Submitted to the Faculty of the Graduate College of the Oklahoma State University
in partial fulfillment of the requirements for the Degree of MASTER OF SCIENCE July, 1980

$$
\begin{aligned}
& \text { Thesis } \\
& 1980 \\
& \text { G248 } \\
& \text { cop. }
\end{aligned}
$$



THE ROLE OF THE TEACHER IN CURRICULUM
DEVELOPMENT IN THE EDMOND
ELEMENTARY SCHOOLS

Thesis Approved:


## PREFACE

This study is concerned with the role of the teacher in developing curriculum guides. The primary objective is to determine if all teachers should be involved, and if so, at what level and to what extent should they become involved. An analysis of the process was conducted according to Bridges' decision-making model.

The author wishes to express her appreciation to her major adviser, Dr. Kenneth St. Clair, for his assistance and guidance throughout this study. Appreciation is also expressed to the other committee members, Dr. Carl Anderson and Dr. Russell Dobson for their invaluable assistance in the preparation of the final manuscript.

The author, also, expresses her appreciation to Dr. Edna Manning, who afforded this author the opportunity to work with her in developing the guides. A note of thanks is, also, extended to TOP Services, Inc. for excellence in typing this thesis.

Finally, a special note of gratitude is expressed to Dick, Keesha, and Malik for their understanding, encouragement, and many sacrifices.

## TABLE OF CONTENTS

Chapter Page
I. INTRODUCTION ..... 1
Endnotes ..... 4
II. REVIEW OF RELATED LITERATURE ..... 5
The Expert Approach ..... 7
One-Hundred Percent Participation: Yes or No ..... 8
Participation in "Curriculum Decision-Making" ..... 11
School-Based Management ..... 13
The Individual. School and School-Based Curriculum ..... 15
Cooperative Education Approach ..... 19
Summary and Conclusions ..... 21
Endnotes ..... 24
III. PROCEDURE ..... 27
Endnotes ..... 33
IV. RESULTS ..... 34
V. SUMMARY ..... 46
Discussion ..... 48
Recommendations ..... 48
Endnotes ..... 51
BIBLIOGRAPHY ..... 52
APPENDIXES ..... 54

## LIST OF TABLES

Table Page
I. Item-by-Item Tabulation of Teachers Participating
in Developing Curriculum Guides . . . . . . . . . . 35
II. Item-by-Item Tabulation of Teachers Not Participating
in Developing Curriculum Guides . . . . . . . . . . 37
III. Corresponding Item Tabulations and Percentages

Between Those Participating and Not Participating in Developing Curriculum Guides . . . . . . . . . . . . . 40
IV. Correlation Between Those Participating and Not Participating in Developing Curriculum Guides With the Percentage of Agreement Between Teachers44

## CHAPTER I

## INTRODUCTION

In 1889 the first public school house built in Oklahoma was completed in Edmond. Two "stone" buildings were built in the years 1900 and 1909. These two new buildings housed grades one through ten, after which students could enter normal school. In 1917 a junior high was added to the Edmond system. A fully accredited high school was established in 1921 and in 1956 a high school building was constructed to accommodate the increased enrollment. ${ }^{1}$

Today the district is made up of ninety-seven square miles in northern Oklahoma County and southern Logan County. Edmond has nine elementary schools, a middle school, an eighth grade center, a midhigh, and a senior high school. In order to accommodate the increasing enrollment, additions have been made to all school buildings and a new middle school is in the initial building stage. ${ }^{2}$

The curriculum of the Edmond system begins in kindergarten and is enlarged upon throughout the twelve grades. The writer's definition of curriculum involves all areas of experiences of children for which the school accepts responsibility. Teachers identify their courses of study for the year through information gleaned from the scope and sequence materials of the adopted text books.

The goal of the Edmond system is to develop all children to their fullest potential in the cognitive, affective, and psychomotor domains. ${ }^{3}$

To help achieve this goal more effectively, the need to develop curriculum guides was defined by the assistant superintendent in charge of instruction.

If developed properly, curriculum guides should provide general directions and help in the teacher's organization of subject matter and activities. The guide should, also, provide a valid, generalized framework for the guidance of teachers, individually and collectively. Modifications, which can be utilized effectively in working with the individual differences of children, should, also, be included in the guide. ${ }^{4}$

The curriculum guide should serve as a guideline for the development of a special environment that has been systematized, simplified, and edited in an appropriate fashion, in order to relate in a relevant and humane way to the pupils and the purposes of the school. The guide should, also, provide a basis for communication between and among teachers, as well as between teachers and the community. The guide should, also, allow for the establishment of an evaluation and feedback system. The instructional program could be evaluated by comparing the intended inputs to the outputs and the feedback of this relationship could serve as a focal point from which continued revision of the guide could be based. 5

Curriculum guides can be very effective when (1) they are used as a resource by teachers rather than a set of rigid content to be covered; (2) they are based on sound information about children, school, and society; (3) they are understood, accepted, and used by teachers; (4) teachers are encouraged to adapt them according to individual differences in pupils; and (5) teachers and pupils are allowed the freedom
to initiate learning experiences not mentioned in the guides. ${ }^{6}$
This study is concerned with the role of the teacher in developing curriculum guides. The problem is the question of whether all teachers should be involved in the development of the curriculum guides and, if so, at what level and to what extent should they become involved.

The writer believes that this study is warranted because the majority of the teachers have taught only in the Edmond system and have no reference point from which to ascertain the value in the process of developing the curriculum guides nor the value of the guide as an effective teaching tool.

The teachers and administrators involved in the process of developing the guides will sow the seeds for continued improvement in the quality of education in the Edmond schools by enhancing the schools with curriculum guides based on relevancy, expectancy, and continuity. From this experience the total faculty, students, and community will reap the benefits.

## ENDNOTES

${ }^{1}$ Edmond Public School District, Get Acquainted Folder For You From Edmond Public Schools, Edmond, Oklahoma.
${ }^{2}$ Ibid.
$3_{\text {Ibid }}$.
$4_{\text {William B. Ragan and Gene D. Shepherd, Modern Elementary }}$ Curriculum, 5th ed. (New York, 1977), pp. 193-194.
$5_{\text {Ibid }}$.
$6_{\text {Ibid }}$.

## CHAPTER II

## REVIEW OF RELATED LITERATURE

Many forces have influenced the developing American public school curriculum. The curriculum expert or the "knowledgeable" individual has of ten dictated practices and exerted overwhelming influence on the shape of curriculum experiences up to the present day. Curriculum development patterns dictated by experts were not always valid and/or accepted by practitioners in the field.

The beginning of major curriculum change can be traced to Benjamin Franklin. His was the first attempt at modernizing the American school curriculum. The beginning of the nineteenth century brought the advent of the common school which purported to offer education to all children without cost of tuition. Up until World War I, curriculum changes were made by reviewing old courses, adding new ones and changing textbooks. In these early days educators viewed the curriculum as an integrated program of experiences. Teachers specialized in segregated subject areas and textbook writers dictated curriculum practices. ${ }^{1}$

During the nineteenth century teachers' institutes were developed to enhance the performance level of teachers, but they failed because they ignored the individual needs, capacities, and interests of teachers.

Another attempt at upgrading instruction was developed by the superintendent's staff. Courses of study dealing with subject matter and how teachers should teach were produced, but these also failed to meet the
needs of teachers and students. ${ }^{2}$
In the late 1800 's, national committees comprised of experts (college professors and school administrators) were concerned with courses of study and textbooks to satisfy new or revised courses. During these years the duties of the supervisor in curriculum development expanded to include inspecting the curriculum and working with teachers mainly through demonstrations. An emphasis was stressed on the expert providing prescribed courses of study for the teacher.

After World War I, industrial and social growth caused lay people and educators to look at the offering of education. An emphasis on productivity and industrial growth placed an overwhelming emphasis on education as a prerequisite to social and economic upward mobility.

The Progressive Education Movement during the 1920's and 1930's helped to promote the curriculum development movement. ${ }^{3}$ During this decade the purpose and nature of curriculum supervision was questioned. Curriculum development had been delegated to directors of instruction and supervisors. Their efforts were primarily aimed at practices in terms of administrative policy. At this time the emphasis was on teacher conformity to curriculum plans and teaching practices that were based largely on tradition and administrative fears. 4

These practices were questioned and reoriented. It was realized that curriculum development must be a comprehensive endeavor to include all phases of child development and that the classroom teacher must be an integral part of the curriculum process, so that total acceptance would occur. Teachers were given leadership responsibilities, helped set policies and the ideas and wishes of learners were given consideration. ${ }^{5}$

In 1940 Saylor, in his Virginia curriculum development study, showed that the participation of teachers in deliberate meetings and production of materials produced significant changes in the classrooms and teaching process. Thus, in 1957 Krug concluded, "Teacher participation in curriculum planning today is to be regarded not as a pleasant gesture to the teachers but rather as an indispensable part of the process." ${ }^{6}$

This conclusion did not stem from the idea that teachers are needed because they had good ideas, made intelligent and relevant suggestions, and added balance to policy decision. It stemmed from the fact that the end result of curriculum growth is demonstrable improvement in the quality of experiences students are afforded in the classroom. The crux of the teacher's role in curriculum development is to arouse in each student an appetite for greater knowledge and to increase enthusiasm for learning and skills. ${ }^{7}$

The comprehensive view of curricular experiences, the need for continuous curriculum improvement and evaluation and the utilization of classroom teachers for curriculum change have continued to grow in education. However, these points of view have been objected to by many educators who argued that curriculum revision should be done by subject area specialists. ${ }^{8}$

## The Expert Approach

In the expert approach, the subject matter specialist, being the ultimate authority of knowledge, determines what knowledge in a specific area must be acquired by students and suggests a logical, sequential order of learning which affords continuity of study and completeness of coverage.

