The Minnesota Center for Curriculum Development proposed a series of language-centered units and study guides for English instruction in secondary schools. Among the specific objectives of the Center were (1) the identification and analysis of the concepts appropriate to grades 7-12, (2) the preparation of curricular materials and study guides for teachers, (3) the education of selected teachers to use the study guides, and (4) the establishment of field tests for evaluation of the materials. The materials were first tested by 166 teachers throughout the state; later, three schools were selected as demonstration centers. Results indicated that the Project English materials engender interest in many kinds of curriculum reform, that the language-centered curriculum has become widely accepted, and that a curriculum should be considered a process rather than a finished product. A study is underway which provides a pilot test for the effect of the materials on student performance by determining the value and validity of a test of "linguistic sensitivity" developed by members of the Center staff. (Summaries of the units developed are included in the report.) (JS)
FINAL REPORT

Cooperative Research Project H-009
Contract SAE OE-3-10-010

Preparation and Evaluation of Curricular Materials
and Guides for English Language Study in Grades 7 to 12

June, 1968

Stanley B. Kegler
and
the staff
of the
Center for Curriculum Development in English

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research
Final Report

on

Cooperative Research Project H-009
Contract SAE OE-3-10-010

Preparation and Evaluation of Curricular Materials and Guides for English Language Study in Grades 7 to 12

Project Director: Dr. Stanley B. Kegler
Associate Directors: Dr. Harold B. Allen
               Dr. Donald K. Smith
Project Supervisor: Mr. Rodger L. Kemp

University of Minnesota
Minneapolis, Minnesota

June 30, 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. Department of
Health, Education, and Welfare

Office of Education
Bureau of Research
CONTENTS

SUMMARY. .................................................. p. 1

BACKGROUND FOR THE STUDY .......................... pp. 2-3

ORGANIZATION AND METHODOLOGY OF THE PROJECT ... pp. 3-10

FINDINGS, ANALYSIS, AND DISSEMINATION
OF MATERIALS .......................................... pp. 10-42

CONCLUSIONS AND RECOMMENDATIONS ................ pp. 42-48
The Minnesota Center for Curriculum Development proposed to develop a series of language-centered units and study guides for English language study in grades seven through twelve. The term language-centered should be taken to mean a curriculum which draws on a substantial body of scholarship from diverse disciplines such as rhetoric, linguistics, anthropology, and psychology. Among the specific objectives of the Minnesota Center were (a) identification and analysis of the informational and conceptual content appropriate to the language arts in grades 7-12, (b) preparation of curricular materials and study guides for teachers, (c) education of teachers from a selected number of high schools for the use and evaluation of the study guides in their schools, and (d) establishment of field tests for evaluation of the effectiveness of the curricular materials in promoting orderly and substantial instruction in knowledge of the English language in the secondary schools.

Following the identification by Project staff of information and concepts appropriate for inclusion in the materials, the Minnesota Center held a summer training institute for thirteen classroom teachers who carried nine credits of course work in descriptive grammar, language and human behavior, and English curriculum. In addition, these teachers suggested grade placement of materials and wrote drafts of units. Following the workshop, drafts of the units were edited and used by the schools represented in the summer program. At the end of that school year, participating teachers returned the materials with their suggestions for revision.

In the period from July of 1964 to July of 1967 a field testing program was carried out in which approximately 166 cooperating teachers tried various units in their own school systems and fed back results and reactions to the Project staff. Evaluation of the materials by teachers included discussion of the adequacy of the curricular materials, the usefulness of the materials, the information or instructional techniques found appropriate to a given grade level, and suggestions for revision.

Although the materials were thus tried in well over one hundred classrooms, the staff felt that a more systematic attempt should be made to study the implications and impact of such materials in diverse school settings. Accordingly, an arrangement was made in the summer of 1966 with the Upper Midwest Regional Laboratory to establish three pilot demonstration centers around the state of Minnesota. The sites selected were Hopkins, Burnsville, and Detroit Lakes. The analysis of "data" from this stage of the project has focused as much on the process of curriculum reform as upon measurable changes in student performance as a result of the materials. In each of the three demonstration centers the Project English materials seemed to have an important catalytic effect within English departments, bringing about, among other things, curriculum development and revision of other aspects of the English program. In two of the three centers, involvement in the process led to successful application for Title III grants. Although there has been to date no tightly controlled experiment on the effects of Project English materials on student performance, a study...
is presently underway which provides a pilot test for such an experiment by determining the value and validity of a test of "linguistic sensitivity" developed by several members of the Project English staff. Subjects in the study were students at Hopkins High School, one of the demonstration sites.

Dissemination of results has been partially accomplished through the preparation of a booklet which discusses the origin and purposes of the Center, the underlying assumptions and concerns of the materials developed, and the training, demonstration, and evaluation activities of the Center. With respect to publication of Project English materials, the Center staff has found publication on paper to be economically unfeasible. Thus, all units will be edited and made available in the fall of 1968 through the ERIC Center at the National Council of Teachers of English.

BACKGROUND FOR THE STUDY

English curricula are frequently characterized by fragmentation and disorder, particularly in the area of instruction about language. Secondary school students receive isolated and unrelated bits of knowledge which do not provide a reasonably complete view of language and the ways in which language functions. High school students may know some concepts about standard usage or prescriptive grammar; typically they know little about the insight brought to the study of language by descriptive linguistics and nothing about its extensions through transformational grammar, or about the systematic structures which characterize language. They may have some notions about the way in which language is adapted to its end in acts of exposition and persuasion, but they lack any systematic study of rhetoric, or of the theory of expository or persuasive address. They may have some ideas about critical thinking, or about the scientific method as reflected in discourse of all kinds, or even be able to identify some of the commonplace linguistic fallacies. But they are unlikely to have had any systematic instruction in logic. They are likely to have little understanding of the relationship between the development of speech and the nature of man, or between language and culture.

To summarize, secondary school students, in the main, complete their education in the high schools with a meagre understanding of language and its many facets. Even under the best of conditions, they may well understand a few of the basic principles of "linguistics," but be unaware that "linguistics" is only a small dimension of the study of language.

In response to this situation the Minnesota Center for Curriculum Development proposed to develop a series of language-centered units and study guides for English language study in grades seven through twelve. By language-centered the Minnesota Center meant more than materials to teach descriptive grammar or doctrines of usage, although such concerns did play an important role in the development of materials. Rather, language-centered should be taken to mean a curriculum which draws on the substantial body of scholarship built from fields as varied as orthography and psychology of language or
phonology and rhetoric. These are representative of the diverse fields which are united by a common interest in the fundamentally human phenomenon of language. It is in this broad conception of language-centered that the Minnesota Project differs from grammar-centered or usage-centered curricula implicit in the proposals of some recent professional literature.

A major part of the work of the Minnesota Center, then, called for identifying and analyzing informational and conceptual content from a wide variety of disciplines. This information and these concepts were built into teaching materials and study guides. Classroom teachers at three pilot demonstration centers then utilized these materials, with experimental evaluation and analysis following.

Specific objectives of the Minnesota Center were the following:

a. Identification and analysis of the informational and conceptual content in the study of the English language appropriate to the language arts or English curriculum in grades seven through twelve.

b. Preparation of curricular materials and study guides for teachers, specifying the content, form, and order to be given to its introduction in grades seven through twelve, and the relationship between such instruction in language and instruction in the skills of reading, writing, speaking, and listening.

c. Preparation of curricular materials for use by secondary school language arts teachers especially for pre-service and in-service education.

d. Preparation of explanatory materials for use by elementary and college teachers to more clearly effect articulation of effort.

e. Education of teachers from a selected number of high schools for the use and evaluation of the study guides in their schools.

f. Establishment of field tests and evaluation of the effectiveness of the curricular materials and study guides for promoting orderly and substantial instruction in knowledge of the English language as part of the secondary school curriculum, with revision of the guides and curricular materials, including programming various aspects, based on results of field tests.

ORGANIZATION AND METHODOLOGY OF THE PROJECT

The procedures of the Minnesota Center can be divided into five stages: (1) planning and development, (2) pilot study, (3) research, (4) analysis, and (5) dissemination of results and publication of materials. Stages 4 and 5 will be discussed in subsequent sections of this report.
The planning and development period ran from the date of initiation of the project, July of 1962, to June of 1963. During this stage, emphasis was placed on staffing the Center and the task of identifying the information and concepts appropriate for inclusion in the materials. Conceptualized statements were formulated by members of the Center staff in consultation with scholars in related disciplines, and information exemplifying the general conceptual statements was noted. These statements were then allocated to appropriate units. Most of these statements, with differing exemplifications, appear in more than one unit at more than one grade level, on the assumption that this situation creates a degree of continuity and enhances the opportunities for some type of cumulative effect. The outlines of content were subjected to numerous revision, and outlines of units were started.

Related work of the Minnesota Center in this period included correspondence and exchange of information and proposals with directors of other curriculum centers. Contacts were also made with local school officials, supervisors, and teachers. Finally, the Center disseminated 560 announcements of the summer training institute for teachers. Each applicant was required to submit a complete application, two recommendations, and transcripts of all college work.

The pilot study stage began in June of 1963 with the summer training institute. Thirteen classroom teachers, selected from approximately 220 applicants, received stipends and attended a five-week summer program beginning in mid-June. Eight additional teachers attended and were paid by their school systems. These teachers carried nine quarter credits of courses consisting of descriptive grammar, language and human behavior, and English curriculum. In addition to their course work, participants suggested grade placement of materials and wrote drafts of units. (Content outlines for forty-one units and a complete sample unit were ready at the outset of the pilot stage.) Following the workshop, drafts of the unit materials were edited and mimeographed. Fourteen of these units were subsequently used by the schools represented in the summer program and at the end of that school year, participating teachers returned the materials with their suggestions for revision.

Also during this pilot study stage, plans were made for the research stage. Additional materials were outlined, revision of existing material was started, and applications for the second summer workshop, in which emphasis was placed on preparing teachers to use the new materials and on explaining the experimental design, were accepted.

The research stage, which ran from July of 1964 to July of 1967 began with a rather extensive field testing program in which approximately 166 cooperating classroom teachers, many of them having participated in Project English workshops and NDEA Institutes held at the University of Minnesota, tried various units in their own school systems and fed back their results and reactions to the Project English staff. The summer preceding the academic year 1964-65 was devoted to a training period for these cooperating teachers, who were chosen on the basis of experience and their willingness, with the additional aim being to represent all grade levels, seven through twelve. Evaluation of the materials by teachers included discussion of the adequacy of the curricular materials, the usefulness of their contents, the comprehensiveness of the content, and so forth.
usefulness of the materials, the informational or instructional techniques found appropriate or inappropriate to a given grade level, and suggestions for revision.

The materials developed at the Project English Center were thus tried in well over one hundred classrooms in this initial segment of research. The staff felt, however, that a more systematic attempt should be made to study the implications and impact of such materials in diverse school settings. The testing of materials carried out through the spring of 1966 gave the staff little hard data from which to infer the likelihood of success of the Project English materials when used by teachers with little formal training in the use of such materials or in school settings in which innovative materials had seldom, if ever, been introduced. Accordingly, during the summer of 1966 staff members approached the Upper Midwest Regional Educational Laboratory to determine that agency's interest in establishing one or more pilot demonstration centers around the state of Minnesota.

A number of reasons impelled the staff of the Project English Center to seek the assistance of UMREL in establishing such demonstration centers. Clearly the establishment of such Centers as field projects of the Laboratory would fall within the purview of the emerging focus of the Laboratory—the study of methods by which increased competence of teachers becomes a matter of continuing concern to the teacher education enterprise.

Of considerable consequence to the staff of the Project English Center was the wish to see the materials used on a basis wider than they had up to that point and to avoid going the way of many curriculum materials projects: languishing in the archives of some library, unused and waiting to be discovered by an historian of curricular reform. It is widely, if not universally, acknowledged that public secondary school curriculum reform is ponderously slow in coming, perhaps necessarily so, given the complexities of contemporary education. Nonetheless, it seemed wasteful for programs such as Project English to pass without having much impact on school practices simply because the key persons in curriculum reform, classroom teachers and administrators, lack the opportunities to observe, analyze, and evaluate new programs.

