication in the Curriculum	Exemplary programs and practices in writing, speaking, language study, and literature.	October 1, 1984
March	Varieties of School Improvement	Comparison of approaches now in use intended to bring about planned change in schools.	November 1, 1984
April	(Theme to be selected later.)		
May	Uses of Tests and Test Scores	Examination of ways tests are being used and misused. Exploration of alternative forms of assessment and other perspectives on evaluation.	January 1, 1985

All issues also include non-theme articles, so manuscripts on other aspects of curriculum, instruction, supervision, and leadership in elementary and secondary education are always welcome. Authors are not paid for their contributions.

Papers should be written in direct, conversational style and be as brief as possible (five to ten double-spaced pages preferred). References may be cited in footnotes or listed in bibliographic form at the end of the article. For examples of either style refer to a recent issue or to Kate L. Turabian's *A Manual for Writers* (University of Chicago Press). Double space *everything*, including quoted material, references, and footnotes.

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