The curriculum devised by experts consists of segregated subjects and is highly academic in nature. They believe that integration of subject matter will occur within students, after they have acquired the various knowledge and skills. The expert advocates disciplined work in the classroom which in turn will foster the development of a disciplined mind. Subject matter experts profess the belief that young people given logical and disciplined training in school will develop the abilities to govern themselves and to propagate democratic values successfully. Subject matter specialists think that the expert approach is the one and only way to develop curriculum because it frees the teachers from involvement and allows them more time to concentrate on teaching. ${ }^{9}$

The expert approach to curriculum development proposes change in curriculum content only. This hinders growth in the educator and the educational process, because very little emphasis is placed on research, educational improvement and current theory. The expert approach has neglected to develop in the classroom educator the necessary skills to evaluate the curriculum and to encourage continuous investigation and improvement. In order for new curriculum changes in the classroom to occur teachers must depend upon the subject-matter specialist.

Educators must become competent in the processes critically examining current practices and fostering additional changes which will keep pace with the requirements of a complex society and the total development of young people. ${ }^{10}$

## One-Hundred Percent Participation: Yes or No

Should there be a $100 \%$ participation by all teachers in curriculum development? Should classroom teachers make the final instructional
decisions with pupils? Should they become deeply entrenched in the curriculum development process? Should they determine goals, shape content and select the learning and supplemental resources for the courses? Or, is it the role of teachers to implement a curriculum which has been developed and designed by others inside or outside the school district?

Neagley and Evans believe that all professional personnel should have the opportunity to participate in the development of curriculum. They believe that staff members will contribute according to their interests, abilities, and experiences. Involvement in curriculum planning adaptation and implementation should be a vital and integral part of every professional staff member's job. Throughout the curriculum development process teachers can be offered roles of researchers, writers, reactors in group situations and field testers of the new materials in the classroom. ${ }^{11}$

Verdiun in a study of the Cassopolis, Michigan Public Schools found that full staff involvement for one year's curriculum study contributed to the following positive outcomes:

1. Curriculum change was continued after completion of the original study.
2. A more democratic and professional attitude resulted from the cooperative efforts of the participants.
3. Greater concern for students, fellow educators and education in general was evidenced.
4. More cohesiveness and better rapport on all levels resulted.

A conclusion was made that a cooperative approach to curriculum development fostered valuable changes in the participants and worthwhile changes in the curriculum. ${ }^{12}$

Taba states that a strategical error is committed when a $100 \%$ participation is mandated. Taba sighted two problems which may occur if a $100 \%$ participation of teachers is insisted on:

1. Participants sabotage new ideas and the committee is unable to get off the ground.
2. Inclusion of resistant staff members may impede progress and create atmospheric conditions which could cause resistance and doubt on other participants.
'The principle of selective participation in curriculum revision on the basis of concern contradicts the current notion that participation in any effort on behalf of curriculum change should be one hundred percent or at least include representation from every school. This insistence on a one hundred percent participation is partly due to equating participation with democracy, to the idea that no one should be left out of important decisions and that burdens should be shared equitably. Partly, however, it stems from the failure to see curriculum making as a developmental sequence in which different groups of school personnel all involved at different stages of work and at a different point in the sequence. This is the principle of levels of involvement. ${ }^{13}$

Taba states that the first level of involvement should be a fairly small group of volunteers composed of concerned persons willing to compose something for their own classrooms. This group will be more effective if there is a wide range of grade levels and types of school situations among the volunteers. After forming the small group of volunteers, or pilot group, this strategy is supplemented by extending participation at successive levels of work by adding personnel as the nature of work and also, the nature of its appeal, changes. For example, persons not interested in curriculum development (per se) may become interested in such activities as testing to determine needs, selecting reading and other materials for experimental units or actually trying out experimental units. Once involved, these staff members continue on as part of the group and also, enlarge their interests. The
involvement of personnel at various stages of curriculum development requires continuous communication and kindling of interest which can happen only if the lines of communication remain open between the pilot groups and the remaining staff. For eventual productivity and effective participation, it is preferable to approach the task of curriculum development through levels of involvement with staff, thus combining the work of individuals and groups who are willing to change rather than to harness a large group with little or no motivation for change.

## Participation in "Curriculum Decision-Making"

In 1977, Young's study of 1268 respondents employed in 174 randomly selected schools identified the kinds of curriculum work in which teachers wished to participate and then indicated the level at which they believed the work should be performed. The school district level was indicated as the level at which curriculums should be selected, adopted, evaluated, created, and translated into instruction. In this same study Young concluded that $78 \%$ of the respondents would be reluctant to become involved in the curriculum decision-making process. ${ }^{15}$

The classroom teachers' major function is to implement curriculum decisions in their classrooms. By training, tradition, and daily work requirements teachers are oriented toward their own classrooms and not to the school district as a whole. Teachers in the Young study preferred curriculum tasks which involved translating curriculum into instruction. This involved selecting or creating methods or materials of instruction with which teachers could implement a curriculum in the classroom. This finding is supported by Ponder and Bullock who established that $42 \%$ of the teachers in their study desired greater
participation in determining instructional aids and materials for a curriculum and only $25 \%$ and $29 \%$, respectively, desired greater participation in determining the detailed content of a curriculum and the basic outline of a curriculum. A conclusion can be made that teachers are more interested in how to teach rather than what to teach. ${ }^{16}$

Young's article suggests that the school district concept for curriculum decision-making is far removed from the teacher's classroom. It intimates that teachers are placed in a dependent and subordinate position because of their orientation towards the classroom and away from school district's concerns. Also, the classroom orientation of teachers prevents the development of a broad informational field, long-range perspective and collegiality that are essential in curriculum decision-making. ${ }^{17}$

Young's article contains considerable evidence which supports the desirability for teachers to become more actively involved in curriculum decision-making. Beauchamp installed within a $\mathrm{K}-8$ school district, an ongoing curriculum system which was based on the participation of all professional personnel in the district. Teachers were involved as planners at the district level and implementers in their own classrooms. The significance of the curriculum system is that participation in curriculum decision-making was incorporated as an integral part of the teachers' professional lives. ${ }^{17}$

Longitudinal data collected yearly showed that over a period of four years there was an increase in the positive attitudes of teachers toward teaching, the curriculum system, and the curriculum that it produced. After four years, there was a significant decline in the teachers' perceptions of themselves as participants in the curriculum
system and their assessment of the leadership behavior of their principals. ${ }^{19}$

Beauchamp and Conran attributed the losses to a lack of emphasis upon curriculum by the school district's central office. Young suggests changing the context for curriculum decision-making from the school district to the individual school. ${ }^{20}$

## School-Based Management

School-based management would have the school district relegate to each school (a) responsibility for the development of the school's educational programs, (b) a lump sum of money for development and implementation of the school's program, and (c) accountability for the results of program implementation. ${ }^{21}$

In school-based management the central office would define such parameters as district-wide goals and identify basic subjects to be included in every school's curriculum. However, each school's staff would then organize the subjects into a viable, suitable, and effective curriculum for their particular school. ${ }^{22}$

School-based management offers considerable potential for teacher participation in curriculum decision-making.

1. Teachers would be familiar with the school.
2. Teachers would possess knowledge about their particular. school population and community.
3. Teachers would recognize the constraints placed on the school program by its physical facilities.
4. Teachers would be acquainted with other staff members.
5. Teachers, responsible for curriculum development, would become initiators of curriculum decision making as well as implementers.
6. Teachers would hold the dominant position in curriculum decision-making and central office personnel would make an effort to 'sell' their services to each school staff. Thus, the central office role would change from a directive and evaluative role to a supportive and informative role.
7. Teachers would be involved in ongoing curriculum planning, implementation and evaluation.
8. Teachers would derive greater intrinsic rewards because curriculum decisions made at the school level directly effect the quality of a teacher's work with students. This area, according to Lortie, is the primary source of a teacher's job satisfaction.
9. Teachers would be involved in the areas of budget planning and decision-making. Each of the above areas would help to encourage the development of the necessary background for effective participation. ${ }^{23}$

School-based management includes built-in accountability. A district-wide evaluation team, possibly consisting of personnel at each level and parent representatives, ascertains if the within school curriculum has been implemented. ${ }^{24}$

Problems of teacher participation in curriculum decision-making may still exist in school-based management. Principals of each school could solely control curriculum decision-making rather than share it with the teaching staff. ${ }^{25}$

Also, the parameters and framework established at the central office level for curriculum decision-making could be so specific and detailed that individual schools would have little power in curriculum decision-making. ${ }^{26}$

Problems of teachers communicating freely and honestly with each other and principals being overwhelmed by increased financial responsibilities could endanger the process of school-based management. ${ }^{27}$

Young concluded that the ambivalence of teachers toward
participation in curriculum decision-making is consistent with the school district context for curriculum decision-making and that it is the context--not the teachers--that needs to be changed. ${ }^{28}$

An alternative context for curriculum decision-making--the individual school--was then proposed because it removes the barriers of teacher participation by partially eliminating a centralized school district, moves curriculum decision-making closer to the teacher's classroom, and incorporates curriculum decision-making as an integral part of the teacher's professional life. ${ }^{29}$