Another reason for the staff of Project English being interested in the development of demonstration centers was the desire to conduct a rather special kind of evaluation of the materials developed by the Center, asking the question, "Will a set of materials such as those from this project help generate reform which emphasizes adaptation rather than adoption of materials. Such a stance assumes that "packaged" materials for "adoption" in toto are less useful in curricular reform than are materials which are designed for adaptation to local situational variables. Such a position moves away from the notion that the curriculum can be "reformed" periodically in a kind of "crash effort" designed to bring the curriculum "up-to-date," and toward the idea that curriculum development is a continuing process of development, creation, innovation, adaptation, modification, research, evaluation and assessment of results, and renewal based on the current state of knowledge of the subject matter, methods of teaching, and modes of learning.
Implicit in this position is the notion that the substance of the field is dealt with in the process of curriculum development. The best proposed course of study is the one most nearly congruent with the experience and intuitions of the teachers who must execute it.

Probably the most important reason for undertaking the establishment of such demonstration centers was to determine the effect of introduction of such materials relating to one aspect of one subject, English, on the remainder of the curriculum in that subject and, indeed, on curriculum development in other subjects in the school curriculum. In brief, does the introduction of a set of more-or-less coherently organized materials act as a catalyst in curriculum reform in other areas?

Other factors in which the staffs of the Project English Center and of UMREL were interested dealt with teacher attitudes necessary for successful use of the Project English materials, school and community factors which aided or impeded the successful uses of the materials, personnel requirements, and other such matters.

Thus, this demonstration center program was designed for purposes of demonstrating two related matters: first, a set of materials, and second, a process of curriculum development in English. Both purposes are important, but the long-range implications of the latter seem greater than those of the former. In practice, and happily so for this kind of program, the two functions are so thoroughly inter-related as to be inseparable. At least, this ought to be the case in situations where the preferred approach is to offer materials for adaptation rather than adoption, and this is the preferred approach for this program.

The demonstration sites selected were Hopkins, Burnsville, and Detroit Lakes, Minnesota. Each of these sites offered attractive possibilities as demonstration centers, partially because the three districts shared some features and partially because these districts varied in interesting ways. The common factors included the following: (1) Each of the schools had one or more persons who expressed interest in curriculum reform and in the Minnesota materials. (2) There were personal contacts between the interested teachers or administrators and members of the Project English Center staff. (3) There was administrative support for curriculum reform in each of the schools, usually backed by a willingness to expedite the process of teacher involvement.

Clearly, these and other factors exist in many schools. As a practical matter, some selection was necessary, and this selection included attention to the range of situations which might be represented by the centers. A description of each site will help to elucidate those features differentiating the schools involved.

Demonstration Center A:

Prior to the current curriculum revision work in Demonstration Center A, the community's attitude toward curriculum change could probably be best classified as somewhere between neutral and conservative. No community
Pressure to change the curriculum or opposition to the recent work was in evidence. Especially in the early planning stages, the community at large did not seem aware of the work in curriculum revision going on in the schools. There is some evidence now, however, after the curriculum work has been reflected in school practices and after the new curriculum has attracted interest from outside the district, that more people are becoming interested and showing a considerable measure of pride in the attention given the school.

The most important community element influencing curricular change is reflected in the lack of financial resources available to the district for special projects in curriculum research and development. The county in which Demonstration Center A is located is one of the poorest in the state, and resources are stretched to the maximum to simply operate the schools at minimal levels. If there were strong community pressures for curricular change, it is highly doubtful that reasonable financial support could be found within the district. This, of course, has had a strong influence on curriculum work in past years, and lower than average teacher salaries have not served to aid in the encouragement of extensive curriculum revision; funds from outside sources for staff workshops were an absolute requirement as a stimulus for the very active work now being carried on.

The original curriculum revision project apparently acted as a strong incentive for curriculum revision throughout the faculty of Demonstration Center A. Prior to that grant there had apparently been dissatisfaction with the curriculum and with the inability to hold reasonable curriculum revision workshops. With outside funds came the opportunity to work intensively during the summer on a problem that had been recognized for some time. In the English department, more specifically, there was a strong leadership from the department chairman, and the department was small enough to permit full participation of all teachers. The chairman had attended an NDEA Summer Institute in English at the University of Minnesota the previous summer and was able to serve as a valuable resource regarding new curriculum developments. In terms of pre-service and post-baccalaureate preparation, the Demonstration Center A teachers were probably quite representative of most Minnesota high schools when the work began. Since that time it is obvious that a much stronger interest in in-service work has been generated. Likewise, the interest in continuing curriculum revision has increased greatly within the faculty, and it is apparent that as a department there is considerably more commitment for curriculum improvement than would be found in most schools of this size in the region.

All of the curriculum work of the past two years in Demonstration Center A has been characterized by exceptional support and active involvement on the part of the high school administration. Administrators seem to have a rather detailed grasp of the developments in the various departments and have participated in most of the working sessions. The school-wide effects of this kind of support and involvement are most obvious, and the communication between departments is excellent. The lines of communication between teacher and administrator have been excellent, and this has had a significant effect on the faculty's commitment to curriculum change on a continuing basis. Under the present situation, a teacher with a new idea has the assurance that he will have full support for experimentation.

7.
Elements in Outside Involvement: Involvement with organizations and agencies outside the district has been extremely important to the successes of the activities in Demonstration Center A. As already mentioned, it is highly doubtful that curriculum revision on even a limited scale could have been effected without the infusion of outside funds. It should be noted that the UMREL Demonstration Center grant provided an additional strong stimulus. This project brought in teachers and administrators from numerous schools in the state, and being under such scrutiny has further stimulated the faculty's interest in curriculum improvement. Presentations to English education classes in area colleges have aroused sufficient attention to interest new teachers in the school system, and this may lead to an improvement in staffing in the future.

Throughout the faculty, there seems to be a shift from a sense of isolation to an active willingness to demonstrate the program to outsiders and to draw materials and ideas from a wide variety of sources. The staff is aware of developments in professional organizations, curriculum development programs, and model schools throughout the country, and they are most willing to examine those developments for implementation in their own programs.

Demonstration Center B:

As a newly-developed and rapidly growing suburb of Minneapolis, the district in which Demonstration Center B is located differs in many ways from the situation in Demonstration Center A. Since the district is located in a new suburb, and since the district's population has increased so dramatically in a very short period of time, the attitude toward curriculum change is relatively uninhibited by long-standing traditional practices. Since a large portion of the population have children in schools, there is naturally considerable interest in the school program. There has been, however, no evidence of either active support nor opposition to curriculum change on the part of the public. The public has not been directly involved in any discussions of curriculum change.

If, however, one looks to the school board as a reflection of community interest in school programs, there is every indication that curriculum change is supported and will continue to be supported. Following the additional work with the Demonstration Center project initiated by UMREL, the school board has committed district funds for regular and continuous improvement in the future. This is the kind of public support for curriculum change that will undoubtedly have a very strong influence on faculty attitudes towards curriculum work.

The English Department staff in the Demonstration Center B seems to be particularly well suited toward continuous curriculum development. The majority of the teachers are young, actively pursuing further formal education, and willing to experiment with new materials, new teaching techniques, and new curriculum approaches. The communication between junior high school and senior high school English teachers is obviously excellent and there is a strong commitment to an articulated English curriculum. As is the case in Demonstration Center A, there is considerable evidence that other departments, after watching
the English Department working on curriculum revision, are beginning to develop similar attitudes toward curriculum change. It is quite apparent that the level of communication between teachers from various departments has improved significantly over the past year.

As in Demonstration Center A, there has been an extremely strong support from the junior and senior high school administrations for continuing curriculum improvement activities. The principal, for example, participated in several of the workshop sessions in which consultants spoke to the English faculty. Administrators, however, have not been actively involved in the actual work sessions as they were in Demonstration Center A; rather, the administration of Demonstration Center B has given the faculty members the responsibility for the development work and has tried to keep informed of the progress of the work. The administration has actively encouraged curriculum work and the previously-mentioned support from the school board for curriculum revision funds in the future is an important factor in maintaining the interest of the faculty in further work.

As in Demonstration Center A's program, the willingness of teachers and administrators from Demonstration Center B to look to outside sources for curriculum improvement ideas is a highly important factor. Throughout the faculty and the administration there seems to be an awareness of new developments and a commitment to utilize these whenever possible. It is very difficult to tell at this point whether the Demonstration Center project initiated by UMREL has played a direct role in developing this attitude or whether it would have developed within the district itself. It may be that the Demonstration Center project in English has stimulated a general school-wide interest in curriculum improvement. The success of the English Department's work seems to have prompted school-wide interest in similar activities along with an emerging attitude of the school board that such work should become a regular operating procedure of the district not to be reliant upon outside funding.

The outlook for continuing curriculum change throughout the junior-senior high school and, in time, throughout the school system, is extremely good. The acceptance of the notion of curriculum revision is a continuous process, with extra salary for participating teachers, will undoubtedly serve as an important factor for further development.

Demonstration Center C:

The community in which Demonstration Center C is located is strongly supportive of education and regards its educational system with considerable pride. The excellence of the educational system has, in fact, been an important factor in the rapid growth of the district's population. As with Demonstration Centers A and B, however, the public has not been actively involved in promoting educational change. If anything, the public has been relatively complacent about the quality of the educational system, relying on the reputed excellence of the district's schools.

The school system has a strong "core" faculty who have been with the system for considerable periods of time and, who, for the most part, have been
working regularly on post-graduate degrees. These teachers have maintained close relationships with the University of Minnesota and a number of other colleges and have been eager to participate in special in-service education programs such as NDEA Institutes and Project English workshops. These teachers tend to be aware of new developments and to be willing to try new materials when it is appropriate to do so. As noted earlier, there is a fairly large turnover of teachers in the English Department of Demonstration Center C and this has had its effect on the continuity of curriculum planning and on willingness to try new materials. Interviews with teachers and administrators have suggested that the large turnover seems to contribute to a willingness to use Project English materials, but it is difficult to ascertain whether this is a position reflecting an attitude favoring continuous curriculum change, or a reflection of the fact that a new teacher, just out of college, sees the materials as a "package" which could be used without considerable planning.

There is a good deal of evidence that the English curriculum of the senior high school and the three junior high schools will be coordinated in the future and that a stronger departmental system will be established. Should these developments occur, it is quite likely that relations among English teachers will improve and that the curriculum revision process will be more orderly than it has been in the past.

The administrative situation in Demonstration Center C has recently changed, and it is difficult to accurately assess the degree of administrative support for curriculum change; some teachers report very strong administrative support and others do not seem to know whether there is administrative support or not. The previous pattern in Demonstration Center C was to allow individuals and departments to follow their own curricular inclinations with little district-wide coordination. It is now apparent that district-wide coordination, aimed at articulation, will become more evident.

Both the teaching staff and the administration in the system are most willing to look outside the system for new developments in curriculum. This is demonstrated by the heavy involvement of certain individuals in the English Department in Project English work and the school-wide interest in the modular scheduling project. Furthermore, there is considerable pressure for faculty members to continue with graduate work and this has played an important part in the faculty's awareness of current curriculum development work.

FINDINGS, ANALYSIS, AND DISSEMINATION OF MATERIALS

The fourth stage in the procedures of the Minnesota Project English Center was analysis of the results of the research discussed in the foregoing section of this report. Primary attention was directed to the drawing of inferences about factors which aid or impede curriculum reform in the secondary schools rather than conclusions about observable, testable, behavior changes. Although this represents a change in focus from the initial plan, work has also been done on measures of "linguistic sensitivity," and the comparative study of scores of students exposed to the materials for varying lengths of time.
One of the simplest ways of getting at the evaluation and comparison of the work of the three demonstration centers is to pose certain general questions and then indicate specific areas of similarity and diversity among developments at those three sites. The questions which were originally posed dealt with a number of matters of great concern to the staff of the Project English Center. From these questions, the staff of UMREL selected those of most compelling general interest. Some of the questions dealt with the process of curriculum reform, and the remainder were related to organization of the Project English materials themselves. Questions in the former category included the following:

1. What elements in each setting seem to produce or inhibit the attitude for change on the part of teachers critical to successful use of the Project English materials?

2. What factors in the community, in the school, in the organizational format, and in the materials themselves aid or impede the successful uses of the Project English materials?

3. What are the personnel requirements for curriculum change in regard to the Project English materials, with particular emphasis on the pre-certification preparation?

4. What evidence is there that the use of the materials of Project English act as a catalyst for continuing curriculum change?

The responses to these four questions are largely subjective in nature. Some achievement data seemed relevant and are indicated where appropriate. The subjectivity is reduced to a certain measure of objectivity, however, by the fact that three methods were used to seek answers to the questions:

1. The reports and correspondence of each of the three Centers were systematically analyzed.

2. Each of the Centers was visited by more than one member of the Project English staff, whose observations were carefully summarized.

3. Many of the administrators and teachers from each of the Center school systems were personally interviewed and these responses were carefully collated and scrutinized.

