Curriculum Development: Who Is Involved and How?

Most respondents to a national survey agreed that teachers should be involved in curriculum development to ensure "teacher ownership" of curriculum and continuity between development and implementation. Here, a skilled teacher works on a new program for hearing-impaired children developed by teachers at the Kendall Demonstration Elementary School, Gallaudet University.
A national survey shows that most school districts prefer homegrown curriculums developed by committees of teachers and administrators. Local control, however, requires long-term teacher participation that budget-watching school boards may be unwilling to pay for.

The call for excellence in education for the 1980s raises numerous questions for the professional educator. For the curriculum specialist, a special set of questions arises:

- What curriculum changes are needed at the district level?
- Who at the district level should make decisions about curriculum development?
- Who should be actively involved in curriculum development?
- What are the advantages and disadvantages of having teachers participate in curriculum development?
- What roles should administrators and parents play in curriculum development?

To answer these and other questions, we conducted a national survey of curriculum development practices in the United States.

Curriculum Development Process Model

An assessment of the curriculum development practices of today’s school districts is especially useful when some model exists with which to compare them. Our model for maximizing teacher involvement in curriculum development requires a gradual implementation over a two- to three-year period. It involves ten steps:

1. A teacher committee meets to write a rationale and objectives for the curriculum; members then solicit feedback from peer teachers in their schools.

2. The committee revises the rationale and objectives based on this feedback and proceeds to develop student activities. Subcommittees may take responsibility for different groups of activities and then critique each other’s work.

3. Subcommittees recommend materials and evaluation methods. The entire committee again solicits feedback from peer teachers on these products.

4. Committee members identify and briefly train pilot teachers who agree to test the curriculum and provide feedback based on implementation.

5. A new teacher committee is formed (with some members from the previous committee) to collect and evaluate the pilot-test data.

6. This second committee revises the curriculum based on pilot-test results.

7. The revision is brought forward to the administration and school board for final adoption.

8. The pilot teachers become a core group of trainers of other teachers who will implement the curriculum. (Preferably, there is one pilot teacher from each of several schools, so this training can be decentralized.)

9. A third committee may be formed (again composed of some members from either of the two previous committees) to carry out final revisions based on the year-long pilot test and to monitor the implementation itself.

10. Higher-level training, using the pilot teachers as catalysts, is conducted for teachers who are experienced in the new program to keep the curriculum vital.

This process is continuous, taking up to three years, and involves a large percentage of the teachers who will be expected to use the developed curriculum. This model was built on the work of Miel (1946), Pritzkau (1959), and others, who established the case for a slow but deliberate process of curriculum development.
locally based curriculum development designed to strengthen teacher commitment to implementing change.

The Survey
To help us answer the fundamental question, "To what extent is such a high level of curriculum development really carried out in American public schools?" we developed, administered, and analyzed a survey of curriculum directors or administrators in public school systems. The 12-item instrument (see fig 1) surveyed processes used at the local school district level for curriculum development or revision. Items were based on current practice and focused specifically on the level of involvement of various personnel.

All questionnaires were coded for ethnic composition of the school system, size of the school system according to the number of students enrolled, dollars spent per pupil, and type of school system (urban, suburban, or rural) for each recipient selected at random. Table 1 provides a profile of the characteristics of the responding districts. The survey was sent to 200 districts of which 91 responded. Responses for each survey item were tabulated across the total group. A content analysis of narrative sections, particularly those relating to the local curriculum development process, was carried out. We also examined the fit between responses and our own curriculum development model.

The Results
The completed survey provides a picture of curriculum development in American public schools today.

1. Curriculum master plan. More than two-thirds of the districts reported having a master plan for curriculum development. In 40 percent of these districts, the plan was initiated by an assistant superintendent. Less frequently, it was guided by a director of curriculum or instruction.

2. Areas of curriculum development. All respondents except one indicated that they had been involved in developing or revising curriculum. These districts reported that approximately six curriculum areas had been developed or revised during the past five years. We found no relationship between the size of the school district and the number of curriculum fields that were developed.

The major subject areas—language arts, mathematics, science, and social studies—were the most frequently developed or revised. The actual subjects and courses listed by the respondents were classified as shown in Table 2.

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Not at all</th>
<th>Very little</th>
<th>Some</th>
<th>Heavily</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Representative(s)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Board of Education</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Superintendent</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Assistant Superintendent</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
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<tr>
<td>Director of Curriculum</td>
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<td>1</td>
<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>Assistant Principals</td>
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<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
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<td>2</td>
<td>3</td>
<td>N/A</td>
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<tr>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Teacher Aides</td>
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<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Parents</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Students</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Consultant(s)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
<tr>
<td>Other: Please specify</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Please specify:

5. From your experience, who should be involved in the curriculum development process? (You may check as many as apply):

<table>
<thead>
<tr>
<th>Role</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervisors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
<td></td>
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<tr>
<td>Students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community representatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College professors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent consultants</td>
<td></td>
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</tbody>
</table>

6. Please rank the following items on their effectiveness for changing curriculum. 5 represents the highest rank; 1 represents the lowest.