The Individual School and School-Based
Curriculum

Kelly supports Young's findings when he states that real and effective curriculum development must go on within individual schools rather than in central offices which are detached from the realities of actual school situations. Kelly states that industrial and employment conditions, social origins and interests of pupils and parents, and the expectations the community has of the school are important factors in the curriculum development process. However, the most significant factor is the teacher's attitude which will be crucial in determining the realities of what goes on at the level of the individual classroom. ${ }^{30}$

The "individual" teacher has the task of bridging any gap that might exist between curriculum theory and practice. Many teachers react negatively to attempts to introduce curriculum changes. Teachers are of ten accused of conservatism and unwillingness to break away from patterns of tradition. This attitude is understandable because a teacher's security depends on the maintenance of those areas of
knowledge and experience in which he/she has recognized expertise. Thus, a recognized need for in-service programs to help teachers become less dependent on traditional techniques and materials and more adept at accepting and implementing changes. ${ }^{31}$

The converse of unacceptance of change on the part of teachers is the commitment to change. It is fruitless to introduce a new scheme into a school's curriculum without the support of at least all of the teachers who will need to be involved in the implementation process. Kelly states, "no attempt to establish innovations derived from outside agencies will be successful unless the teachers are 'won over' to them, unless there is a change in ideology." 32 The prime needs are that they should both understand the reasons for and be committed to the values of what is proposed, so that in-service backup and every kind of support that is offered must be attuned to achieving both of these ends and not merely to providing them with the new skills and techniques that will be required of them.

Having recognized that a gap exists between the curriculum planner and the teacher, Kelly demonstrates a concern to bring each closer to the other. Recognition of the fact that curriculum development is essentially a matter of local development implies the need for a schoolbased curriculum development process. 33

Two reasons for considering school-based curriculum development are that attempts of innovation through a centralized system have met with little success and that this is the only way of ensuring that curriculum change is actually curriculum development. Skilbeck says school--based curriculum development
. . provides more scope for the continuous adaptation of curriculum to individual pupil needs than do other forms of curriculum development. Other systems are 'by their nature' ill-fitted to respond to individual differences in either pupils or teachers. Yet these differences . . . are of crucial importance in learning . . . . At the very least, schools need greatly increased scope and incentive for adapting, modifying, extending and otherwise reordering externally developed curricula than is now commonly the case. Curriculum development related to individual differ- or ences must be a continuous process and it is only the school school network that can provide scope for this. ${ }^{34}$

Kelly advocates the need for teachers to devise curriculum programs tailored to the recognized needs and requirements of their own pupils in order to facilitate and insure a truly meaningful and educative experience for all pupils. Two broad questions emerge from the consideration of promoting school based curriculum. First, what conditions within the school are most likely to be conducive to curriculum innovation? Second, what is the most appropriate form in which assistance and support can be offered from outside the schools. ${ }^{35}$

Shipman arrived at some tentative suggestions as to the main characteristics of a school that is ready for innovation.

The salient points are that the school which is likely to introduce and implement successfully a planned innovation would:
*Have teachers who would feedback information to the project.
*Have teachers who would accumulate supplementary material.
*Have teachers who had volunteered knowing that they would be involved in a lot of work.
*Have planning time set aside for the teachers involved in innovation.
*Have a principal or headteacher who supported the innovation but did not insist on being personally involved.
*Have a low staff turnover among key personnel.
*Have no immediate need to reorganize as part of a changing local school situation. ${ }^{3}$

Other concerns which must be considered as to the readiness of the school for curriculum innovation are the location of the school; the availability of appropriate resources; and the most crucial consideration is the school climate.

Schools not possessing the above characteristics will need support from outside the school in order to develop strategies to bring about the conditions that will make curriculum development possible for them. Schools engaged in curriculum development will need financial support and provisions for resources which could be offered by local authorities, especially through teacher centers. Teacher centers are equipped with available information, materials, equipment, and resources to enhance the educational programs of the schools. The appointment of specific teachers, responsible for coordinating and guiding curriculum development, will help to ensure organized support from outside agencies. ${ }^{37}$

Kelly declares the need for an adequate support system for classroom teachers who have a crucial and fundamental role in the development of curriculum. A teacher's initial training must be concerned with the central role of curriculum development as well as adequate opportunities for continuing in-service education to develop and obtain new skills vital to the planning, research and development of curriculum. Kelly states:

There can be no curriculum development without teacher development and the more teachers are to be given responsibility for curriculum development the more important it becomes that they be given all possible support of this
kind. The potential of the role of the professional tutor as the focal point of this kind of teacher development, linking initial and in-service teacher education and developing contacts between the school and colleges and other institutions responsible for these courses has so far not been fully appreciated, but it offers opportunities ${ }_{3}$ that may be crucial to school-based curriculum development.

Teachers must be advised of outside agencies with whom they can communicate, so that they can acquire the necessary skills or understandings and resources which would enable them to effectively and responsibly develop curriculum.

## Cooperative Education Approach

Teachers perform the most vital roles in curriculum development when they assess the needs of their students, provide multi-disciplinary learning experiences and techniques for their students, create enjoyable and practical methods to learn new knowledge and skills, and provide a positive atmosphere for problem solving and sharing. ${ }^{39}$

Increasingly, in recent years the teacher's role in curriculum development has become one of participant, suggestion maker, producer of ideas for the clarification and meaningful dilineation of concepts, and creator of resources. This development has surfaced from the major emphasis on cooperative democratic action in almost every phase of educational planning. It has derived from:

1. The agitation of conscience on the part of those who preach 'education for democracy.'
2. Greater insight into what democratic relationship means.
3. Clear evidence that those who are involved in the development of plans have a much greater commitment to to see them work.
4. The theory that out of effectively organized groups can come a greater 4 qumber of more significant and valuable contributions. ${ }^{40}$

The cooperative education approach to curriculum development suggest that the curriculum should be subject to the needs, interests, capacities, and individual differences of young people in the schools; and to the requirements and demands that society places on the young people.

The cooperative educator bases curriculum experiences on psychological factors emphasizing educational experiences involving social, emotional, and physical development, which youngsters can internalize when they are psychologically ready. The cooperative educator desires an integration of subject matter which gives more meaning to the total development of youngsters' ideas, knowledge, and skills. ${ }^{41}$

The curriculum change agent is the classroom teacher who, through group investigation and personal activity, can discover new meanings and foster effective curriculum changes. Verduin states:

If the educator does not have an active part in effecting change and does not know the rationale behind it, it will have less meaning and interest for him. The lack of meaning, knowledge and interest and the fact that personal needs and goals have not been met, can result in very little acceptance of proposed change by the classroom educator. Thus, curriculum changes handed down by experts are not likely to be implemented. ${ }^{2}$

Educators must become competent in the processes of critically examining current practices and fostering additional changes which will keep pace with the requirements of a complex society and the total development of young people. Educators through a cooperative curriculum approach have the opportunity to become more aware and critical of current educational practices, to discern additional weaknesses in the
curriculum, to develop skills with which they can attack problems and bring about additional changes, and to engage in additional examination and improvement of the curriculum. 43

## Summary and Conclusions

Moffitt states: "With all that has been written and discussed about continuous expansions and alterations of the curriculum, it must be understood that the curriculum changes only as the teacher changes it."44

Classroom teachers largely determine the curriculum. Regardless of curriculum plans, the teacher in the classroom, to the most extent, determines the quality of learners' experiences. Eash and Chasnoff state that teachers need to pool their thinking because their knowledge, acceptance, and promotion of their schools' goals can promote effective curriculum development. Group thinking helps to create higher morale, maintenance of interest, and willingness to change. 45 Wiles states: "The quality of group problem-solving, including the nature of the evidence collected during the problem-solving process, makes for quality in decision-making and hence for improvement. 46

Curriculum experts now rest on the thesis that given the responsibility for improving the experiences of children in school, classroom teachers working together will produce far more than supervisors or directors of instruction. As a participant in curriculum development, the teacher's role will expand to include that of:

1. A deliberate social analyst.
2. A student of adolescent growth and development characteristics and needs so to advise on what to offer in and how to manage schools.
3. A value judge determining what priority to place on various goals and contacts.
4. A policy-maker on organization and structure of the educational program.
5. A research planner and manager, testing out the appropriateness of plans and procedures.
6. A critic and supporter of the ideas and proposals of peers and superiors.
7. A public relations participant both explaining and seeking suggestions from patrons.