The personal interview schedule was a most productive feature of the evaluation. Although many of the responses were predictable, the yield of specific illustrations of practice was most helpful. For each of the general questions posed in the section above, an additional group of more highly specific questions was formulated to elicit more specific responses:

A. What elements in each setting seem to produce or inhibit the attitude for change on the part of teachers critical to successful use of the Project English materials?
Specific questions:

1. Was your department (or you, or your English faculty) considering a change in your curriculum before you knew about Project English materials?

2. If so, why were you or your English faculty considering such changes? With what in your previous curricula or programs were you dissatisfied? What did you think change would accomplish?

3. If not, what in the presentation of the Project English materials made you and your English faculty think that change might be necessary or worthwhile?

For Teachers:

4. Did your administration encourage you in thinking about change? Did your administration initiate discussion of change? Was your administration in any way reluctant with regard to change? If so, how did you get around this?

For Administrative Chairman:

5. Did you encourage? Did you initiate? Were you reluctant? Were they reluctant? If so, how did you get around this?

6. Were students consulted before, during or after the curriculum revisions? Were parents consulted?

7. What were the attitudes toward changes among students and parents?

8. Were all members of the department or English faculty interested in change?

9. To what extent did you (administrators) enter into the actual work of curriculum development? Did you (administrators) participate in work sessions?

B. What factors in the community, in the school, in the organization format, and in the materials themselves aid or impede the successful uses of the Project English materials?

Specific Questions:

1. Were there organizational formats (e.g. departments, curriculum committees, etc.) in your school which helped or hindered efforts at revision? How?

2. Did the PTAs: a) play any part; b) help or hinder your efforts at revision?

3. Were any other non-professional groups involved in the revision? Did they help or hinder?
4. Did the School Board act or react to revision? Did or do they have any authority in such matters? How do they usually exercise this authority?

Of your English Faculty:

5. Were all members interested in using Project English materials in some way? If so or if not, what in the materials was or was not useful or interesting enough to warrant considering them?

6. What in the materials got in the way once you had started the process of revision? What helped?

For Administrators and Chairman:

7. How much turnover was there in your staff before you began revision? How much during revision?

C. What are the personnel requirements for curriculum change in regard to the Project English materials, with particular emphasis on the pre-certification preparation?

Specific Questions:

1. Did the Project English materials need explanation? What types of explanation? From whom? To whom?

2. Are some kinds of in-service training programs necessary? Who should conduct such programs: a teacher from your staff; the department chairman; the consultant or English supervisor; those who developed the materials; linguists, rhetoricians or critics; etc?

3. Was the initiative of the department chairman an important factor in facilitating or discouraging curriculum change?

4. Is a "strong" department chairman a necessity in initiating or maintaining such a program?

5. What kind of teachers are necessary in teaching such materials? Is the present preparatory program producing teachers who can cope with such materials or with curriculum revision in general? How should it be changed?

6. In this regard what are the weaknesses of new teachers? What are the strengths?

7. How long has it been since you took course work? In what areas did you take it?

8. Did your work in curriculum revision lead you to take any course work? In what areas?
9. Is a specialist in the English curriculum, a supervisor or consultant, necessary in systems attempting to adapt such curricular materials?

10. What role should the school's administrators play in curriculum developments of this kind (those involving revision of content)?

11. Should or did the school system provide any special administrative personnel in support of the Project English program, or subsequent curricular change?

12. To what extent is it necessary to have financial support from the school system or from other sources to conduct such revisions?

D. What evidence is there that the use of the materials of Project English act as a catalyst for continuing curriculum change?

Specific Questions:

1. Has use of the Project English materials affected your work in other aspects of the English curriculum?

2. Has your staff's work with Project English had any affects in departments other than the English Department? If so, what were they?

3. Have the Project English materials made you more or less amenable to curricular change?

4. Do you think the curriculum you have now developed is going to last for a while or will it too need revisions soon?

5. Has your experience in adapting Project English materials given you a taste for (or a more tolerant attitude toward) curriculum revision?

6. Would you be interested in supporting or participating in further curriculum revisions here or elsewhere?

7. Is it your view that we ought to be able to arrive at a curriculum organization which is teachable and learnable which covers the essential materials and which would remain relatively stable? If so, why or why not?

In addition to these questions, we ascertained the professional backgrounds, both pre-service and post-baccalaureate, of teachers involved in the Centers. We noted institutions from which teachers had graduated and also analyzed the extent to which experience teaching was a factor in the successful use of Project English materials.
The Results--General Description of the Accomplishments

With only one year having elapsed since the three demonstration centers were started, it is somewhat premature to evaluate the success of the curricular revisions that are taking place. All three systems are still working on revisions of their curricula and adaptations of many of the Project English materials, and the interviews with teachers from the three schools have clearly shown that revisions accomplished to date are not viewed as "completed"; rather, the work of the past year is viewed as subject to continuing revision as conditions change. But while there are considerable variations in the goals, procedures, and successes in the three schools, we can report that each is making excellent progress in the adaptation of Minnesota Project English materials and is establishing a process of continuous curriculum improvement that has already yielded very promising results. In this section of the report, the differing purposes, procedures, and results of the past year's programs in the three schools are reported in relation to their particular settings, drawing whatever inferences are plausible regarding the implications of these experiences for other schools concerned with curriculum revision in English.

The past year's work in the Detroit Lakes Demonstration Center has centered upon the adaptation of Project English materials to a new "quarter course" curriculum, the refinement of the curriculum work which was done in the summer of 1966, and an extensive curriculum demonstration program. In 1965-66, the senior high school was awarded an E.S.E.A. Title I grant which was used to finance a large-scale curriculum revision. In an attempt to provide a broader range of curricular offerings to students of varying abilities, a system of twelve week courses was developed, and a four-track grouping pattern was established. The primary rationale for the new system is that it provides greater flexibility for matching course offerings to student achievement and interests. Grade level designations, for all practical purposes, are largely eliminated.

During the summer of 1966 the faculty participated in a full-time workshop to design courses for the 1966-67 school year. Project English materials were made available at that time, and the English department adapted the units to the quarter course system, in many instances drawing materials from several units of different grade levels for a particular course. Teachers also examined materials from other sources, including other Project English centers, incorporating that material where appropriate. During the school year the first series of quarter courses was taught, and teachers traded assignments each quarter in order to gain experience with each of the new courses. Throughout the year the English faculty met in regular workshops to discuss courses and make revisions. New courses are still being written and will go through the same process of quarterly evaluation and revision.

The accomplishments of the Detroit Lakes faculty to date are most impressive, and the outlook for continuous curriculum improvement is highly promising. They are making excellent uses of the Project English materials, appropriately regarding them as suggestions for adaptation rather than as packages for acquiescent adoption. All indications suggest that teachers are enjoying the curriculum revision, making genuine and significant changes in their teaching, and effecting major improvements in the English curriculum.
In addition, it should also be noted that Detroit Lakes has been particularly successful as a demonstration project. The new program has aroused widespread interest among schools in the area, and Detroit Lakes faculty members have conducted demonstration activities on a large scale, both in the school and in workshops and conferences on the teaching of English.

The Burnsville Project has differed from the Detroit Lakes situation in a number of important ways. Demonstration of the Project English materials has been a relatively minor emphasis in this program, with considerably more effort being spent on revision and adaptation of the Project English materials themselves, with the addition of supplementary materials in the form of student readings and audio-visual materials.

The Burnsville English Department participated in a locally-financed summer workshop in 1966 at which plans for major curriculum revision were made. Much of the summer work was directed towards examining a wide variety of possible materials for trial use in the 1966-67 school year. Primary emphasis has been placed on the trial use of an extremely wide variety of materials, keeping anecdotal records of the results of experimental uses, and gathering evidence for subsequent and continuing revision.

Special attention was devoted to gathering resource materials, a task to which the workshop participants devoted themselves most enthusiastically. The specially-developed sets of audio-visual materials, including special sets of transparencies for use with each of the revised units is probably without peer, even though the curriculum revision is still in its infant stages.

Two other elements of the Burnsville development are worth citing. The workshop staff had the services of a consultant who worked in a "problem-solving" capacity one day weekly during the period of the workshop. In addition, the English faculty met regularly with a similar workshop group in the Social Studies to exchange information and progress reports. The consultant for that group also met occasionally with the English workshop, especially on matters relating to the study of language from an anthropological approach.

Of the three demonstration schools, Hopkins is the largest and has the longest history of involvement in curriculum revision. Teachers from several departments have been involved for a number of years in curriculum development projects and have been working with new materials for some time. Several Hopkins teachers were involved in the writing of materials in the early stages of the Minnesota Project English program. Consequently, the teachers' awareness of Project English materials and the assumptions upon which they were developed is somewhat greater in Hopkins than the other schools. There are, however, a number of factors which make it very difficult at this time to accurately generalize about the overall effects of the current project on curriculum revision.

The Hopkins school system has grown very rapidly over the past ten years, and until very recently there was no general design for the English curriculum throughout the system, nor has there been, until recently, any pressure for such
a design. In addition, the district is very large and it has been most difficult to bring all of the English teachers together to discuss curriculum matters. A further complication lies in the fact that there has been a large turnover of teachers throughout the system over the years and, while some of the teachers had had considerable experience with Project English materials, many have had none at all; in many cases this past year was the first experience with such materials for some of the teachers.

It should also be noted that the English departments in the three Hopkins schools in which Project English units were offered regarded such units as optional teaching materials which teachers could use in whatever manner they felt appropriate. As a result, the Hopkins teachers had varying attitudes regarding cooperation with each other on the revision or adaptation of the materials. In individual cases highly successful uses of the Project English materials can be cited. In other instances, teachers have used only some of the units with varying degrees of success and some teachers have not used any of the units during the past year.

By this time next year it should be much easier to assess the effects of the Project English materials on the Hopkins English curriculum as a number of important developments will be taking place during the 1967-68 school year. For example, the district has received a Title III grant to develop a system of modular scheduling as part of the work required in setting up this system. The Hopkins faculty have been asked by the new superintendent to develop and describe curricula in each subject area from kindergarten through the twelfth grade. As the faculty committees develop these descriptions, it will be much easier to see which Project English materials will be used, and to ascertain the extent to which the "adaptive approach" will be followed by the teachers in their use of Project English materials.

The Results—Summary of Responses to the Questions

1. What elements in each setting seem to produce or inhibit the attitude for change on the part of teachers critical to successful use of the Project English materials?

Elements which seem to produce favorable teacher attitudes toward curriculum change are multiple and varied among the three systems. All of the systems indicated that an administration favorable to change was critical. The willingness of administrators to support the programmatic changes suggested was frequently mentioned as a factor critical to success of a program. Such support, it was felt should include provision of time and resources for the necessary work of revision. The administration of the schools in each of the three systems provided financial support in some way as a method of beginning the curriculum revision; in most cases the method was the funding for a local workshop.

The two systems in which the work of curriculum revision was most rapid and most successful reported unusual administrative support worthy of special mention here. In these two systems the administrative support went considerably beyond the encouragement, or funding, or "commitment" stage to the point of...
actual persistent participation in the process. In one system, felt by the staff of the Project English Center to be the most successful in its year's work, the administrator participated in all sessions, contributed to discussions, and occasionally helped, in subtle ways, to shape direction of the revision. The least successful center, interestingly enough, had an administration which "was interested," "gave encouragement," provided funding, but did not become actively involved in the process of curricular revision in any intimate way. It is interesting to note that the administrators who were least involved in two of the systems felt that the result of the work would be a relatively stable course of study to serve the schools for a number of years to come; the "most-involved" administrator saw little likelihood of a stable, unchanging curriculum, and saw the process of curriculum development as a process of continuing change.

A second element producing attitudes favorable to change resided in the teachers themselves. In every case, the idea of "grass roots" involvement could be detected; in each school it seemed acceptable, if not downright fashionable, for teachers to demonstrate themselves as amenable to change. Whether this is a reflection of administrative interest and encouragement or not is difficult to ascertain; what is certain is that this feeling exists in the three systems studied.

Part of the reason for this experimental attitude may relate to provision of funds which made the teachers feel that they were being paid to do a professional job as a part of their normal professional tasks, and not something added at the end of a tiring school day. Whether a reflection of administrative attitude or a function of being paid is moot, but the attitude was clearly demonstrated, especially in the personal interviews.

A third element producing attitudes favorable to changing the curriculum lay in the dissatisfaction or frustration which the teachers felt regarding their work on the present curriculum itself. Teachers as well as administrators in each of the three systems confessed to frustrations, especially relating to sequence and articulation in the program in English. In the most successful center, there was expressed the feeling of a need to develop a broader conceptual framework for the program in English, to structure the work in English so that it more accurately reflected that system's own answer to, "What is English?" It should be pointed out that the feeling of dissatisfaction with current programs in all three systems related less to the substance of the curriculum and more to problems of scope, sequence, and articulation. In the two school systems which seemed to be most successful in their program of curriculum revision, substance also seemed to be of considerable concern.