<table>
<thead>
<tr>
<th>Item</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buy a curriculum from a commercial company.</td>
<td>5</td>
</tr>
<tr>
<td>Ask a college professor of curriculum to do it.</td>
<td>3</td>
</tr>
<tr>
<td>Hire a consultant.</td>
<td>2</td>
</tr>
<tr>
<td>Use a curriculum that was tried in another school district.</td>
<td>1</td>
</tr>
<tr>
<td>Do it yourself.</td>
<td>4</td>
</tr>
</tbody>
</table>

Fig. 1. Gallaudet University Curriculum Development Process Survey
using the 1981 Classification of Instructional Programs developed by the National Center for Education Statistics.
Uniformly high effort was directed at developing or revising language arts and mathematics curriculums by school districts of all sizes. The larger the district, however, the more often the science curriculum was revised.

7. Based upon your experience, do you favor using committees in curriculum development?

<table>
<thead>
<tr>
<th></th>
<th>yes</th>
<th>no</th>
</tr>
</thead>
</table>

If yes, what is the ideal number of members on a curriculum committee:

Composition of committee (e.g., teachers, parents)

If no, what is your rationale? Please check as many as apply:

- Committees do not produce what is intended.
- Committees tend to be a waste of time.
- People involved do not have the expertise or adequate background.
- A committee is difficult to manage.
- Other:

8. Which of the following do you favor?

- A national curriculum
- A local curriculum
- A state curriculum
- Other: (please specify)

9. Whose responsibility is it to ensure that a new curriculum is implemented after it is developed?

- The school principal
- The teacher
- The director of curriculum
- Other(s) (please specify)

10. From your experience, how do you know that a curriculum is being properly implemented? Briefly state your opinion.

11. Some school districts favor a quantitative or statistical evaluation of curriculum, while others favor qualitative, descriptive evaluations.

Briefly, where do you stand in regard to this issue?

12. General comments about effective curriculum development processes:

Check One:

- I would appreciate a summary of the survey results; my name and address
- I am not interested in receiving a copy of the survey results.

Fifty-six percent of the small districts worked on the science curriculum, compared to 64 percent of medium-sized districts and 73 percent of large districts. Conversely, smaller districts most often cited low-incidence subjects, which we grouped into the “other subjects” category. Sixty-one percent of small districts worked on “other” curriculum fields, compared to 49 percent of medium-sized districts and 35 percent of large districts.

3. The curriculum development process. We asked the districts to describe how their schools developed curriculum. The most frequently mentioned activities included:
- assessing needs, including involvement of teachers through some type of survey (52 percent);
- allocating resources, including the establishment of curriculum committees (68 percent);
- establishing a scope and sequence (48 percent).

“We have no evidence of a decline in the use of textbooks, but commercial curriculums apparently are not used as the foundation for curriculums developed locally.”
- evaluating curriculum (43 percent); and
- obtaining administrative approval (35 percent).

It is troubling but not surprising that few of the districts reported using prior empirical research to shape the curriculum being developed (27 percent). In addition, few districts took the time to write a philosophy (18 percent) or to pilot the new curriculum (12 percent).

4. Constituency participation in curriculum development. We asked the districts to indicate the degree to which different constituencies actually participated in curriculum development. In a follow-up question, we asked them to indicate which constituencies should be involved. The responses to these paired questions provided a way of comparing curriculum specialists' theories with practice.

Table 3 shows the average degree to which each constituency was involved in curriculum development. Heavy involvement was reported for instructional professionals and directors of curriculum. Assistant superintendents and principals also had a great deal of involvement. Community-based constituencies, especially parents, had less input. Students, on the average, had little input, and teacher aides almost none.