The review of literature concerning the teacher's role in curriculum development suggests the following:

1. The classroom teacher must be an integral part of the curriculum process.
2. All professional personnel should have the opportunity to participate in the development of the curriculum.
3. Teachers should be involved at various stages of curriculum development.
4. Teachers prefer the task of translating curriculum into instruction rather than determining the content of the curriculum.
5. School-based management offers considerable potential for teacher participation in curriculum decision-making.
6. Individual school-based curriculum development moves curriculum decision-making closer to the teacher's classroom and incorporates curriculum decision-making as an integral part of the teacher's professional life.
7. Classroom teachers involved in curriculum development must be provided with an adequate support system, such as continuing
in-service education to develop and obtain new skills
vital to the planning, research, and development of curriculum.
8. The cooperative curriculum approach provides educators with the opportunity to gain expertise in the planning, improvement, and examination of the curriculum.
9. Classroom teachers, who are held responsible for improving the experiences of school children, will produce far more than supervisors, directors, or experts of instruction.
${ }^{1}$ John R. Verduin, Jr., Cooperative Curriculum Improvement: A Rationale (Englewood Cliffs, N. J., 1967), p. 21.
${ }^{2}$ Ibid.
$3^{\text {Ibid., p. }} 22$.
$4_{G}$. Robert Koopman, Curriculum Development (New York, 1966), p. 22 .
$5_{\text {Ibid. }}$.
${ }^{6}$ Edward Krug, "Administering Curriculum Planning," Harper (1957), p. 13.
$7_{\text {Galen Saylor, Factors Associated With Participation in }}$ Cooperative Programs of Curriculum Development (New York, 1941).
${ }^{8}$ Verduin, p. 25.
${ }^{9}$ Ibid., p. 26.
${ }^{10}$ Ibid., p. 27-28.
${ }^{11}$ Ross L. Neagley and N. Dean Evans, Handbook for Effective Curriculum Development !Englewood Cliffs, N. J., 1967), p. 138.
${ }^{12}$ Ibid., p. 2, 139.
${ }^{13}$ Hilda Taba, Curriculum Development Theory and Practice
(New York, 1962), p. 403 .
14 Ibid.
15 Jean Helen Young. "Teacher Participation in Curriculum Decision Making: An Organizational Dilemma," Curriculum Inquiry, 9:2 (1979), pp. 113-126.
$16_{\text {Ibid. }}$, p.
${ }^{116}$ Ibid., p.
${ }^{118}$ Ibid.
${ }^{18}$ Ibid., p.
10. 

${ }^{19}$ Ibid.
${ }^{20}$ Ibid.
${ }^{21}$ Ibid.
${ }^{22}$ Ibid., p. 124 .
${ }^{23}$ Ibid., p. 123 .
${ }^{24}$ Ibid., p. 124 .
${ }^{25}$ Ibid., p. 125 .
${ }^{26}$ Ibid .
${ }^{27}$ Ibid.
${ }^{28}$ Ibid., p. 126.
${ }^{29}$ Ibid.
${ }^{30}$ A. V. Kelly, The Curriculum, Theory and Practice (New York,
1977), p. 17.
${ }^{31}$ Ibid., p. 18.
${ }^{32}$ Ibid.
$33_{\text {Ibid., p. }} 150$.
${ }^{34}$ Ibid., p. 151.
${ }^{35}$ Ibid .
${ }^{36}$ Ibid., p. 153 .
${ }^{37}$ Ibid., p. 154 .
${ }^{38}$ Ibid., p. 155.
${ }^{39}$ Verduin, p. 20.
${ }^{40}$ Ibid., p. 21.
${ }^{41}$ Ibid., p. 27.
42 Ibid., p. 32.
${ }^{43}$ Ibid., p. 33 .
$44_{\text {John }}$ Clifton Moffitt, In-Service Education for Teachers (Washington, D.C., 1963), p. 12.
$45_{\text {Ronald C. Doll, Curriculum Improvement: Decision-Making and }}$ Process (Boston, 1964), pp. 224-225.
${ }^{46}$ Kimball Wiles, "Does Faculty Participation Provide Curriculum Improvement?," Educational Leadership, 15 (March, 1958), pp. 347-350.

47 Verduin, pp. 54-56.

## CHAPTER III

## PROCEDURE

In November 1979 a committee comprised of principals, teachers, and parents met with the assistant superintendent in charge of curriculum and instruction to discuss the developing of curriculum guides for the Edmond elementary schools. This meeting was held at the Central Administration Office Building in Edmond, Oklahoma. It was determined that the first step in developing the guides would be the compiling of skills according to units in the basic textbooks used in the system in conjunction with supplementary resources and materials. It was concluded that in the ensuing year more information including a districtwide philosophy and basic skills for each area would be compiled and added to the guide. A decision was made to ask for teacher volunteers to gather the information for math, science, reading, penmanship, spelling, and social studies at grade levels one through five. Each elementary principal was asked to chair a committee to help assure the development and completion of the rough draft of the guides by April 4, 1980. It was, also determined at the time that a parent disclosure document would be developed to reinforce the lines of communication between the home and school and to assist the parents in assessing their children's progress.

Teachers were personally requested to volunteer to work on developing the guides. From an approximate total of 180 teachers, 105
volunteered their services. The eight elementary schools in Edmond were represented on all committees except the penmanship committee which had representation from five schools. Principals were appointed as chairpersons of each subject-matter area committee.

On January 22, 1980, the assistant superintendent met with the principals to present the established committees, to discuss the basic format for the guides, and to determine time-lines. The assistant superintendent stressed the need to keep the guides very simple, since this was the very first step in developing a comprehensive curriculum guide. Textbooks, scope and sequence charts, and all available supplementary materials and techniques were the sources of information to be used by the teachers in the development of the guides. A standard form was devised to assist the teachers in their work (Appendix A). The principals were encouraged to point out the significance of supplementary materials and activities to their teachers.

Prior to February 8, 1980, this author met with the 47 teachers who had volunteered to work on the math, science, and reading committees. This author discussed the purposes of developing the guides:
A. To assist in the development of all children to their fullest potential.
B. To promote continuity in subject matter in grade levels 1-5 throughout the school system.
C. To serve as a guide to teachers in developing their lesson plans and to acquaint them with new and available supplementary materials and teaching techniques.
D. To reinforce the lines of communication between the home and
the school through the development of a parent disclosure document.
E. To help new teachers become acquainted with the skills and content of each subject area and the supplementary materials and techniques available to them.

This author, also, provided the teachers with a model form to be used in developing the guides, reviewed the form with the teachers, and shared examples of completed parts from a sample guide. This author encouraged representatives from each grade level to consult with other teachers from the same level in order to acquire supplementary materials, ideas and teaching techniques, and provided the names and numbers of those who would be available to assist the teachers in the gathering of information for the guides.

This author encouraged one person from each group to take a leadership role in coordinating the task areas of the respective groups. Those task areas included:
A. The clarification of responsibility for particular chapters or skill areas.
B. The coordination of topics and/or units with supplementary materials and activities.
C. The validation of the progress of the members of the group.

This author, also, set time deadlines and established checkpoints to determine the progress being made on compiling and gathering the materials. This author elicited and answered questions from the group pertaining to the defined process and procedure.

The math and science committees decided to divide their task areas in accordance with the breakdown of subject matter in the textbook. The
reading committee designed their tasks according to specific skill areas.
During the week of April 4, the work from each committee was turned into the central office. At that time this author sent a letter of recognition and thanks to all teachers who participated in the process. Included in the letter was an explanation of the process which would be undertaken to complete the guides and projected dates when the guides would actually be in the teachers' hands (Appendix B). After a lengthy process of scrutinizing, verifying, and correcting the information turned in by the teachers, this author was able to compile the math, science, and reading curriculum guides (Appendix C). The information received from the guides was then used to construct the parent disclosure documents (Appendix D).

This author then devised a questionnaire to determine the teachers' feelings about:
A. The need for the guides.
B. The involvement level of the teachers.
C. The need for an efficient and effective implementation process.
D. The teachers' commitment to use the guides.
E. The probability that the guides will provide continuity for students transferring within the system.

This author administered this questionnaire to the assistant superintendent and an intern to determine the validity. They agreed that the questionnaire would provide great insight into the curriculum developing process and would also indicate the changes necessary to further develop and expand the curriculum guides (Appendix E).

In developing the questionnaire this author wanted to determine
the zone of acceptance of the teachers who volunteered to work on the committee. Zone of acceptance is defined as the range of behavior within which the subordinate is ready to accept the decisions made for her/him by his/her superiors. Bridges postulates that teachers' participation in decision-making will be less effective if the decision being made is located in the teachers' zone of acceptance. Teachers for whom the decision is clearly outside their zone of acceptance will be more effective in the decision-making process. ${ }^{1}$

Bridges proposes two tests to identify issues that clearly fall within the subordinate's zone of acceptance: (1) the test of relevance and (2) the test of expertise. ${ }^{2}$

The test of relevance is concerned with the personal stake that the individual has in the decision. Participation will be high, if the subordinate has a high personal stake in the decision. The subordinates will be receptive to the superior's directive, if they have no personal stake. ${ }^{3}$

The test of expertise is concerned with the subordinates' qualifications to make knowledgeable contributions to the identification or solution of the problem. This test is primarily concerned with the subordinates' capabilities of making meaningful contributions. 4

Bridges states that subordinates should be involved in the decision-making process when subordinates have a personal stake (high relevance) in the decision and have the knowledge to make a useful contribution (high expertise). He, also, declares that subordinates should not be involved in the decision-making practice if the issue is not relevant and falls outside their sphere of competence. Involvement of subordinates in decision-making within their zones of acceptance will
probably result in resentment and frustration. ${ }^{5}$
Bridges, also, identifies two marginal situations. First, a subordinate may have a personal stake in the issue, but little expertise. In this case the subordinates should have limited involvement. The main purpose of their involvement should be to communicate the rationale for and lower resistance to the decision. ${ }^{6}$

Second, a subordinate may have the knowledge to make useful contributions, but has no personal stake in the decision. Again, the subordinates should have only limited involvement, but in this case involvement would be primarily to improve the decision. ${ }^{7}$

Upon selecting a random sample of 40 teachers the questionnaire was issued to 24 teachers who worked on the curriculum guide committees and to 16 teachers who were not involved in the process. There was one hundred percent participation from the teachers in responding to the questionnaire.