In the system which seemed least successful in its work of curriculum revision, there was not only less of a feeling of dissatisfaction on the part of the teachers, but rather a more marked feeling of assurance that the current program seemed to be satisfactory.

Other factors which seemed to produce attitudes favorable to change related to community involvement. In the most successful center, the students and parents were directly involved in the process of change. Enthusiasm of
parents and students seemed to reflect enthusiasm of the teachers and seemed to act as a charge to further change in the total program.

All of these factors seemed to have combined to bring about an attitude best described as a shift from a sense of isolation to one of definite professional involvement, including a willingness to cooperate with others, regardless of the source, in finding new ways in which to improve the English curriculum.

Two factors can be identified as hindrances to producing favorable attitudes. If the teachers involved have little personal stake in the changes, the likelihood of success seems minimal. This factor seemed to operate only in the large, multiple-school system, and may be a function of size. If low premium is placed on cooperation, the probability of success in curriculum revision is very small indeed; the three systems studied seemed to bear out the notion that teacher-to-teacher cooperation and communication is essential.

2. What factors in the community, in the school, in the organizational format, and in the materials themselves aid or impede the successful uses of the Project English materials?

The three demonstration centers had, as has been previously described in this report, varying characteristics which can be described as aiding or impeding curricular change. Obviously, a number of common elements aiding successful use of the Project English materials were characteristics in all three operations. These can be summarized briefly:

a. Community Factors: In each of the communities a neutral or favorable attitude existed among the citizens regarding curricular change. In no situations was there negative reaction of any consequence.

b. Organizational Format: The departmental organization seemed to be of considerable aid in curricular revision. Where strong departmental chairmen did not exist prior to the establishment of the centers, the need for such personnel became rapidly apparent and in each instance a leader emerged.

The size of the department seems to make a difference in the extent to which the Project English materials could be successfully used. In the two smaller centers, where the departmental staff was smaller, there emerged more readily a spirit of cooperation and a willingness to exchange information and ideas. In the one center in which a general curriculum committee operated, that body was viewed as a definite asset.

c. Relationships with Administrators: In the instances in which teachers felt that administrators were contributing members of the team there seemed to be a more successful use of the materials developed in the Project English Center. The support of administrators was obviously required for the fiscal commitment, but
the more successful program also was characterized by administration which was "physically involved" in the ongoing process of revision of the curriculum.

d. Factors in the Materials: Some of the Project English materials, it was felt by some of the teachers, were too easy and too detailed. Suggestions for improvement will be detailed in a special report to be published by the Minnesota Center for Curriculum Studies in English. There seemed to be no inherent defects in the organization and format of the materials if the teachers viewed the units as guidelines for adaptation, not as packages for adoption.

Several factors can be cited which served as impediments to successful use of the materials:

a. Lack of finances for underwriting workshops, attendance at conferences, purchase of needed materials.

b. Limited resources or inability to secure materials once identified (even when financial resources were available).

3. What are the personnel requirements for curriculum change in regard to the Project English materials, with particular emphasis on the pre-certification preparation?

General requirements

The personnel requirements necessary for successful use of Project English materials can be readily identified. In each of the three demonstration centers at least one strong leader emerged. He was not necessarily the department chairman, but frequently he fulfilled that role and was ultimately accorded the title and responsibilities of department chairman. Nor was this development a sheer happenstance. All fourteen individuals interviewed felt that a strong department chairman was a necessity.

An interesting relationship can be detected in analyzing the education of the strong leaders. Each had been involved recently in either an NDEA English Institute or a Project English workshop. Other members of the faculties who had also had recent in-service work or campus-located graduate work (but not focused as were the institutes and workshops) did not seem to emerge as leaders. Either the focused institutes and workshops developed leaders or seemed to attract them. In the most successful program the department chairman also served as a point of liaison with the community; he worked with PTA's, civic and lay groups as a type of "public relation's" specialist.

The personnel requirements of the teaching staff can also be described. In most instances, the faculties were young, flexible in attitude, and with only a few years of teaching experience. They were "less set in their ways," "more self-critical," "more tolerant of criticism by others," "more cooperative," "highly venturesome."

20.
In several instances administrators seemed less worried than heretofore about the problem of turnovers, as it seemed to them that the newer teachers seemed more nearly to match the requirements of a successful curriculum revision program. In at least one instance the administration of one of the centers felt that the establishment of the center, with its attendant activity and publicity, had tended to attract young teachers who wanted to be "where the action is"; the same administration suggested that they foresaw few problems in retention, even though teachers who had been through the program had become more "visible" and were receiving attractive offers.

Although it would be difficult to sketch the personal characteristics of the successful demonstration center teacher, some general conclusions can be drawn when all of the participants are taken into account. Prior teaching experience, type of institution or pattern of courses in the major in English, sex, age--none of these factors seem to be nearly as important as a sense of dissatisfaction and frustration about current practice, together with an openminded willingness to seek new ways of going about the business of helping students to learn.

The participants in the demonstration centers all felt that a language arts curriculum consultant in the system would have been of immeasurable assistance in the process of revision of the English curriculum. It was clearly felt that this individual should not be a general consultant, but should be specifically trained in and assigned to a leadership role in curriculum revision in English from kindergarten through the twelfth grade.

The use of consultants in the programs is worthy of mention here. All of the centers used consultants from outside the center as well as individuals who were on the center's faculty. The pattern which seemed to prevail had the "outside" consultant more heavily used in the developmental stages. The "outside" consultants were most frequently used to discuss assumptions, philosophy, and conceptual framework of the Project English materials as well as to identify sources of information and materials. The "inside" consultants were employed at the task of explaining teaching procedures, specifically relating to Project English units under consideration.

The participants in the three centers felt that a continuing in-service education program was a necessary concomitant to a successful curriculum development program. They saw this program as one in which there was a judicious mixture of college personnel interested in problems of secondary school teaching and of local personnel who could carry on the major in-service work. The administrators felt that the major burden should be carried by "inside" consultants; the teachers in the three centers tended to lean more heavily toward the case of "outside" consultants.

Pre-service Educational Requirements for Personnel

One of the items of considerable concern to the staffs of UMREL and the Project English Center was the extent to which pre-service preparation of teachers aided or impelled successful use of the materials. No particular pattern of
preparation or prior experience seemed to emerge as a factor in successful use of the Project English materials. The teachers in the three centers did feel that three elements were lacking in their pre-service preparation.

The first of these deficiencies, mentioned most frequently by teachers and administrators alike, dealt with the absence of or inadequate attention paid in preparatory programs to information about the nature and uses of language. The teachers did feel that they had some vague notions about the structure of language, but that they had had almost no preparation for the new kinds of language materials which are appearing in sources now more readily available to English teachers, including Project English materials from the University of Minnesota and elsewhere.

The second deficiency which teachers identified in their pre-service preparation programs related to the lack of development of a broad conceptual framework of the discipline. That is, English teachers very frequently felt that they had pursued a number of discrete courses but that no attempt had been made to synthesize these discrete courses into an overall perspective of the discipline.

The teachers and administrators in the three demonstration centers all felt that their prior work, both pre-service and in-service, had not adequately prepared them for the process of curriculum revision. In most instances these individuals felt that they had not been adequately trained to undertake cooperative endeavor with other school personnel. They felt that this kind of training should form a critical part of the pre-service preparation program in order to avoid the "self-contained-classroom" kind of attitude which seemed to characterize many of the teachers.

It should be pointed out that involvement in the work of a demonstration center seemed to trigger the teacher's desire to pursue additional graduate work at a college or university. All of the leaders and many of the teachers in each of the three centers pursued such additional work and in a number of instances, these teachers indicated that their involvement in the process of curriculum revision had focused attention on certain areas of the subject in which they felt they needed additional study.

4. What evidence is there that the Project English materials themselves can act as a catalyst for continuing curriculum change?

It should be noted that no attempt is made in this report to document a direct causal relationship among the materials themselves, the process of adaptation, and resulting attitudes favorable to activities directed toward continuous curriculum development. In the case of each of the three demonstration centers there seems to have been an important catalytic effect within English departments. In every instance teachers who were not originally involved in the revision and adaptation became involved sometime during the year; this is obviously an important effect. In addition, the use of the materials and the process of adaptation seems to have brought about curriculum development and revision in other aspects of the English curriculum. The extent and probable duration varies considerably among the three centers, and within individual schools, but the tendency of the Project English materials to serve as a catalyst seems to be quite clear.
In two of the three demonstration center projects, involvement in the process of adaptation and revision has led to successful application for a Title III grant. In one instance the new Title III grant is aimed at continuing the process of curriculum revision especially focused on the English curriculum; in the other instance the Title III grant is to continue the process of curriculum revision and to expand it by establishing a scheme of modular scheduling.

Within individual centers, attention can be called to curriculum development in departments other than English departments. In at least one case this development is attributed to the prior involvement by the English department in the work of the demonstration center. In the several instances in which other departments have become involved in similar curriculum revision projects, the reasons given seem to suggest that members of other departments tended to follow the example of their colleagues in English departments, saw that it was fashionable to be involved in the process of change, and showed a greater tolerance for the process of revision. It was suggested in this context that it is easier to become involved in such a program after "some other group of teachers" had set the pattern.

One of the interesting ways by which one can measure the catalytic effect of the use of the materials and the resulting process of revision and adaptation lies in a quantitative analysis of the development of materials not included in the original Project English units. If the process of adaptation and revision is a meaningful process, it should be reasonable to expect that a variety of new sources should be explored in an attempt to add new materials to the program. In two of the three demonstration centers one can point to rather sizable additions by way of supplementary readings and audio-visual materials. The evidence seems to suggest that once a faculty becomes intensively involved in a major curriculum development and revision program, that personal involvement itself becomes a major contributing factor in willingness to seek out new resources from which to draw for local adaptation.

Another measure of the catalytic effect of the use of such materials can be described within the context of the extent to which the use of such materials results in an institutional climate which is describably different, hopefully better, but at minimum amenable to the continuing process of curriculum change. In all of the three demonstration centers the teachers and administrators involved felt that the institutional climate for change has been much more favorable since the introduction of the Project English materials and the initiation of the revision and adaptation process itself. The quantitative criterion most frequently pointed to in this regard was the fact that each of the three centers could point to increased local funding for continuing curriculum revision, often through provision of funds for special summer workshops or attendance at a college or university to pursue additional graduate work.

In the preceding section of this paper the effect of prior experience and education was discussed in the context of successful use of the Project English materials. In this section, it should be pointed out that involvement in the adaptation and revision process which began with the introduction of the Project
English materials seems to have led an inordinately large number of teachers involved in each of the three centers to pursue additional in-service or graduate work.

One method used in this survey to determine whether the use of the Project English materials served a catalytic function was to ascertain the extent to which teachers viewed the present effort as leading to a "stable" curriculum. Since the materials were developed from the philosophical posture that they must be changed and adapted to suit local variables, one would assume that one criterion of the catalytic effect of such materials would be the extent to which teachers perceived the end product as a matter subject to constant revision, updating, and modification rather than as a stable product not needing revision in the foreseeable future.

Such an attitude was characteristic of all of the teachers involved in the three demonstration centers and of the administration which was directly involved in the process of revision at one of the demonstration centers. In the one demonstration center in which administrators did not participate directly in the process of revision the idea that a "stabilized" course of study would emerge as the end product seems quite evident. In almost every other case, however, the teachers and administrators responded that the curriculum did need to be adapted constantly to the inputs of new information, new methods of teaching, new technologies, and new modes of learning. In this context, it is worthwhile noting that several teachers indicated that the textbook would be less important in the future in shaping the curriculum in English.

Several side effects could be detected which may or may not relate directly to the process of curriculum revision resulting from the introduction of the Project English materials. With the exception of the large, multiple-school system in which one of the demonstration centers was located, the problem of recruitment of new teachers and retention of current faculty seemed to be diminished to some extent. In one instance the teachers and administrators were willing to attribute this effect to the involvement in curricular revision.

The findings discussed thus far have dealt primarily with the process of curriculum revision in the schools, particularly as it is affected by the adaptation of Minnesota Project English materials. But what can be said concerning the evaluation of the materials in terms of measurable effects on the students involved in such a program?