Table 1
Characteristics of Survey

| Sample | 200 school districts |
| Returned surveys | 91 school districts |
| District size | 30 percent—6,000+ students 50 percent—4,000 to 6,000 students 20 percent—less than 4,000 students |
| District location | 45 percent—suburban 40 percent—rural 15 percent—urban |
| Average minority population | 16 percent |

Table 2
Percentage of School Districts Reporting Development or Revision of Curriculum Areas over the Past Five Years

- Language Arts
- Math
- Social Sciences
- Sciences
- Other Subjects* (Includes career education, study skills, media, business, typing, computers, vocational, driver education, humanities, psychology, industrial and practical arts)
- Home Economics
- Art/Music
- Foreign Language
- Physical Education
- All Subjects

*Includes career education, study skills, media, business, typing, computers, vocational, driver education, humanities, psychology, industrial and practical arts.
### Table 3

Degree of Participation in Curriculum Development by Major Constituencies

<table>
<thead>
<tr>
<th>Professionals involved with instruction</th>
<th>Department Heads</th>
<th>Supervisors</th>
<th>Teachers</th>
<th>Other Professionals</th>
<th>Superintendents</th>
<th>Assistant Superintendents</th>
<th>Directors of Curriculum</th>
<th>Principals</th>
<th>Assistant Principals</th>
<th>Community Members</th>
<th>Board of Education Members</th>
<th>Community Representatives</th>
<th>Parents</th>
<th>Others</th>
<th>Students</th>
<th>Teacher Aides</th>
<th>Consultants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
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<td>Very little</td>
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<tr>
<td>Heavily involved</td>
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</tbody>
</table>

### Table 4

Average Rankings of Effectiveness of Modes of Curriculum Change

<table>
<thead>
<tr>
<th>Do it yourself</th>
<th>Use curriculum tried in another district</th>
<th>Hire a consultant</th>
<th>Buy a curriculum from a commercial company</th>
<th>Ask a college professor to do it</th>
</tr>
</thead>
<tbody>
<tr>
<td>Least effective</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Most effective</td>
<td></td>
<td></td>
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</tbody>
</table>

DECEMBER 1986/JANUARY 1987
Table 3 also indicates that at least two-thirds of the respondents thought that administrators, supervisors, teachers, students, the board of education, parents, and community representatives should be involved in curriculum development. About half thought that independent consultants should be involved, and about one-third that college professors should participate. While there appears to be support for some degree of involvement by a wide range of constituencies, the degree of involvement supported by administrators remains undetermined.

All constituencies—teachers, students, parents, community representatives, and boards of education—showed higher rates of participation in districts that supported such involvement. Respondents’ rather high support for parent involvement may be attributed to their need to obtain community support for curriculum revision and requires further study.

The universal involvement of teachers in curriculum development is significant, although the survey does not reveal the actual quality of their involvement. We found no relationship between the extent of teacher involvement in curriculum development and the size of the school system, the type of educational setting, the percentage of minority students, or dollars spent per student.

5. Preferred strategies for curriculum change. We asked the districts to rank the effectiveness of five different ways of bringing about curriculum change. Table 4 indicates that the highest mean ranking (4.2 out of a possible 5.0) was assigned to “do it yourself.” "Use a curriculum that was tried in another school district” and “hire a consultant” were ranked moderately high as effective change strategies (3.2 and 3.1, respectively). “Buy a curriculum from a commercial company” was ranked relatively low (2.5), as was “ask a college professor of curriculum to do it” (2.1). However, these last two responses indicate that a large minority of respondents do favor curriculum adoption using the work of some outside agency.

Respondents were asked if they favored national, state, or local curriculums (we asked about national curriculum to find out whether the respondents favored development of a national curriculum, although none exists now); 84 percent chose local. This choice is consistent with “do it yourself” as the favored strategy for effecting curriculum change. Nearly 25 percent of the respondents favored a state curriculum, but only 1 percent favored a national curriculum.
All 91 responding districts favored curriculum development by committee. The average preferred committee size, 10 persons, was not related significantly to the size of the district. Nearly all of the respondents favored teacher membership on these committees, more than three-fourths favored participation by administrators, and half favored parental involvement.

The low average rate of actual parent involvement in curriculum development contrasts with apparent general support for participation by teachers, more than three-fourths favored participation by administrators, and half favored parental involvement.

We found significant involvement of the school principal, although not as high as that of teachers. Recent literature in the field of curriculum change (e.g., Berman and McLaughlin 1978) indicates that building-level commitment by principals has been a key to successful institutionalization of program change: results of our survey appear to confirm this research.

6. Curriculum implementation. We asked the districts to tell us whose responsibility it was to ensure that a new curriculum was implemented. Nearly all respondents (89 percent) agreed the primary responsibility rested with the principal. However, about half of the respondents indicated that teachers and directors of curriculum had responsibility for implementation. This point should stimulate school districts to reexamine the potential of combined leadership in curriculum development.

We also found that, statistically, the higher the frequency of teacher involvement in implementation, the higher the frequency of curriculum director involvement. However, no significant relationship was found between principals' and teachers' responsibilities. From these findings we can hypothesize two patterns of implementation: one at the building level guided by principals, and one at the district level possibly coordinated by a director of curriculum.