## ENDNOTES

${ }^{1}$ Edwin M. Bridges, "A Model for Shared Decision-Making in the School Principalship," Education Administration Quarterly, 3 (1967), 49-61.
${ }^{2}$ Ibid.
$3^{\text {Ibid }}$.
$4_{\text {Ibid }}$.
${ }^{5}$ Ibid.
$6_{\text {Ibid }}$.
${ }^{7}$ Ibid.

## CHAPTER IV

## RESULTS

The following (Table I) is an item by item tabulation of those teachers who participated in the process of developing curriculum guides.

The following are comments made by those teachers who worked on the guides:

1. More time to work together would be helpful.
2. What was developed this past Spring was not a curriculum guide, but just an outline of the various textbooks. In short it was a waste of time and it will be a waste of paper.
3. I think the guides could prove to be very beneficial to new teachers and possibly set a better pattern of unity within the grade levels throughout the system. I think they were not properly implemented or approached properly this year.
4. Hopefully teachers in Edmond will strive to follow these guides. It should be helpful when students change schools.
5. I feel we can better evaluate when we have an opportunity to use the guide.
6. There should have been a meeting with one teacher from each school represented per grade level for each subject. After a preliminary meeting where a rough draft was made a smaller group per grade level could compile it. As it stands there will be ideas from a couple of teachers who listed

TABLE I

## ITEM-BY-ITEM TABULATION OF TEACHERS PARTICIPATING IN DEVELOPING CURRICULUM GUIDES

## Statement

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

The number of no responses to the following items is as follows: 非1-1; 非15-1.
supplementary materials that happened to be in their particular building. I am sure all schools have materials that the people working on this project did not know about.

I, also, think we rushed through this project. We should take one area per year and do a super job. More teachers could be involved this way.

I did enjoy doing this but felt I had to hurry and didn't have enough time to do a proper job.

I think the guides should be for all teachers, not just new teachers and it should be stressed that they are to use not store on the shelf.

I think we need a time where teachers would have a chance to see some of the materials and get patterns, etc.
7. Not enough room was given on the curriculum form under "Supplementary Materials/Activities." More space on the form should be allotted to that item.
8. It provides no time guides so even if followed, we would be at different points at different times.

The following (Table II) is an item-by-item tabulation of those teachers who did not participate in the process of developing curriculum guides.

The following are comments made by those teachers who did not work on the guides.

1. I feel there is a need for a curriculum guide if it is used. I have helped prepare three since I've been in the system and have never seen one yet. Most teachers won't follow one either.

TABLE II

## ITEM－BY－ITEM TABULATION OF TEACHERS NOT PARTICIPATING IN DEVELOPING CURRICULUM GUIDES

## Statement

SA MA A MD D SD
I．There was a need for the development of curriculum
guides in this district．
2．A11 teachers should have been involved in develop－ ing the guides．
3．Rather than being assigned to an overall activity in developing the guides，teachers should have been allowed to select a particular area of involvement， such as coordinating the activities of groups， developing supplementary activities，and compiling ahd／or typing the guides．
4．More teachers would have worked on the guides，if they had been given release time and／or pay． 5．The majority of the teachers in the district will use the guides．
6．The guides will be used more effectively and effi－ ciently，if proper implementation procedures are made available to the teachers．
7．It was beneficial to work on the guides with teachers from other schools．
8．All teachers in the same grade levels at different schools are working on and covering the same materials and activities．
9．Working on the curriculum guides broadened my perspective of the range of subject matter，materials， and activities to be covered during the school year． 10．Working on the curriculum guides provided an opportunity for professional growth．
11．The guides will prove to be most beneficial to the new teachers in the district．
12．If properly implemented，the curriculum guides will be an asset to all teachers and children within the system．
13．Children transferring within the system will be provided with some sense of continuity through the use of the guides．
14．The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered．
15．Working on the guides helped to improve a teacher＇s self－confidence，motivation，interest，and expertise in at least one subject matter area．

The number of no responses to the following items is as
follows：非 $3-2$ ；非 $5-1$ ；非 $7-4$ ；非 -1 ；非 -8 ；非10－4；非11－1；非12－1；非13－1；非15－3．
2. I did not work on a committee so I answered the questions without being involved on a particular guide.
3. Developing guides was optional on part of the teachers. What are level meetings for if not to get all areas together? Most teachers are very good resource people -- I'm not in favor of a person using teachers to gain another degree -- There must be other ways of people gaining knowledge for another degree than by hounding teachers to death with something that may not even be implemented. I have plenty to do to prepare and teach kids without any extra committee work.
4. A teacher with adequate training and a sense of responsibility to her students will implement creative ideas in any area of curriculum with or without a guide. A teacher will suit her curriculum for the year to the needs of her students -- not being concerned what another in the same grade level at another school is doing.

It seems to me that by all schools within a system using the same adopted sets of books, the only deviation necessary on the part of the teacher would be to fit the materials to her students' needs and this would certainly differ according to the area in which the school was located.
5. Questions 7, 9, 10, and 15 -- I could not answer because I did not work on the curriculum guides. I have had use of curriculum guides in other systems and they were helpful.

Items 3, 4, 6, 11, 12, 13, and 14 appear to be located outside the zone of acceptance of both groups. Items 5, 8, and 9 appear to be within the zone of acceptance of both groups. Items 1, 2, 7, 10, and 15
appear to be outside the zone of acceptance for Group A and within the zone of acceptance for Group B.

An item-by-item analysis of the responses of Group A, those who participated, and Group B, those who did not participate, clearly indicates that the zone of acceptance is an important variable in determining the extent to which teachers should be involved in decision making and also, the level to which they should be involved. (See Tables III and IV.)

CORRESPONDING ITEM TABULATIONS AND PERCENTAGES BETWEEN THOSE PARTICIPATING AND NOT PARTICIPATING IN DEVELOPING CURRICULUM GUIDES

| Statement | SA MA |  | A MD |  | D SD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. There was a need for the development of curriculum guides in this district. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 91\% <br> Group B - 62.5\% | 11 | 6 | 4 | 2 | 0 | 0 1 |
| 2. All teachers should have been involved in developing the guides. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 79\% <br> Group B - 12.5\% | 7 1 | 2 1 | 10 1 | 1 | 2 | 2 |
| 3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides. <br> Group A <br> Group B <br> - Percent Agreeing: <br> Group A - 79\% <br> Group B - 85.7\% | 5 | 4 | 10 | 2 | 2 0 | 1 |
| 4. More teachers would have worked on the guides, if they had been given release time and/or pay. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 91.6\% <br> Group B - 93.7\% | 15 | 1 | 6 | 2 | 0 | 0 1 |

TABLE III (Continued)

| Statement | SA MA |  | A MD |  | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5. The majority of the teachers in the district will use the guides. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 50\% <br> Group B - 33\% | 0 | 4 | 8 | 7 | 3 | 2 |
| 6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 79\% <br> Group B - 75\% | 3 1 | 5 | 11 | 4 | 1 | 1 |
| 7. It was beneficial to work on the guides with teachers from other schools. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 70.8\% <br> Group B - 58\% | 2 | 4 1 | 11 | 2 | 2 | 1 |
| 8. All teachers in the same grade levels at different schools are working on covering the same materials and activities. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 29\% <br> Group B - $53 \%$ | 0 | 3 | 4 | 2 | 8 | 3 |

9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year.

Group A
Group B
$\begin{array}{llllll}1 & 5 & 8 & 5 & 5 & 0 \\ 0 & 0 & 3 & 2 & 3 & 0\end{array}$

TABLE III (Continued)

| Statement | SA MA |  | A MD |  | D | SD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9. (Continued) <br> Percent Agreeing: <br> Group A - 58\% <br> Group B - 37.5\% |  |  |  |  |  |  |
| 10. Working on the curriculum guides provided an opportunity for professional growth. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 70.8\% <br> Group B - $58 \%$ | 3 1 | 6 | 8 | 3 | 3 | 1 |
| 11. The guides will prove to be most beneficial to the new teachers in the district. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 100\% <br> Group B - 86.6\% | 7 |  | 13 | 1 | 0 | 0 |
| 12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 91.6\% <br> Group B - 80\% | 9 1 |  | 6 | 2 | 0 | 1 |
| 13. Children transferring within the system will be provided with some sense of continuity through the use of the guides. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 91.6\% <br> Group B - 86.6\% | 5 | 2 |  | 2 | 0 | 1 |

## TABLE III (Continued)

| Statement | SA MA |  | A MD |  | D SD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 100\% <br> Group B - 100\% | $\left.\begin{array}{r} 16 \\ 8 \end{array} \right\rvert\,$ | 5 | 3 | 0 | 0 | 0 |
| 15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area. <br> Group A <br> Group B <br> Percent Agreeing: <br> Group A - 73.9\% <br> Group B - 46\% | 1 | 1 | 11 | 1 | 2 | 1 |