Although there has been to date no tightly controlled experiment on the effects of Project English materials on student performance, a study is presently underway which provides a pilot test for such an experiment by determining the value and validity of a test of "linguistic sensitivity" developed by Stanley B. Kegler, Donald K. Smith, Rodger Kemp, and George Robb. This study grew out of a situation in which experimental controls on independent variables were not possible, but in which a good deal of information about individual subjects was easily obtained. These subjects were senior high school students at the Hopkins, Minnesota demonstration center who had had varying degrees of exposure to Project
English materials during the tenth, eleventh, and twelfth grades. Some students had had no experience with the materials. The test of linguistic sensitivity was administered to these subjects in the spring of 1967.

Specifically, the purpose of the study is the development of scoring keys for the test of linguistic sensitivity. The first method of developing such keys involves doing an item analysis on each possible response in every item, comparing the students who have had exposure to Project English materials in each of the three senior high years with those having no exposure in any of these three years. The purpose of these comparisons is to discover what sections of the test, which possible responses do discriminate between those who were exposed to Project English materials and those who were not. If the Project English and non-Project English groups are found to be drastically different from one another in terms of other measures of these students' abilities, the researchers will attempt to equalize the groups statistically using analysis of covariance techniques. The results of this item analysis will then be used in a prior contrasts analysis of either variance or covariance, comparing those students who have had one or two years of Project English in varying combinations.

The second method of developing a scoring key will involve having the designers of the Project English materials take the test. Responses in which there is 75% agreement between these individuals will be counted as correct responses and will be used to score the student responses. As in the method outlined in the above paragraph, student responses will be analyzed using a prior contrasts technique comparing all of the groups with varying amounts of exposure to Project English materials. This analysis will not only yield information about the effects of the materials, but should lend some insight, when compared to the preceding analysis, as to how well the developers of the Project English materials were able to predict the effects of the materials on the students who used them.

Results of this study should be available by June of 1969.

The fifth and final stage in the procedures of the Minnesota Center for Curriculum Development involves the dissemination of results and publication of materials. In order to acquaint teachers, curriculum specialists, and administrators with the work of the Minnesota Project English Center, a booklet was prepared which discusses origin, purposes, and key personnel of the center; underlying assumptions and central concerns of the curriculum materials; grade level emphases and curriculum development procedures of the center; and teacher preparation, demonstration, and evaluation activities of the center. The booklet also contains an entire sample unit and an annotated list of the Minnesota Project English units, which is included below.

SAMPLE MATERIALS:

Annotated List of Minnesota Project English Units

Unit 701 - Introduction to the Study of Language

Introducing the seventh grader to selected fundamental generalizations about language and language study, the unit establishes a groundwork for the definition of language that is used throughout the Minnesota Project English
materials. The unit is intended as an introduction to some basic language study concepts, as well as an introduction to topics which are treated in later units, drawing upon this initial introduction. An understanding of language as a system of learned, conventional oral symbols is the most important objective of the unit.

Other concepts developed in the unit include:

...how language is learned in personal, social, and cultural settings,
...how language resembles other coded systems,
...how human language is distinguished from animal communication,
...elements of the communication process in language,
...elements of the linguistic code as a system,
...the personal and social importance of speech,
...elements of the process of argumentation.

Through a series of readings about Helen Keller's experiences learning to use speech, the student is introduced to some basic characteristics of spoken language by examining Miss Keller's first attempts to produce speech sounds, and these early difficulties also serve to illustrate the personal and social significance of language. Following a brief discussion of some of the basic elements of word-referent relationships, students examine the notion of language as a coded system involving "coding" procedures in both the written and spoken forms. Moving to a more general level of discussion, the student's attention is directed from individual language learning to the question of how and when mankind learned to use language. Some elements of the argumentative process are introduced as students consider several theories of language origin. These discussions then lead into the question of animal communication and its relationships to human language. Finally, the unit concludes with a section on the phonemic, morphemic, and syntactic elements of language.

Unit 702 - Changes in the Meanings of Words

Expanding upon the discussion of meaning in Unit 701, and partially functioning as an introduction to the study of semantics, the unit emphasizes the representational relationships between words and their referents, particularly in terms of changes of meaning and degrees of abstraction. As a specific example of meaning change, the unit treats the processes of generalization and specialization. In a number of later units in other grades, other types of meaning change will be studied, drawing upon the introduction from this unit.

Concepts developed in this unit include:

...the fact that language, produced by the community, continues and inevitably changes and varies to meet the community's changing and differing needs.
...that language, in part, is an inventory of word-referent relationships which can be utilized at widely varying levels of abstraction.
...the process of categorization humans use in the process of meaning.
...the relationships between subordination and superordination in terms of language categories.

26.
Of considerable importance to this unit is the student's understanding that changes and variations in meaning, at any given point in time or over a longer period of time, are natural human responses to the changes and variations in the community's demands and needs. The ability of a student to simply verbalize the notion of specialization and generalization, for instance, is not the purpose of the unit. However, by examining this process, as well as the process of change through levels of abstraction, the unit intends to broaden the student's understanding of the phenomenon of change and the social influences that produce change in language.

The concept of levels of abstraction is introduced, through analogy, by the examination of maps showing varying degrees of detail and scale. In a series of classroom activities, students apply the process of selecting details at differing levels, based on the purpose of the speaker or writer. Abstraction is related to categorization and outlining through a subsequent series of activities, among them a classroom game in which students present words and ask opponents to present another word which is either subordinate or superordinate to it. The processes of generalization and specialization are studied as students read the short story, "The Most Dangerous Game," keying on the uses of the "hunt" and "animal" in the story.

Unit 703 - The People Who Study Language

The major purpose of this unit is to expand the student's view of language by studying some of the various disciplines within the general category of language study. The purposes and methods of such disciplines as anthropology, psychology, linguistics, psycholinguistics, and rhetoric are examined with respect to their common interests in language. The centrality of language to human activities is reinforced by the student's understanding of the commonalities between seemingly diverse disciplines as he examines their interests in language.

Most of the language concepts developed in the six-year sequence could be listed as applicable to this unit, as almost any later unit could be related back to the possible discussions in this unit. One of the central purposes of the unit is to introduce to the student the breadth of language study included in the six-year curriculum he is now beginning. The teacher would have an extremely broad range of possible topics to emphasize during this unit, and certain choices undoubtedly must be made if time is limited.

To maintain the interest of the seventh grader, most of the material in the unit is developed through a series of hypothetical letters from a Peace Corps volunteer who has been assigned to a country with a language and culture widely different from his own. As he experiences problems in learning the new language, he seeks advice from his uncle, who relays back information from people in the disciplines listed above. This device provides flexibility, as the letters can be revised or new letters can be written by the teacher to introduce other aspects of language and culture or to emphasize certain aspects for more detailed study.
Unit 704 - Introduction to Transformational Grammar

Unit 704 tries to establish the simplest phrase-structure operations and notation techniques fundamental to the understanding of a generative-transformational description of grammatical relationships in English sentences. The most important emphasis in this unit is on the understanding of binary structure, using treebranch diagrams to represent structural, semantic, and phonological contrasts. All examples used in this unit are extremely simple relationships, with more concern for the procedures for representing them than for the mastery of where this is leading to. Once these fundamentals are understood, students construct certain lexical and structural items for a simplified infant language and apply the rules they have learned to generate admissible "sentences" from this limited vocabulary of semantic and phonological items.

Unit 705 - Syntactic Relationships

Unit 705 is a follow-up to Unit 704. It is an attempt to present the notion of syntactic relationships as flowing from the binary subject-verb relationship in the English sentence. The classroom procedure, based on computer-type programming, teaches classification of grammatical relationships through card-sorting techniques. In a limited way, working from a small corpus of carefully chosen sentences, the sorting establishes the primary syntactic relationships (predicate nominative, post-verbal modification, and direct object) and experimentally continues to teach a simple system of notation.

Unit 801 - Our System of Spelling

This unit does not attempt to solve the problems of spelling inconsistencies in the English language, but it does try to explain some of the influences upon the system over an extended period of time.

Some of the more important concepts in the unit include:

...the notion that the English spelling system often fails to represent actual speech sounds.
...the historical bases of our spelling conventions.
...the irregularities of spelling as results of dialect changes, borrowings from other languages, faulty assumptions about the nature of language.
...relationships between phonemes and graphemes.
...the feasibility of spelling reforms.

After surveying a number of historical influences on spelling, stressing the influences of Middle English on Modern English, students are introduced to the concepts of the phoneme and the grapheme. Using this understanding to see what spelling might be like if the written language were to accurately represent the spoken, students discuss several attempts to reform the spelling system, with primary emphasis on the feasibility of such reforms in the future. The general conclusion attempted is that reforms which would accurately match graphemes and phonemes are highly unlikely.
Unit 802 - Language Varies With Approach

Within varying contexts of language use, the unit attempts to increase the student's sensitivity to the rather complex interrelationships between spoken and written language. An attempt is made to develop the student's awareness to variations in language that are relevant to his roles as speaker, listener, writer, and reader. Emphasis is placed on the identifiable and inherent similarities and differences between written and spoken language, within the situational dimensions of formal-informal, standard-nonstandard, time, place, and purpose. Within a descriptive framework which provides an objective examination of situations, media, and usage, the rhetorical notion of appropriateness is heavily stressed.

Concepts:

...Speech is the primary form of language; writing is a secondary form.
...In addition to the words in speech, gestures, intonation, stress, etc. can be used to provide the listener with additional clues to meaning.
...Our system of writing does not provide accurate methods for easily communicating the gestures, intonation, and stress that accompany normal speech.
...The spoken situation provides the capability of immediate forms of feedback from the audience to the speaker.
...Until modern sound recording equipment was developed, the spoken language was far less permanent than written language.
...The variations of usage cannot easily be placed in discrete classes, but can be regarded as a continuum of overlapping conventions.

Following an introduction which reviews some of the seventh grade material on the nature of language, the unit traces some of the inherent and conventional characteristics of speech and writing, comparing the two media in terms of the communication model. Short passages describing dawn from Huck Finn, Tom Sawyer, and Life on the Mississippi provide interesting contrasts, demonstrating a rather wide degree of success in representing speech in written form. In these and other readings, the rhetorical principle of appropriateness receives heavy emphasis. Students are asked to examine the various aspects of the situation as guides to usage for effective speaking and writing.

Unit 803 - Structures of Time, Mode, Manner and Causality

Unit 803 is an approach to the specifically generative aspects of the new grammar begun in 704 and 705. Using the concepts of binary structure and the notation and diagrams already introduced, the procedure moves from a study of the auxiliary system and its effects on sentence time, mood and voice through a series of worksheets to a theoretical consideration of adverb classification, the generation of simple adverb clauses, and the transformations that form participles, gerunds, and infinitives. The main purpose of the unit is to show the students the essentially dynamic nature of syntax and some of the many varieties of paraphrasing, in the hope that their understanding of style will be matured through their study of grammar.
Unit 804 - Structures of Specification, Place, and Number

Unit 804 continues to develop the notions of generative grammar of Unit 803. For all practical purposes, the two units might even be offered as one. Nevertheless, the systematization of the material that is being taught now begins to take on proportions that seem to indicate some change in approach is necessary. In this unit, therefore, the concentration is more on sentence-writing than on the symbolic representation of grammatical rules, which should, of course, still be used in presentation and explanatory periods, but which need not be drilled beyond the point of recognition and/or working understanding. Grammatical relationships taken up are: the use of the article; the other determiners; application of the knowledge of the article to problems in pluralization, restrictive and nonrestrictive modification, and agreement; and application of transformational paraphrasing to the formation of pre-nominal modifiers, relative clauses, and conjunctive structures.

Unit 805 - The Dictionary: Describer or Prescriber?

The primary concerns of the unit are the purposes and methods of the lexicographer, and the attempt is to give the ninth grader a reasonable understanding of the nature of dictionaries, the information available in different dictionaries, the purposes for which dictionaries have been written, and the limitations of dictionaries. Within this framework, students are asked to examine several contemporary dictionaries, noting any differences in methodology, apparent or stated function, and especially the assumptions about the nature of language. The intent is that the student becomes aware of the weaknesses in viewing any single dictionary as the permanent source of all truths regarding language as he sees the rather substantial differences in the treatment of selected items in dictionaries at this time and from earlier times.

It should be noted that the nature and uses of dictionaries are not limited to this individual unit in the sequence. In several earlier units, as well as the units later in the sequence, dictionaries are used and studied extensively.