With an open-ended question, we asked the districts to indicate how they could tell if a curriculum is being properly implemented. More than 70 percent reported that they relied on classroom observations by supervisors or principals, a view consistent with the perception that principals are largely responsible for curriculum implementation. Forty percent said they relied on standardized test results, nearly 30 percent reported using meetings or teacher lesson plans to judge success of implementation. Most districts relied on more than one method.

7. Curriculum evaluation. We asked the districts whether they favored qualitative (descriptive) or quantitative (statistical) evaluations of curriculum. Sixty-two percent favored both. About a quarter favored only qualitative evaluation information, while only 15 percent favored a quantitative approach alone. This may be interpreted in at least three ways: either quantitative methods are not commonly understood, or a new evaluation trend stressing qualitative approaches is taking effect, or school districts tend to prefer more informal measures of success over objective test instruments. Clearly, more study is needed here.

8. Comments. Content analysis of the unstructured comments section indicated that most respondents supported "teacher ownership" of curriculum—again consistent with the results of items four and five. Comments included the following:

"Teachers need to be involved right from the start.
"If teachers don't feel committed to the change, no one else will.
"I can't imagine trying a change in curriculum without getting the teachers to participate in the decision."

Of equal weight, however, is the call among the respondents for both periodic updating of curriculum and for administrative support for teachers implementing change. This endorsement of administrative support for curriculum development also is consistent with the response for item 5.
Implications of the Results

Assuming that this random sampling of school systems in the U.S. yielded an honest profile of current practice, the following inferences from the results may be useful to curriculum leaders and to students of curriculum development.

1. Basic core subjects (language, reading, and math) are still the focus of systematic curriculum development efforts at the local level.

2. A large proportion of school districts, perhaps due to the leadership of those responsible for curriculum development and revision, recognize the importance of systematic curriculum development, as opposed to the rapid, wholesale adoption of prepared curriculum.

3. The heavy involvement of teachers within curriculum committees appears to characterize school districts that develop curriculums locally. However, the model we developed and presented earlier calls for widening circles of teacher involvement over several years; that model currently does not appear to be in use on a wide scale.

4. Districts involved in curriculum development make little systematic use of prior research.

5. The development of a philosophy for the curriculum appears to have a low priority.

6. Evaluative instruments are rarely used to refine the curriculum objectives for a new locally developed curriculum.

7. The active participation of building administrators (principals and supervisors) is a feature of the curriculum development process in many school districts. This involvement may be an implicit recognition of the importance of administrative support in institutionalizing a curriculum change.

8. We have no evidence of a decline in the use of textbooks, but commercial curriculums apparently are not used as the foundation for curriculums developed locally. Students of curriculum have long known that adopted curriculums often differ from what teachers actually teach. Further study is needed, however, to learn whether districts develop local curriculums to match a published series or purchase materials that fit their own curriculum specifications.

9. Nearly half of the respondents affirmed the importance of a balanced evaluation design. Many curriculum writers (e.g., Eisner 1979) have expressed concern about the exclusive use of quantitative evaluation. Perhaps these writers and conference speakers, along with training programs for curriculum leaders, may be having some positive effect; alternatively, we might infer that many school districts are satisfied with more informal judgments of the success of a new curriculum. Again, further study is needed.

10. The frequency of the comment about the importance of teacher ownership in curriculum development is also evidence that top-down models are inadequate for bringing about meaningful and lasting curriculum change. This inference, again, deserves further investigation.

11. The relationship between development and implementation apparently is not clearly defined in many districts. The process of curriculum development has multiple steps that usually culminate in a product. At that point, curriculum implementation, also a multistep process, begins. These two processes should be seen as a continuum, with implementation smoothly following or even overlapping slightly with the curriculum development stage. They both should involve many of the same professional personnel to assure this continuity, as illustrated in the model presented earlier. However, curriculum development and implementation are in fact often carried out separately; frequently leaders from a central office (with or without teacher involvement) develop curriculum, and then teachers and principals implement it. Curriculum leaders should strive to create a continuum that ensures consistency.

Our representative sample of curriculum leaders indicates that the trend is to involve teachers broadly in curriculum committees. Time and additional research will answer the larger question of how deep and lasting this development will be, particularly in the face of shrinking school budgets. The challenge for American curriculum leaders is to maintain and enhance the teacher-ownership model with its requirement for large investments of time, and to resist the temptation to surrender curriculum decisions to outside forces, both at state and local levels.

References


Authors' note: We wish to acknowledge with great appreciation the valuable assistance of Helen Jimenez-Ulloa and Hazel Johansen, both of Gallaudet University.

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