TABLE IV

## CORRELATION BETWEEN THOSE PARTICIPATING AND NOT PARTICIPATING IN DEVELOPING CURRICULUM GUIDES WITH THE PERCENTAGE OF AGREEMENT BETWEEN TEACHERS*

| Statement | Agree |  |
| :---: | :---: | :---: |
|  | A | B |
| 1. There was a need for the development of curriculum guides in this district. | $\begin{aligned} & \text { Yes } \\ & 91 \% \end{aligned}$ | $\begin{gathered} \text { No } \\ 62.5 \% \end{gathered}$ |
| 2. All teachers should have been involved in developing the guides. | $\begin{aligned} & \text { Yes } \\ & 79 \% \end{aligned}$ | $\begin{gathered} \text { No } \\ 12.5 \% \end{gathered}$ |
| 7. It was beneficial to work on the guides with teachers from other schools. | $\begin{gathered} \text { Yes } \\ 70.8 \% \end{gathered}$ | $\begin{array}{r} \text { No } \\ 58 \% \end{array}$ |
| 10. Working on the curriculum guides provided an opportunity for professional growth. | $\begin{gathered} \text { Yes } \\ 70.8 \% \end{gathered}$ | $\begin{gathered} \text { No } \\ 58 \% \end{gathered}$ |
| 15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest and expertise in at least one subject matter area. | $\begin{gathered} \text { Yes } \\ 73.9 \% \end{gathered}$ | $\begin{gathered} \text { No } \\ 46 \% \end{gathered}$ |
| 3. Rather than being assigned to an overall activity, in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides. | $\begin{aligned} & \text { Yes } \\ & 79 \% \end{aligned}$ | $\begin{aligned} & \text { Yes } \\ & 85 \% \end{aligned}$ |
| 4. More teachers would have worked on the guides, if they had been given release time and/or pay. | $\begin{aligned} & \text { Yes } \\ & 91.6 \% \end{aligned}$ | $\begin{gathered} \text { Yes } \\ 93.7 \% \end{gathered}$ |
| 6. The guides will be used more effectively and efficiently if proper implementation procedures are made available to the teachers. | $\begin{aligned} & \text { Yes } \\ & 79 \% \end{aligned}$ | $\begin{aligned} & \text { Yes } \\ & 75 \% \end{aligned}$ |
| 11. The guides will prove to be most beneficial to the new teachers in the district. | $\begin{gathered} \text { Yes } \\ 100 \% \end{gathered}$ | $\begin{gathered} \text { Yes } \\ 86.6 \% \end{gathered}$ |
| 12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system. | $\begin{aligned} & \text { Yes } \\ & 91.6 \% \end{aligned}$ | $\begin{aligned} & \text { Yes } \\ & 80 \% \end{aligned}$ |
| 13. Children transferring within the system will be provided with some sense of continuity through the use of the guides. | $\begin{gathered} \text { Yes } \\ 91.6 \% \end{gathered}$ | $\begin{gathered} \text { Yes } \\ 86.6 \% \end{gathered}$ |

## TABLE IV (Continued)

| Statement | Agree |  |
| :---: | :---: | :---: |
|  | A | B |
| 14. The curriculum guides should be used as a resource by the teachers rather than as a set of rigid content to be covered. | $\begin{array}{r} \text { Yes } \\ 100 \% \end{array}$ | $\begin{gathered} \text { Yes } \\ 100 \% \end{gathered}$ |
| 9. Working on the curriculum guides broadened my perspective of the range of subject matter materials and activities to be covered during the school year. | $\begin{array}{r} \text { No } \\ 58 \% \end{array}$ | $\begin{gathered} \text { No } \\ 39.5 \% \end{gathered}$ |
| 5. The majority of the teachers in the district will use the guides. | $\begin{array}{r} \text { No } \\ 50 \% \end{array}$ | $\begin{array}{r} \text { No } \\ 33 \% \end{array}$ |
| 8. All teachers in the same grade levels at difforent schools are working on and covering the same materials and activities. | $\begin{array}{r} \text { No } \\ 29 \% \end{array}$ | $\begin{array}{r} \text { No } \\ 53 \% \end{array}$ |

*Each statement refers to the agreement by the majority of the teachers (majority being defined as $66.6 \%$ of the teachers or more).

## CHAPTER V

## SUMMARY

The main purpose of this study was to examine the role of the teacher in developing curriculum guides. The question was whether all teachers should be involved in the development of the curriculum guides and, if so, at what level and to what extent should they become involved. A questionnaire was administered to a randomly selected sample of 40 teachers, 24 who participated in the developing of the guides and 16 who did not participate.

The questionnaire was developed to determine the teachers' feelings about:
A. The need for the guides.
B. The involvement levels of the teachers.
C. The need for an efficient and effective implementation process.
D. The teacher's commitment to use the guides.
E. The probability that the guides will provide continuity for students transferring within the system.

This author, also, wanted to determine the zone of acceptarice of the teachers who volunteered to work on the comrittee. The results determined by the data gathered from the teachers who worked on the curriculum guide committees support the following ỉeas:

1. There was a need for the development of curriculum guides in
this district.
2. All teachers should have been involved in developing the guides.
3. It was beneficial to work on the guides with teachers from other schools.
4. Working on the curriculum guides provided an opportunity for professional growth.
5. Working on the guides helped to improve a teacher's selfconfidence, motivation, interest, and expertise in at least one subject matter area.
6. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement such as coordinating the activities of groups, developing supplementary activities and compiling and/or typing the guides.
7. More teachers would have worked on the guides if they had been given release time and/or pay.
8. The guides will be used more effectively and efficiently if proper implementation procedures are made available to the teachers.
9. The guides will prove to be most beneficial to the new teachers in the district.
10. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
11. The curriculum guides should be used as a resource by the teachers rather than as a set of rigid content to be covered.

## Discussion

The results generally confirm that not all teachers should have been involved in the development of the curriculum guides at the same level, as per the Edmond model. When this author compiled the data received from the teachers it was very easy to assess those who were working within and without their zones of acceptance. Under the category of supplementary materials and activities on the standard form provided to all teachers who worked on the curriculum committees those teachers who were working outside of their zones of acceptance had an abundance of materials and activities while others had few activities to be dispersed among 10-12 topics.

The results also suggest teachers would like to have a choice of assignment when asked to serve on a committee. Teachers have specific expertise and a limited amount of time, thus they would like to be involved where they can be most efficient and effective.

More teacher input and expertise would have gone into the developing of the guide if release time and/or comp time had been provided by the school district.

Finally, the study shows that the guides should serve only as guides; however, with proper implementation the guides should prove to be an asset to those within the school system.

## Recommendations

It is suggested that in the future development of the curricuum guides only those teachers with expertise and high relevance be asked to work on the committees. This will help to eliminate unskilled and
inaccurate work.
It is advisable to extend the participation levels of the teachers by adding personnel according to the nature and the appeal of the work. ${ }^{1}$

It is suggested that release time and/or comp time be made available to those who work on committees. If the system cannot afford comp time, then the administrators should provide release time for those involved on committees. If neither release time or comp time can be provided this problem might be remedied by the school system and nearby college or university working together to provide partial credit hours to those involved in the process.

The guides should be implemented by the teachers who worked on them. It is suggested that an in-service program be scheduled for the purpose of having those teachers who worked on the guides to share their thoughts and ideas with other teachers on how the guides should be implemented.

It is also recommended that input from parents and students be considered in developing curriculum guides.

In developing curriculum guides it is more feasible to work on one subject matter area at a time. In this way all teachers, who are willing, can share their expertise, thus incorporating a wider variety of techniques, activities, and ideas in one subject-matter area. It is also recommended that at least one year should be spent on developing a single guide. This relieves the pressure on teachers and also will allow the administration more time to provide comp time, release time, and/or other incentive methods.

It is very important to be aware of the developmental processes of children when developing curriculum guides. All children are not
ready to learn the same thing at the same time.
It is also suggested that the needs of and activities for all children be specifically spelled out (i.e., handicapped, bilingual, multicultural, gifted, etc.).

This author discovered that there is a small amount of recent research concerning the role of the teacher in developing curriculum guides. Current research on the role of the teacher in developing curriculum guides is needed in order to facilitate planning and development for curricula changes. It is the belief of this author that teachers should be involved in developing curriculum guides. Teachers are the agents of change in the classroom; therefore, they should provide input on how to bring about these changes in the most humane, effective, and efficient manner. This author recommends an extension of this study to develop full-scaled curriculum guides and to access the process, the attitude of teachers, and the implementation of the guides.

## ENDNOTES

${ }^{1}$ Hilda Taba, Curriculum Development Theory and Practice (New York, 1962), p. 469 .

## BIBLIOGRAPHY

Bridges, Edwin M. "A Model for Shared Decision-Making in the School Principalship." Education Administrative Quarterly, 3 (1967), pp. 49-61.

Doll, Ronald C. Curriculum Improvement: Decision-Making and Process. Boston: Allyn and Bacon, Inc., 1964, pp. 224-225.

Edmond Public School District. Get Acquainted Folder For You From Edmond Public Schools. Edmond, Oklahoma.

Kelly, A. V. The Curriculum, Theory and Practice. New York: Harper and Row, Inc., 1977, p. 17.

Koopman, Robert G. "Curriculum Development." The Center for Applied Research in Education, Inc. (1966), p. 22.

Krug, Edward. "Administering Curriculum Planning." Harper (1957), p. 13 .

Moffitt, John Clifton. "In-service Education for Teachers." The Center for Applied Research in Education, Inc. (1963), p. 12.

Neagley, Ross L. and N. Dean Evans. Handbook for Effective Curriculum Development. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1967, p. 138.

Ragan, William B. and Gene D. Shepherd. Modern Elementary Curriculum. 5th Ed. New York: Holt, Rhinehart and Winston, 1977, pp. 193-194.

Saylor, Galen. Factors Associated With Participation in Cooperative Programs of Curriculum Development. New York: Bureau of Publications, Teachers College, 1941.

Taba, Hilda. Curriculum Development Theory and Practice. New York: Harcourt, Brace and world, Inc., 1962, p. 469.