Unit 901 - Language Varies With Backgrounds and Interests

The two primary purposes of this unit are to increase the student's awareness of the ways in which language varies with the differing backgrounds and interests of those who use language, and to develop the student's abilities to adapt his own language behavior to more effectively meet the demands of a variety of communication situations. As in Unit 802, the concept of appropriateness is stressed. In order to appropriately suit his language to changing situations, the student must be aware of the relationships between his own background and interests and those of his listener or reader. Coinciding with such an awareness, of course, is the understanding that other people make adaptations of language for persuasive purposes when the student is the listener or reader, and an understanding of the adaptation can be important to the student as a rational listener.
Concepts:

...Language varies according to age, sex, educational background, occupation, and avocational interests.

...Such variations are sometimes necessities, since different groups need more precise categories than other.

...Variations can be used for social purposes, to identify "members" of a group and keep outsiders away.

Selected readings in fiction are used to illustrate some of the differences based on age, sex, and education. In the discussion of occupation and avocation, students hear tape recordings of a livestock market report, a professional football game, and an orbital space flight. Final activities include the technical demonstration speech and literature selections in which characterization is based upon the language used by the character.

Unit 902 - Changes in the Meanings of Words: II

This unit is concerned with the study of how and why changes occur in the meanings of words. It is hoped that the unit will develop understandings of several specific ways in which the meanings of words change; of the interpersonal relationships and the social values which cause such change; and of some general concepts related to change in language which have wider application outside the content of this unit. Additional value may lie in peripheral understandings. For example, the student may gain a greater tolerance for and understanding of the different meanings of words which he encounters in earlier works of literature; or develop an awareness of the richness of the vocabulary of his language.

In terms of specific subject matter, this unit deals with the systematic description of various types of lexical change, ignoring the systematic treatment of the history of these changes. Such treatments can be found in units 905 and 1201. The major focus here is on developing a taxonomy for describing various types of lexical change. The unit deals with degradation, elevation, radiation, euphemism, hyperbole and popular (folk) etymology. Abstraction, generalization, and specialization were treated earlier, in Unit 702.

Unit 903 - Approaches to Grammar

The intent of this unit, central to the Minnesota Project English materials in general, is to demonstrate to the student that there are many perspectives from which to study language and that it is dangerous to assume that any one of those perspectives is inherently correct for all situations and all times. More specifically, the unit traces some of the major developments in the study of grammar from ancient Greece to the present, illustrating some of the most significant differences in the interest, assumptions, and methodologies of grammarians. It is hoped that the student will avoid simply passing judgment on the merits of any one approach to grammar by gaining at least some understanding of the cultural influences upon the various grammars.
The unit begins with the somewhat descriptive Greek grammar as explained by Thrax. Switching to the field of astronomy, students are shown one of Ptolemy's diagrams of the planets—an impressive attempt at description if one overlooks the fact that Ptolemy has assumed the Earth as the center of the solar system. Students then examine an example of medieval grammar and compare the attempt to identify language universals with similar attempts in other fields during that time. Moving to the 18th century, students find a somewhat similar interest, as the 18th century grammarian, following the predispositions of his time, prescribes grammatical rules that are based on Greek and Latin writings. As the student examines the 19th century penchant for taxonomy in the sciences, as well as the interests in comparative study of cultures, he sees the descriptive grammarian following these influences with the use of structural linguistics. Finally, the current emphasis in physical science on discovering tenable rules which allow prediction is illustrated and related to the attempts of the transformationalist.

While the range of topics is broad, the intent is not for the student to learn specific details about each approach to grammar. The unit is successful, rather, if the student realizes that the approaches vary in response to the contexts in which they have been used.

Unit 904 - Structures of Emphasis in the Paragraph

The paragraph revision unit is the culminating unit of the transformational grammar series. If the students have grasped the dynamics of structure shifts, they ought to be able to move to some consideration of authorial intention and to utilize the transformational properties of syntax so as to further their grasp of style and purpose in the paragraph. The unit is essentially a resource unit, consisting of a series of paragraphs from published works, analyses of the syntactic emphases of each, and then exercises which direct the student to work toward shifting the structural emphasis; for example, from emphasis on time to emphasis on place, person, action, etc.

Unit 905 - A Historical Study of the English Lexicon

This unit is intended to introduce students to the historical study of language. As an introductory unit the crucial concern is the historical method rather than specific historical data. For this reason there is no attempt to develop the unit chronologically, nor is there any attempt to give the student the exact chronology of the history of the English language. Instead this unit attempts to give students an understanding of the several kinds of linguistic phenomena which, when viewed historically, help to explain the ways in which our language has developed. In other words, instead of treating the history of the English language in terms of a series of somewhat arbitrary historical periods, this unit attempts to see growth and change in language in relation to the history of the people speaking that language.

In addition, this unit limits itself to a consideration of the lexicon of our language. The major reason for avoiding the consideration of syntax, morphology,
and phonology is that ninth graders may not be ready to treat these matters profitably in the context of historical study. These areas will be covered in later units, especially Unit 1201.

Since the intent is not to provide the historical survey, the unit begins with consideration of current changes in the English lexicon, primarily those changes which have occurred as a result of technological advances in recent years. After examining these current changes, students begin looking back on earlier developments, particularly in terms of the relationships between language and the historical contexts. Of key importance, as in several other units, is the understanding that language change is a natural and inevitable result of social and cultural change.

**Unit 1001 - The Nature of Meaning in Language**

This unit's general purpose is to introduce the student to some of the complexities in the study of linguistic meaning by examining the relationships between linguistic symbols, their referents, the situation, and the people who interpret them. The unit attempts to give the student insight into the processes of meaning, to acquaint him with terms that are applicable to the analysis of meaning in practical and artistic language, and to familiarize him with methods of applying his understanding of meaning processes in his own speaking and writing. The use of several dimensions will point out the complexities of meaning, and it is quite likely that students will find these somewhat overwhelming. On the other hand, the terms to provide operational bases from which students can attempt to study the complexities of meaning.

Topics treated in this unit include:

...the relationships between signs, symbols, and referents.
...the concept of extra-linguistic meaning.
...the primacy of spoken language.
...referential and expressive meaning.
...the communication model.
...the relevance of communication study to the study of meaning in language.

The unit begins with the reading of Ray Bradbury's short story, "The Kilimanjaro Machine." While the reference to the life and writing of Ernest Hemingway is patently obvious to those who have read Hemingway's works, the story is almost hopelessly obscure to the tenth grader. As certain clues about Hemingway (the referent of the story) are provided through class discussion, however, the story takes on meaning. This discussion then leads into the study of the relationships between words and referents, using Susanne Langer's analysis of signs, symbols, and referents as the major starting point. Readings from Paul Wendt and Vance Packard illustrate some of the extra-linguistic symbol processes, and selections by Charlton Laird and S. I. Hayakawa discuss aspects of linguistic meaning. The conclusion of the unit involves the application of the symbolization process to the process of communication.
While this unit is relatively brief, it serves as an important introduction to several units in the tenth, eleventh, and twelfth grades. It is not intended that this unit provide a comprehensive and conclusive survey of discourse. The essential concern, rather, is the asking of basic and tentative questions about the ways in which language is adapted to its purposes by the rhetorically sensitive writer or speaker and the ways in which language is evaluated and interpreted by the sensitive reader or listener. Such questions will be prompted by a general examination of discourse reflecting a wide range of purposes. Looking for rather general similarities and differences, while a major objective must certainly be the application of concepts, attitudes, and skills to each student's individual situation, this will not be reached in the course of this unit. This application might be started here, but there are later units in 10th, 11th, and 12th grades which deal more specifically with the modes and functions of discourses:

Unit 1003 - The Language of Exposition
Unit 1102 - Persuasion
Unit 1103 - The Nature and Evaluation of Argument
Unit 1202 - The Language of Evocation
Unit 1203 - Social and Psychological Implications of Language
Unit 1204 - Evaluating Persuasive Discourse

In this and the above units, a spirit of tentativeness and inquiry on the part of students and teachers alike is most important. In the light of this emphasis, the unit places very little value on prescribing technical terminology. Rather, the students are encouraged to develop terminology and models through inductive approach, and the teacher can provide the more technical terms later in the units. This tentativeness and the awareness that a theory of discourse must be carefully qualified may depend heavily upon the attitude of the teacher. Students should not be given the impression that there is one way of talking about discourse, or that there is one set of terms that encompasses all they might need to know in this area. Students should understand that we are often discussing these matters on a rather high level of abstraction, and that scholars have not yet been able to reach consensus on either the terminology or the subject matter in general. While the unit does include an attempt to construct a theoretical model of the functions of discourse, it should be viewed as a model—not as a prescribed formula.

Unit 1003 - The Language of Exposition

Drawing upon materials from Unit 1001 - The Nature of Meaning in Language, and Unit 1002 - The Modes and Functions of Discourse, this unit attempts to focus more specifically on the characteristics of expository language. As the term is used throughout this and other units, "exposition" refers to language outside the arena of overt controversy, as compared to more obviously suggestive discourse in some areas of persuasion and evocation. The earlier units have provided a very general overview of the functions of language and the characteristics of language used for the various purposes, and the spirit of tentativeness in attaching labels to the various forms is continued in this unit.
While the two preceding units are rather theoretical, this unit is intended to deal more specifically with the writing and speaking of students. Considerable flexibility for student writing and speaking activities is encouraged, and the unit could be divided into sections related to the year-long writing and speaking program for the tenth grade.

The two central divisions of the unit are the study of the organization of expository discourse and the study of the modes of exposition, including description, illustration, comparison and contrast, classification, causality, and definition, as these bear on the production and analysis of "report" language.

Unit 1005 - Grammatical Formations

As earlier indicated, the seventh, eighth, and ninth grade units on grammar are based upon a transformational approach. This unit, however, draws most of its materials from structural linguistics. It is the aim of the Minnesota Project English "language-centered" curriculum that the student learn to view language from more than one point of view, observing that there are several grammars, rather than only one, and that there is still disagreement as to which best suits the needs of language description. If students have studied Unit 903 - Approaches to Grammar, they should have a good background for the switch to a structurally based approach.

The unit is primarily concerned with the explanation of the concept of the phoneme. The first section, treating the suprasegmental phoneme, discusses pitch, stress, and juncture. The second section on segmental phonemes develops understanding of voiceless consonants, sound formation and grammatical signals, and contractions.

Unit 1006 - Learning Our Language

This unit is intended as an introduction to some of the primary aspects of language learning. As in other materials developed in the Minnesota Project English Center, the study of language as language provides the underlying framework to which the other skills, attitudes and concepts in the English curriculum are related. By studying the major ways in which the individual learns to use his language, it is hoped that the student will be better able to understand important aspects of language in general. Moreover, since language learning is so central to the general process of learning, the student should become somewhat more familiar with an important part of his school experience.

Since this unit includes material that is likely to be fairly difficult for the high school sophomore, it is recommended that units providing relevant background material be taught before this one. In particular, Unit 1001 - The Nature of Meaning in Language, and Unit 1005 - Grammatical Formations, should be taught before this unit. It is likely, then, that this unit will be taught toward the end of the school year.
The primary source for this unit is Words and Things by Roger Brown. It is highly recommended that the teacher read this book before attempting to teach the unit. While the unit can be taught without this background, the teacher will find the book most helpful, particularly the introduction and chapters I, III, IV, and VII. Some of the same material is available in a paperbound book, A Study of Thinking, by Bruner, Goodnow, and Austin. This book includes an appendix on language written by Roger Brown.

Within the unit, the language learning process will be examined on three levels: physical, psychological and cultural. The physical aspects are quite technical, and the treatment in the unit is brief. The teacher might wish to provide additional material on phonetics and/or phonemics; in this case, the early chapters of Words and Things will be helpful for examples. The psychological aspects of language learning are given the heaviest emphasis. The process of categorization is the central method of analysis in this section. The cultural basis of language, the last part of the unit, will probably be the most demanding for both the teacher and the students. While there are a great many interesting and important questions related to linguistic relativity, this material has the least conclusive research, so the answers to the questions will be most difficult to provide. Perhaps the value is in the asking of these questions.

Unit 1007 - Dialects and Social Stereotyping

This unit examines the relationships between dialects and language, providing students with an understanding of why dialects exist. Several types of dialects are covered in the unit, ranging from the regional variations to variations based on age and sex. Included in the unit are the dialects based on educational backgrounds, ethnic or national origin, and occupational dialects. More important than simply learning examples of dialect variations is the understanding of why such variations exist and what implications these variations have for social situations.

One of the primary concepts developed in this unit is that there is no universally "correct" or "proper" form of the English language which applies to any and all cases in which the language is used. Students learn that their own speech is not the correct form for all speakers of English, with all other forms being quaint or humorous or degraded variations; rather, the unit aims at the understanding that the student's own language changes considerably with differing situations and should be regarded as one or more of the dialects of the English language.

The unit develops the notion that the individual is often judged by his speech, but it also stresses that the criteria for such judgments will differ widely in changing situations. That speech reflects something about the characteristic of the speaker is handled in two ways. Students can readily see that language is useful for such purposes, but it is also shown that the use of language for value judgments also is capable of considerable destruction. The student is urged to use the analysis of language behavior for useful hypotheses rather than ignorant conclusions. Students are shown, for instance, how useful dialects can be in characterization in fiction, as well as the harm that can come from dialect stereotyping in social situations.
Unit 1101-A - Language Varies by Place: American English

This unit is intended to provide background materials on regional variations of speech within the United States, the causes for the differences and similarities, the work of the dialect geographers, and the study of dialect in American literature. The unit attempts to provide both a framework of important factual information about the American regional dialects and an understanding that the student's own speech is part of a dialect of English, rather than the "correct" form of the English language for all speakers of the language.

Throughout the unit, an extensive collection of historical and current data is used to supplement lectures, discussions, and student activities. Classroom activities are also supplemented by a series of projection transparencies, tape recordings, and phonograph recordings. The unit begins with a section on the historical basis for American dialects, tracing some of the important origins, influences, and migrations. The next section deals with current aspects of the major dialect areas in the United States. The following section treats migrations and influences of other languages in more detail. The last two sections are devoted to the work of the dialect geographer and the study of dialects in literature.

Unit 1101-B - Language Varies by Place: English in Other Countries

Intended as a companion unit to Unit 1101-A, which deals only with American English, this unit attempts to broaden the student's understanding of the dialect-language relationship by illustrating English dialects in other countries. Throughout the unit, students compare lexical, phonological, morphological, and syntactic characteristics of the various dialects, attempting also to relate important data about the cultures to the dialects.

The introductory section surveys the spread of the English language. Moving to more specific topics, the second section deals with countries in which English is the primary language. Included are Britain, Canada, New Zealand, and Australia. Students then examine countries in which English is secondary to the native languages, as in India. The unit then moves to the consideration of Pidgin and Creolized languages, showing how English can be combined with other languages. The next section then examines some of the influences of English on other languages, notably French and German. Finally, the last section poses the question of the future of the English language in other countries.

Again, one of the primary intentions of the unit is to avoid the conclusions that there is any single, "correct" version of the English language, concluding instead that these versions are all dialects of the language.

Unit 1102 - The Language of Persuasion

The purpose of this unit is to acquaint the eleventh grade student with one of the basic functions of discourse; persuasion. Persuasion may be defined tentatively as an attempt to secure a controlled response in action or belief through language. In Western civilization there are basically two methods of achieving
change; force and persuasion. Central to a democratic society is the rejection of force; we tend to distinguish the totalitarian society from the free society in part by the way in which change is affected. In the closed society, there is often only one system of beliefs; in the open society, characteristically, one finds a set of competing persuasions. Insofar as a society allows choice, it enables persuasions to compete in a free market place of ideas. A democracy holds that the best persuasion will ultimately be chosen.

Our society has made a commitment to persuasion as opposed to force; and persuasion is a vital part of the complex society in which we live. The success of government, business, social and personal relationships depends to a great extent on the understanding of the structure of persuasion.

Most speaking and most writing are, to a certain degree at least, persuasive. The short story must be convincing, its characters believable, and its plot solution plausible and satisfying. Poetry, too, is persuasive. The reader must gain a new insight of real importance. Editorials, partisan speeches, advertisements, radio and television commercials, magazine articles, and books are designed to set forth a certain point of view and to change thought or behavior accordingly.

This Minnesota Project English Center unit on persuasion is introduced in the eleventh grade to give students an opportunity to acquire a knowledge of persuasive discourse, an introduction to the means of evaluation of it, and practice in the use of persuasive speaking and writing. It is assumed that the students have had an introduction to the modes or functions of discourse in the tenth grade. (See MPEC units for Grade Ten) However, the unit on persuasion is so planned and constructed that it may be presented in the eleventh grade without the tenth grade introductory unit.

The unit is organized around three headings suggested by Aristotle as categories for analysis of persuasion. We consider first, the writer or speaker as persuader. The second part of the unit is concerned with writing and speaking as tools of persuasion; we include materials on semantics, the psychological methods of language manipulation, and the logical methods of language manipulation. In the third part, we consider the audience and the contest of persuasion, including the historical, sociological and psychological contexts.

This unit on persuasion may be taught concurrently with literature which illustrates the uses of persuasion. The unit may be used to introduce literary works or it may be used to suggest different approaches to literary words previously presented. The literary selections will be taken from American writings which constitute the literature usually presented in the eleventh grade. Numerous references to materials are made throughout the unit, and the appendices contain many materials which the teacher may find helpful for the unit.

**Unit 1103 - The Nature and Evaluation of Argument**

The four primary purposes of this unit, the fourth unit in a series of senior high materials on discourse, are:

38.
...to provide the student with a useful framework for the construction and evaluation of practical argument.
...to develop the student's proficiency in the use of logical, reasoned discourse, founded on acceptable bases of argumentation.
...to develop student awareness of the types of argument, as opposed to highly emotional or, of course, coercive measures.
...to promote the student's sense of responsibility for meeting ethical standards that are vital to free speech and inquiry.

The first section of the unit deals with Toulmin model for the structure of argument. Because Toulmin's model is descriptive and flexible enough to adequately account for arguments familiar to the student, it is hoped that students will be better able to apply it to practical arguments than students attempting to apply deductive logic.

Following this, there is a brief section on the modes of proof, discussing authoritative, substantive, and motivational proof. As authoritative and motivational proofs are discussed in Unit 1102, this unit then focuses on substantive proof, examining lines of argument, varieties of substantive proof, and the evaluation of substantive proof. A final section deals with the ethics of argument.

To develop these topics the unit relies heavily on a wide variety of readings and accompanying student activities. After the analysis of the arguments in the readings, students are asked to develop their own speeches or essays using the various approaches. The unit culminates in a classroom mock trial in which the evidence and testimony is provided, but not the deliberations or conclusions. Selected students write summations, and the remainder of the class evaluates on the basis of the earlier content of the unit.

Unit 1104 - An Outline of Grammatical Elements

This unit is intended as a survey of the most important grammatical elements in English, moving from the smallest and simplest to the longer and more complex. The unit attempts a synthesis of grammatical principles students have learned in previous grammar units in grade seven through ten.

The unit's organization is as follows:

...Rules, principles, or criteria for arranging meaningful elements in words, phrases, and sentences.
...Definition and survey of meaningful elements.
...Identification of four parts of speech.
...Five basic sentence patterns.
...Expanding basic sentence patterns by transformation.
...Syntactic structures of predication, complementation, modification, and coordination.

39.
Unit 1201 - A Historical Study of English Phonology, Morphology and Syntax

Unit 1201 is intended to be a historical study of the phonology, morphology and syntax of the English language. The unit concerns itself with both the methods and purpose of the historical study but it does not attempt to provide a chronological survey of the history of English. Such a survey seems inappropriate since the major concern of the unit is not with specific historical data but with the growth and change that characterizes a living language.

In terms of the specific subject matter treated in this unit two additional points should be made. A unit treating the history of English phonology, morphology, and syntax must of necessity, assume some knowledge of phonology, morphology, and syntax on the part of the students. If students do not have such knowledge a consideration of lexical change would probably prove more profitable. Finally, this unit is a limited overview of several complex areas of historical linguistics. While the treatment is in no way definitive, it is hoped that it is representative of the methods used and the conclusions reached by the study of these branches of language history.

Unit 1202 - The Language of Evocation

The purposes of this unit are three: first, the unit attempts to bring students to an understanding of the ways in which language can be used to evoke an experience; second, the unit attempts to provide the student with certain concepts and techniques which will enrich his understandings of the evocative language he encounters in reading literature; finally, the unit attempts to demonstrate that evocation is not limited to either language or literature.

The unit begins with the use of a tape recording of the Kennedy funeral cortege, as described by a radio announcer at the scene. While this tape recording is extremely difficult for students and teachers to discuss objectively, the relationships between language and context that produce emotional reaction are dramatically and effectively demonstrated. Following this, students read a number of poems dealing with Kennedy and the assassination, and the evocative elements of ritual and legend are illustrated.

The second section of the unit deals more specifically with the purposes of evocation and the relationships between evocation and motive. The units draw heavily upon Kenneth Burke's concept of "dramatism" for the material in this section.

The third section discusses the role of evocation in language, reviewing material on the modes and functions of discourse, discussing the human characteristics that contribute to emotional responses, and, finally, explaining the language behaviors which can produce the evocative response.

The last section of the unit is a series of study questions to accompany the reading of Golding's Lord of the Flies. Almost any of the concepts and techniques included in the unit can be applied profitably to the study of this novel, and there are many other literary works which, at the discretion of the teacher,
might also be used. Throughout the unit, literary selections are used extensively, but the teacher is urged to choose other selections if they would be better suited to the literature program in the particular situation.

Unit 1203 - The Social and Psychological Implications of Language

This unit could be used for either of two basic purposes, depending upon the background of the students being taught. For students who have previously been taught MPEC units, this one could serve as a summary and synthesis of earlier units which introduced concepts contained here. For students who have not yet met the concepts included, the unit could serve as an introduction to some of the social and psychological dimensions of language. The teacher will want to preview the unit, especially the outline following this statement, and decide on the most profitable way of using the unit.

The unit attempts to treat the social and psychological importance of language in systematic fashion. The assumption is made that twelfth grade students in their individual and classroom experience, have encountered instances of linguistic stereotyping, in-group language, or inferences of values drawn from language usage. The aim of this unit is to help students analyze these experiences as objectively as possible.

A spirit of tentativeness on the part of students and teacher is necessary in this unit. Much of the information and many of the activities of the unit are designed to raise questions about how social values are developed and transmitted through language. Teachers should not allow students to conclude that the final word on social and psychological problems is contained in this unit. Rather, students should be encouraged to recognize the unit for what it is: a glimpse at the substantial role of language in the social and psychological make-up of man.

Alternative introductions to the unit are provided. The more satisfactory introduction would, of course, be selected by the teacher. The material included in the other introduction will then follow as part of the unit.

Unit 1204 - The Evaluation of Persuasive Discourse

The purpose of this unit is to provide an introduction to the criticism of persuasive discourse. While it is geared primarily to spoken discourse, especially to the speeches of persuaders, this limitation is not meant to suggest that in this unit the teacher and the student should not be concerned with written persuasive discourse. That persuasive discourse is prominent in literature may be indicated by simply reflecting on the works of Jonathan Swift, Aldous Huxley, and George Orwell, to name a few. The student in this unit could profitably explore such persuasive discourse as George Orwell's 1984 or Animal Farm.

This unit is designed especially to serve as a follow-up to and application of the units on Argumentation (1103), Persuasion (1102) and Evocation (1202). The unit is constructed so that the student, if the teacher desires, could do a
term project by analyzing the persuasive discourse of a movement. A set of sample questions has been provided along with a speech (MacArthur's Address to the Congress) to which these questions have been applied. Sample student responses have been included in the discussion sections of the unit, but these should be viewed as desired responses rather than expected responses. Student discussion of these questions will probably range far beyond the responses suggested, and the discussion questions should be considered only a starting place for actual class discussion. From the class discussion, the teacher will probably want to draw responses somewhat similar in content to those indicated in parentheses. In others, the teacher may find it necessary to provide the answers suggested.

In the process of class discussion, the teacher may find that students do not fully understand material that has been assumed in this unit. To review that material, the teacher may want to refer to:

Unit 1002 - The Modes and Functions of Discourse
Unit 1003 - The Language of Exposition
Unit 1102 - The Language of Persuasion

During the summer of 1967 a grid was developed which is designed to explain the conceptual relationships among the above units at all grade levels and which permits the teacher to see how a given concept is returned to and expanded upon at succeeding points in the student's English program.

The most complete statement of the rationale for the language-centered curriculum of the Minnesota Project English Center is now under development and will be available by June, 1968. As well as explicating the historical perspective, the underlying assumptions, and the conceptual base of the Project, this monograph will present results of the experimental evaluation in complete form.

With respect to publication of Project English materials, the Center staff has found publication on paper to be economically unfeasible. Thus, all units will be edited by deleting copyright protected materials and will be made available in the fall of 1968 through ERIC at the headquarters of the National Council of Teachers of English.

CONCLUSIONS AND RECOMMENDATIONS

The following is an attempt to summarize, in general terms, the conclusions and recommendations formed by the staff of the Minnesota Project English Center over the six years in which we have been engaged in the project. In formulating these comments, we have attempted to outline conclusions which would constitute the assumptions that would underlie any further curriculum development or related work that would be done by the Center if the project were continued or expanded.
A key factor, which must be kept in mind throughout consideration of this report, is that the scope of the Center's task to date has consistently been limited to the process of curriculum development, both by design and by a number of external factors. Except as required for the performance of the initial development task, the objectives of the Center under the present contract have not included extensive experimental research, teacher education, or dissemination. From the outset, the staff have viewed the present development work as but one phase of a larger operation, leading to further development activities for particular types of students and for other grade levels, carefully structured experimental research studies, and large-scale dissemination and implementation efforts. Staff members have made a number of suggestions for these types of extended activities, but the outlook for funding such rather costly efforts makes it unlikely that further work can be done on the scale that some may have originally envisioned. As a result, much of the impact and potential of the language-centered curriculum developed in the Center has not yet been assessed fully, particularly with respect to impact on teachers and students. No student has been exposed to the six year sequence of materials in their present form, and this type of long-term exposure must be the basis of any controlled evaluation. The present situation suggests that such a study will have to be performed by individual researchers rather than the Center itself.

Limited statistical studies of the uses of the materials in classrooms have been performed and have already been mentioned in this report, but no major evaluative study has been undertaken under the present contract. The results of the study of Hopkins High School students will not be ready for several months, but under favorable funding conditions that study would provide the instrumentation for the kind of long-term study that has been suggested as a reasonable consequence of the work of the Center.

There is considerable evidence that the concept of the language-centered curriculum has generated wide national interest from classroom teachers and curriculum specialists, and the Center has received several thousand requests for units and other materials. As mentioned earlier in the report, less than two hundred teachers have been involved in pilot uses of the materials from all grade levels. Roughly one thousand copies of a booklet of "Selected Materials" have been distributed, so Unit 701 has been examined and probably used somewhat more than the other materials. In most cases, it is quite doubtful that the schools which have received materials have conducted controlled studies of classroom effectiveness; most have tried Unit 701, requested other materials, and expressed interest in further development and evaluation possibilities.

Since the primary interests of the Center's staff have been focused on the process of curriculum development and continuous curriculum revision, rather than adoption and evaluation of a specific, unchanging set of materials, most of the following conclusions and recommendations related specifically to the development and revision processes instead of the materials themselves. This reflects the general belief of our staff that the language-centered curriculum is properly a flexible, continuously adapted program rather than a given set of units which are adopted for an indefinite period of classroom use. This position makes the usual types of comparative evaluation rather difficult.
The Concept of the Language-Centered Curriculum

Over the last few years, with a major share of the impetus coming from this Center, the language-centered curriculum has gained wide-spread acceptance as a conceptual model for the English program in the secondary school. The extent of language study materials in recently published commercial texts provides an ample indication of this acceptance. In most cases, however, the language study materials are not as structured or as extensively drawn from the various fields of language study as the materials suggested by this Center. In some cases, as has already been mentioned, "language-centered" has been narrowly defined, centering around a particular approach to linguistics. The broader view of the language-centered curriculum, however, has been extensively discussed in professional publications and will be explicated in considerable detail in the monograph which will be published by the Center's staff.

In the classrooms where materials have been field tested, particularly in the three demonstration centers supported by Upper Midwest Regional Educational Laboratory, the language-centered curriculum has been established as a valid approach to curriculum organization. Particular units have met with varying degrees of enthusiasm, but the basic concept is widely accepted. This is especially true when teachers and administrators have accepted the basic concept and the responsibility to continuously revise and adapt materials to the local setting. Those who have assumed that the materials must be adopted in toto have been less successful, since the subject matter resources change so rapidly. Teachers who have been willing to continuously examine the widely varying language study fields, backed by administrators who support continuous curriculum improvement, have met with considerable success.

The comparative impact of the language-centered curriculum on students, as already mentioned, has not been fully explored and would require extensive longitudinal research efforts. High school and college English instructors have indicated some apparent effectiveness, and some freshman English course revision has been required for students who have had extensive exposure to the Center's materials, but all of this evidence is strictly impressionistic at the present time.

Adaptation versus Adoption

A number of factors have led the staff of the Center to the conclusion that the language-centered curriculum in English should be developed and maintained more as a process—a concept of curriculum development—than a product. At first glance, the units developed in the Center might seem to be rather complete instructional guides, offering very specific suggestions for the teacher, sample discussion questions, and the like. In preparing teachers to use the materials, however, the staff has consistently stressed that the study guides are merely suggestions—not to be followed precisely in a classroom situation. Heavy emphasis has been placed on encouraging teachers to discover other materials and instructional strategies that better fit the individual situation. It has been the position of the staff that at the present state of development in the various fields...
of language study, it is impossible to "engineer" a packaged curriculum, since new information from these fields, many of them relatively new fields of inquiry, is constantly being developed, refined, and revised. To adequately provide students with up-to-date instruction about language, the teacher and curriculum specialist must read widely in such fields as linguistics, rhetoric, psycholinguistics, anthropology, and sociology, regularly up-dating the course of study. While this process of continuous revision is a major obstacle to long-term, controlled research, it seems to be the only way of providing current material. Clearly the evaluation of classroom effectiveness must focus on the general approach rather than the specific materials.

Following the limited dissemination and field testing of materials and a number of in-service programs for teachers, staff members have further concluded that teachers who are better prepared strongly prefer the adaptation of the materials to local settings, rather than adoption of packaged materials.

Cooperation Between Liberal Arts Faculty, Education Faculty, and Classroom Teachers

Throughout the Center's history, the development and field testing of materials has depended heavily on the active cooperation of classroom teachers and college faculty from both liberal arts and education. This cooperation has had two major outcomes, the ability to draw upon resources from a variety of fields of language study and the encouragement of further cooperative work between the three groups. It is the belief of the staff that this type of cooperation has proved highly successful in this project, and that inter-disciplinary, multi-level cooperation is most necessary for further refinement of the concept of the language-centered curriculum.

In a slightly different, but related sense, the cooperation that is built into the materials has also been reflected in some of the schools where there have been major attempts to implement the language-centered curriculum. This is suggested earlier in this report where the demonstration centers are described, when English teachers have been able to encourage inter-disciplinary curriculum development efforts within the school, beginning with the English program and working into other disciplines as well.

Field Testing and Revision

The pattern of field testing that was established early in the Center's history has been continued until the final year. In almost all cases, units have undergone three and four revisions as field testing has yielded suggestions from classroom teachers. Field testing has been largely informal, with individual teachers using only certain units of their choice, providing the staff with general reactions and suggestions. The teachers in the Hopkins, Burnsville, and Detroit Lakes Demonstration Centers have provided more structured responses, many of which have been incorporated in final revisions. Teachers in the PESO Project in Amarillo, Texas, have also been using the units during the past year, but reactions cannot be gathered and incorporated at this point in the project.
The most successful field testing was carried out in the early stages of the project, where the participants in the first summer workshop taught first draft versions during the following year and returned for the second workshop the following summer. These teachers were given specific responsibilities and summer workshop time to refine materials.

Demonstration and Dissemination

Demonstration activities were carried out primarily in the three demonstration centers and at University High School, Minneapolis. The demonstration centers worked most frequently with in-service teachers from the areas and in some instances with pre-service college programs. The demonstration activities at University High School were directed mainly toward pre-service candidates from the University of Minnesota. In all cases the demonstration activities resulted in considerable interest among teachers—usually more interest than could be met with the limited dissemination capabilities of the Center.

The extensive use of the materials in these four schools was most important to the developmental efforts of the Center, providing much of the feedback that resulted in unit revision. As demonstration opportunities, each provided means of informing pre-service or in-service teachers about the language-centered approach. This was, however, both an advantage and a source of problems, as most teachers who participated in the demonstration sessions wanted immediate access to the materials for use in their own schools. Since the Center was capable only of providing copies of units to the teachers who were in the field testing program, the interest generated through demonstrations could not usually be capitalized upon.

Dissemination of information about the language-centered curriculum has not been a primary objective of the Center. No fully planned dissemination program of any scale has been undertaken, although through journals, workshops, conferences, and convention presentations, several of the staff members have frequently discussed the language-centered approach and the materials developed by this Center. Last year a booklet entitled "The Minnesota Project English Center: Selected Materials" was distributed to approximately one thousand people, partially through the Center and partially through the National Council of Teachers of English. Like the demonstration activities, however, this would have been more successful if the Center could fill subsequent requests for the rest of the materials.

In both demonstration and dissemination activities, personal contact was more successful than simple distribution of materials. When staff members or particularly well qualified faculty from the demonstration centers could be on hand to discuss the implications of the curriculum with teachers, the quality of information exchange was considerably higher. As a general conclusion, the staff has found that materials simply mailed to a school or to an individual teacher, with no personal contact and no attempt to discuss adaptation of the materials to the local setting, are not likely to be effectively or appropriately implemented.
Pre-Service and 'n-Service Teacher Preparation

Most of the results of the present project suggest that some form of teacher education program is needed before effective implementation can be made. Staff members participated in numerous workshops, both in the project and in activities sponsored by schools and colleges. The general reaction is that the subject matter involved in the language-centered curriculum is sufficiently new to most teachers to require at least some orientation and guidance for further individual preparation.

The regional laboratory is presently developing a pilot in-service training program which will utilize some of the approaches and materials developed by the Center, and, if successful with the pilot, the laboratory will seek funds to develop several more. The program being developed is essentially a multi-media kit which could be used by a local school district for short-term in-service programs, each kit dealing with a particular aspect of the English curriculum.

General Conclusions

In all, the Minnesota Project English Center has been a successful endeavor—in several ways more successful than would have been projected at the outset of the project. The concept of the language-centered curriculum in English has become widely accepted and promises to continue as one of the most persuasive curriculum approaches for some time. The language study concepts identified and developed in the Center's materials have been shown to constitute a most appropriate content for the secondary school program, providing an effective means of structuring the often fragmented English curriculum around the unifying theme of language. A fairly large number of classroom teachers have been exposed to the process of curriculum revision and continuous curriculum improvement. Inter-disciplinary cooperation that was required for the development of the materials has led to other significant cooperative work, both at the college and secondary school levels. It must be added, moreover, that much of the impact of the work of the Center remains to be assessed after the units and the monograph are released.

While the efforts of this particular Center have produced encouraging results, certain aspects of the Project English effort in general have proved to be rather disappointing, and we have noted that this disappointment seems to be shared in other centers and among English educators in general. The sources of these feelings, for the most part, have not been in the work of specific centers, as many have accomplished their objectives quite satisfactorily. The problems, rather, have been caused by essentially extraneous factors which may or may not, in time, prove unfortunate.

When the various Project English centers were first funded, each having either a different approach to curriculum development or a different focus in the research, development, dissemination, and implementation process, it was assumed that these efforts were initial in nature, leading to rather extensive subsequent efforts to evaluate the new curricula and develop appropriate demonstration
and dissemination programs that make the materials easily available to the teacher. It was also assumed that at least some of the curriculum development work would lead to other developmental activities. In our own case, the staff has identified several development projects that would lead reasonably from the current work, including the adaptation of the materials for disadvantaged youth, for the elementary schools, and for college English programs. In short, many expected a major, long-term attempt, on a national level, to capitalize upon the early work of the Project.

In the particular case of the Minnesota Center, it was assumed that our proper task was to focus on a manageable portion of the curriculum improvement process, especially curriculum development, which could be followed by appropriate efforts to disseminate and implement. As a result, large-scale dissemination, demonstration, and implementation programs were not included in the objectives of the present work.

These assumptions appear to have been largely unwarranted, since it has become most evident that further financial support for this type of curriculum work is not available. Most of the centers which concentrated on the development phase have not disseminated materials widely in the forms in which they were developed and field tested. In general, the classroom teacher who has been willing to try new materials and new approaches has had a most difficult time securing copies of Project English curricula. In this center, for instance, most of the units have been revised for the final time only in the last eighteen months, and it can be argued that they are now at the stage where they can be satisfactorily disseminated. To place the materials in the E.R.I.C. system, it may further be argued, is not likely to make them easily accessible to the classroom teacher in a useful form. Unfortunately, this is the only dissemination procedure economically feasible at this time; had we known at the outset that subsequent activities would not be possible, somewhat more effective demonstration and dissemination efforts could have been structured.

We are left with the uncomfortable impression that the Project English effort, except as it affected those who participated in the centers and as it is occasionally picked up by commercial publishers, will be the victim of the general shortage of development funds, the more recent interest in educational technology and individually programmed instruction, and highly inadequate dissemination procedures.