Verduin, John R., Jr. Cooperative Curriculum Improvement: A Rationale. Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1967, p. 21 .

Wiles, Kimball. "Does Faculty Participation Provide Curriculum Improvement?" Educational Leadership, 15 (March, 1958), pp. 347-350.

Young, Helen Jean. "Teacher Participation in Curriculum DecisionMaking: An Organizational Dilemma." Curriculum Inquiry, 9:2 (1979), pp. 113-126.

APPENDIXES

APPENDIX A

FORM FOR CURRICULUM GUIDES


| Topic | $\begin{gathered} \text { Time } \\ \text { (in days) } \end{gathered}$ | $\begin{aligned} & \text { Text } \\ & (\mathrm{pg} . \text { nos.) } \end{aligned}$ | Supplementary Materials/Activities |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

APPENDIX B

LETTER

Dear $\qquad$ ,

Thanks to you, the gathering of information for the curriculum guides has been completed. You volunteered an enormous amount of time in collecting the data and I want you to know that I truly appreciate your participation and effort.

Sue and Mae are now working very diligently to compile the information, so that you can have the math and reading guides in your possession before the end of school. The other subject area guides will be available to you before the end of summer vacation.

I feel confident that your efforts will contribute significantly to a relevant curriculum for the Edmond school system and will enhance the educational opportunities for our children.

Thanks again for a job well done.

APPENDIX C

CURRICULUM GUIDES

GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{aligned} & \text { TIME } \\ & \text { (in_days) } \end{aligned}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Unit 1 - Numbers to 5 | 10-13 | 1-24 |  |
| Recognize and write 1 and 2 | 1 | 1-2 | Have children stand and look at their feet. Ask how many feet do you have? How many shoes? How many hands?. How many eyes? <br> Have children trace the numbers 1 and 2 in the air. <br> Give children a collection of pencils, paper clips, counters, etc. Ask them to hold a certain number of objects. <br> Teach the poem and have the children act it out. "Two little ducks that I once knew, Fat duck, skinny duck, there were two, But the one little duck with the feathers on its" |
| Recognize 1, 2, and 3, and write 3. | 1 | 3-4 | Give children counters and have them form as many groups of 2 as they can. Refer to number 2 above. Trace numbers through 3. Game "Catch the Tiger" Pin cards with numbers 1-4 to the backs of children. Have the other children catch the tigers and call out the other numbers on the back. |
| Recognize 2,3, and 4, and write 4. | 1 | 5-6 | Learn and act out the following poem. "Hands down low at your sides, down the Hands up high and touch your hair Hands down low as before Now clap together, one, two, three, f |
| Recognize and write numil to 4. | ers | 7-8 | Ask children to listen very carefully. Tap your pencil two times on a desk. Ask the children how many times you tapped the pencil. Tap three times and vary the rhythm. Ask, How many times did I tap? Repeat the activity with up to four taps. |
| Recognize 3, 4, and 5, and wite 5. | 1 | 9-10 | Refer to number 1 above. Trace numbers through 5. Refer to number 4 above. |
| $\begin{aligned} & \text { pecognize } 0,1 \text {, and } 2 \\ & \text { frite } 0 \end{aligned}$ | 1 | 11-12 | place two objects in a paper bag. Shake it. Ask the students to guess how many objects are in the bag. Repeat with one object, then with no objects in the bag. Mention that the number of objects in the bag is zerp |

GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)

| TOPIC | TIME <br> (in_days) | TEXTBOOK PAGES | SUPPLEMENTARY MATERTALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> Unit 1 - Numbers to 5 |  |  |  |
| Recognize and write numi to 5. | $1$ | 13-14 | Game: Number the faces of a cube from 0 to 5. "Quiet" cubes may be made from foam rubber. Provide counters and tokens for children to use. 1-One player throws the cube then counts out the number of objects shown. If the number of objects showing is correctly identified, the player receives a token. <br> 2-The next player takes a turn. Play continues until the one with the most tokens. |
| Color up to five objects | 1 | 15-16 | Have children cut out pictures of groups up to five. Let the children paste the pictures on construction paper and write the numbers next to the pictures. |
| Recognize the group lof objects with more. | 1 | 17-18 | Write two numbers between 0 and 5 on che board. Have a child draw the corresponding numbers of dots above the numbers. Have another child mark the group of dots which is "More". (Also, can be used for "Less") |
| Recognize the group of objects with less. | 1 | 19-20 | Use game described above. |
| Read a picture graph and color up to five objects | 1 | 21-22 | Help children to trace their hands on pieces of paper. Ask the children to color their fingers and write the number of fingers they have colored. |
| Order numbers to 5 | 1 | 23-24 | Have the children make cards for the numbers 0 to 5 . Have the children mix up the cards, place them face down, then turn them up one at a time and arrange them in order. |

GRADE \& SUBJECT $\qquad$
TEXTBOOK
Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\underset{\text { PAGES }}{\text { TEXTBOOK }}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 2 - Numbers to 10 | 10-13 | 25-48 |  |
| Recognize and write numbers to 5 | 1 | 25-26 | Game: Come to my Birthday Party. Give 5 children cards numbered one to five Choose another child to give the "Party". The child with the number five card must knock five times on the desk to be admitted to the party. The child with the number 4 card knocks four times and so on. |
| Recognize 4, 5, and 6, and write 6. | 1 | 27-28 | Game: Fishing for numbers. Place several cards with the numbers three and to six in a bag. A child picks a card and calls out the number. Children who are correct are allowed to keep their cards. <br> See TE P. 28 for game board for "Going to the Party". |
| Recognize 5, 6, and 7, and write 7. | 1 | 29-30 | Give each child a string and large beads. Have them string seven beads. Refer to number 1, "Birthday Party" above. |
| Recognize 6, 7, and 8, and write 8. | 1 | 31-32 | Have the children cut out a circle, \& have them cut out petals to make a flowers. The flowers may have from 4 to 8 petals. Let them number the petals. |
| Recognize 7, 8, and 9, and write 9 . | 1 | 33-34 | Make flowers using up to 9 petals, number the petals. |
| Recognize 8, 9, and 10, and write 10. | 1 | 35-36 | Have children learn and act out the following: Ten little firefighters <br> Sleeping in a row; <br> Ding, dong, goes the bell, <br> And down the pole they go. <br> Off on the engine, one, two, three, <br> Using a big hose, four, five, six, When all the fire is out, seven, eight, nine Home so-o slow, back to bed, all ten in a row. |

GRADE \& SUBJECT First Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiln)


GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 3 - Adding $1 \& 2$ | 10-13 | 49-68 |  |
| Join two groups of objec and identify the number of objects altogether. using sums to 5 . | ts 1 | 49-50 | Give the children half an egg carton and 5 beans. Have them place 3 in the first row and 2 in the other row. Have them say and then write the number in each row, then the sum. "Repeat to show other sums up to five. |
| Racognize the symbols + and - | 1 | 51-52 | Tell the children to listen to a woodpecker tapping on a tree. Tap on one side of the table and then on the other side. Ask: How many times did I tap on this side? How many times on that side? How many times in all? Write the example: $2+1=3 \quad 4+1=5$. |
| Add 1 to a number with sums to 10. | 2 | $\left\lvert\, \begin{aligned} & 53-54 \\ & 55-56 \end{aligned}\right.$ | Draw the following pattem; ( ) () $1+1=$ $\qquad$ <br> ( ) ( ) ( ) $2+1=$ $()()() \quad() \quad 3+1=$ $\qquad$ $\qquad$ <br> See TE P. 54 for Enrichment Activity. Puzzle for adding 1 to a number. place five clothespins down one side of a card to show an addition example in both a horizontal and vertical form. Repeat with other examples of adding one. <br> See TE P. 56 for More Practice in adding 1 to a number. |
| Add 2 to a number with suns to 10. | 3 | $\left\lvert\, \begin{aligned} & 57-58 \\ & 59-60 \\ & 61-62 \end{aligned}\right.$ | Game: "Bees in a Hive" Draw a circle on the floor which will be the hive. Tell the children that some of them are going to be bees returning to a hive after visiting flowers. Have two children stand in the circle. Have two other"bees" join the bees in the hive, and ask for the answer to the addition. Repeat with other examples of adding two. <br> Divide the children into two teams. A member of Team A calls out a number to eight. A member of Team $B$ adds two to the number and writes the addition on the board. After this a member of Team B names a number and play continues. |

GRADE \& SUBJECT First Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\underset{\text { PAGES }}{\text { TEXTBOOK }}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. UNIT 3-Adding $1 \& 2$ |  |  |  |
| Cont. <br> Add 2 to a number with sums to 10 |  |  | A team receives a point for each correct answer. The first team to reach 10 points wins. <br> See Enrichment Activity for adding 2 to a number with sums to 10 TE P. 60 |
| Add 1 or 2 to a number with sums to 10 | 2 | $\begin{array}{\|l\|} 63-64 \\ 65-66 \end{array}$ | Have children throw bean bags into a basket. If the bean bag is thrown into the basket, two points are scored. If the bean bag hits the basket but does not go in, one point is scored. Have the children add up their scores after each turn. The first player to gain ten points wins. <br> In a box place eight cards numbered one to eight. In another box place four cards labeled " 1 " and four labeled " 2 ". Have a child come and choose a card from each box, name the numbers, and write the addition on the chalkboard. |
| Recognize the value of a group of pennies and add 1 or 2 to a number with sums to 10 using peanies. | 1 | 67 | On several cards show objects with price tags from lc to $9 ¢$. Display the cards in random order. Ask children to state the price of an object on one of the cards and use pennies to show the amount. <br> See TE P. 68a for activities for adding 1 or 2 to numbers with sums to 10. |
| Unit Jest | 1 | 68 |  |
|  |  |  |  |

GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Miffilin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 4- Subtracting 1\&2 | 10-13 | 69-90 |  |
| Remove 1 or 2 objects from a group of 5 or less and find the number left. | 1 | 69-70 | See TE P. 70 for enrichment activities for removing 1 or 2 objects from groups of 5 or less. |
| Use the symbols - and $=$ for subtractions from numbers to 6. | 1 | 71-72 | See TE P 71. |
| Subtract 1 from numbers to 10 | 2 | $\left\lvert\, \begin{aligned} & 73-74 \\ & 75-76 \end{aligned}\right.$ | Ask ten or less children to stand. Have one child sit down, Ask a child to tell the number story. Write the subtraction on the chalkboard. Have a child say the number of children left standing and write the answer. Repeat with other examples. <br> See TE P. 74-76 for enrichment activities for subtracting 1 from numbers to 10. |
| Subtract 2 from numbers to 10 | 3 | $\begin{aligned} & 77-78 \\ & 79-80 \\ & 81-82 \end{aligned}$ | See TE for enrichment activities P. 80. Game: "Letter Carriér" Draw on the chalkboard eight houses showing the numbers one to eight in order. Prepare "letters" showing subtractions of two from sums of three to ten. Distribute the letters to the children. Ask those who have letters for the first house to "deliver" them by placing them in the chalk tray beneath the appropriate house. Continue until all of the letters have been deliven |
| Subtract 1 or 2 from numbers to 10 | 2 | $\left\lvert\, \begin{aligned} & 83-84 \\ & 85-86 \end{aligned}\right.$ | Practice subtracting one by having children act out the following poem. <br> Ten little snails sitting on a vine, <br> One ate too much, and then there were nine. <br> Nine little snails swinging on a gate; <br> One fell off then there were eight. |



GRADE \& SUBJECT First Grade Math

TEXTB00K Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{aligned} & \text { TIME } \\ & \text { (in days) } \end{aligned}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 5 - Addition Subtraction Facts to 6 | 10-13 | 91-110 |  |
| Add two numbers with sums to 5 | 2 | $\begin{aligned} & 91-92 \\ & 93-94 \end{aligned}$ | Ask the children to listen to the drummer. Tap twice on one side of the table, and then a little faster, tap three times on the other side. Ask: How many times did I tap on this side? How many times on the other? How many times in all? Write (ex.) $2+3=5$ Repeat with other sums to 5 . |
| Add two numbers with sums to 6 | 1 | 95-96 | Give the children half an egg carton each \& marbles or other objects of two different colors to show addition with sums to 6 . Have the children place two marbles of one color in the carton and four marbles of a different color. Ask: How many marbles in all? Write the addition in horizontal and vertical form. |
| Use addition with sums 6 in developing rebus problem solving skills | 1 | 97-98 | See TE P. 98 for More Practice in adding sums to 6. |
| Subtract two numbers with sums to 5 | 2 | $\left\lvert\, \begin{aligned} & 99-100 \\ & 101-102 \end{aligned}\right.$ | Show pictures of objects on the chalkboard. Have children tell their own number stories which should involve subtraction ( or use children to show addition and subtraction) <br> Give children six cards numbered 0 to 5 . Tell the children to find the answer to five minus three. Have the children hold up the correct answer card. If some answers are wrong, illustrate the subtraction with concrete examples. Write the subtraction in vertical form on the chalkboard. Repeat with other numbers with sums to five. |
| Subtract two numbers with sums to 6 | 1 | 103-104 | See TE P. 104 for Enrichment Activity for subtracting two numbers with sums to 6. |

GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)


GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 6 - Addition- <br> Subtraction Facts to $7 \& 8$ |  | 111-132 |  |
| Add two numbers with sums of 6 or 7 | 1 | 111-112 | Use bottle caps, toothpicks, people, other tangible objects to add or subtract numbers. |
| Subtract two numbers with sums of 6 or 7 | 1 | 113-114 | Give each child 10 counters. Ask the children to make a pretty design with seven of their favorite counters. Tell the children to take three counters away from their design \& have the children write the subtraction. Write the subtraction on the chalkboard so that the children can check their own subtraction. Repeat with taking away four, five or six counters. <br> See TE P.. 114 for Enrichment Activity for subtracting two numbers with sums of 6 or 7 . |
| Add or subtract two numbers with sums of 6 to 8 | 1 | 115-116 | Separate the children into groups. Give each group seven counters. One child in each group separates the counters into two groups. The second child writes the addition in vertical form. In the same way, have one child remove counters and have the second write a subtraction in vertical form. Have each child take several turns. |
| Add or subtract two numbers with sums of 7 | 1 | 117-118 | See TE P. 118-120 for Enrichment Activity for adding or subtracting two numbers with sums of $7 \& 8$. |
| Add or subtract numbers with sums of 8 | 1 | 119-120 | See above. |
| Acd or subtract two numbers with sums of 7 or 8 | 1 | 121-122 | Relay races on blackboard with 2 teams. The first person on Team $A$ and the first person on Team B go up to the blackboard upon a given signal and work addition and subtraction problems already written on the board by the teacher. The same set of problems should be written for both teams, When each person is finished or passes, he/she goes back, gives the chalk |

GRADE \& SUBJECT Firgt Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> UNIT 6 - Addition - <br> Subtraction Facts to 78 |  |  |  |
| Add or subtract two numbers with sums of 7 \&8 | 1 | 123-124 | Have the children use grid paper to show additions and subtractions with sums of seven or eight. For an addition have the children color squares using two different colors for the numbers being added. For a subtraction have the children color squares for the first number in the subtraction. The children then cross off the number being subtracted. See TE P. 124 for enrichment activity on this. |
| Add or subtract two numbers with sums of 5 to 8. | 1 | 125-126 | See TE P. 126 for enrichment activity. |
| Add three numbers with sumg to 8. | 1 | 127-128 | Provide the children with cutouts of circles, triangles, and squares. Write addition and subtraction examples on $3 \square$ $+50 \quad-4 \Delta$ <br> Encourge the children to use the shapes to figure out the answers. Have children write the answers and repeat with different numbers. <br> Cardboard circles approximately $12^{\prime \prime}$ in diameter, can be used to put addition or subtraction problems on the front around the outside of the circle. Answers should be written on the back in the same location. Clothespins with numbers written on them can be used to place on the problem to indicafe a chosen answer. The child can turn the circle over and check his/her answer. |
| Unit Test | 1 | 129-130 |  |
|  |  |  | $\therefore$ |

GRADE \& SUBJECT First Grade Math

TEXTBOOK Mathematics (Houghton-Miffin)


| GRADE \& SUBJECT Flrst Grade Math$\qquad$ |  |  |  |
| :---: | :---: | :---: | :---: |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\underset{\text { PAGES }}{\text { TEXTBOOK }}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| UNIT 7 - Addition Subtraction Facts for 9 and 10 |  | 133-152 |  |
| Add two numbers with sums of 8 or 9 | 1 | 133-134 | Have the children add the dots on dominos together for practice in addition; also use as a subtraction activity. See TE P. 134 Enrichment Activity. SRA Computapes Module One Tapes AS2, AS4 Pgs.. $1 \& 2$. |
| Subtract two numbers with sums of 8 or 9 . | 1 | 135-136 | TE P. 136 |
| Add or subtract two numbers with sums of 8 to 10 | 1 | 137-138 | Use cardboard or styrofoam egg carton; put addition or subtraction problems in each cup with permanent marker. Put one bean in the carton. Have the child close the carton \& shake it. Then, open the carton and give the answer to the problem in the cup in which the bean landed. Mark answers for easy checking. |
| Add or subtract two numbers with sums of 9 | 1 | 139-140 | TE P. 140. Enrichment Activity for adding or subtracting, etc: |
| Ahld or subtract two numbers with sums of 10 | 1 | 141-142 | See TE for Enrichment Activity |
| Add or subtract two numbers with sums of 9 or 10 | 2 | $\begin{aligned} & 143-144 \\ & 145-146 \\ & \hline \end{aligned}$ | See TE P. 144 Enrichment Activity. |
| Ald or subtract two numbers with sums of 7 too 10. | 1 | 147-148 | Play TEACHER of Seven. Choose a child to play teacher. The child asks pther children for two numbers which add up to seven. Repeat with sums of B to 10 . |

GRADE \& SUBJECT
First Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)


GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-Miff1in)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (tn days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 8 - Numbers to 20 |  | 153-174 |  |
| Recognize and write 10 | 1 | 153-154 | See TE P. 154 for Enrichment activity. |
| Recognize the numbers 10 to 14 | 1 | 155-156 | Have the names of numbers on one side of ditto and numberals on the other side. Have students match the names and numerals by drawing a line from one column to the other. <br> Use overhead projector and transparencies to introduce place value. <br> TE P. 156. |
| Recognize the numbers 14 to 16 and write the numbers 10 to 15 | 1 | 157-158 | See TE P. 158 for Enrichment Activity. |
| Recognize the numbers 16 to 18 and write the numbers 13 to 18 | 1 | 159-160 | Have children take 16 steps across the room, saying the number of the step as they walk. Repeat for $17 \& 18$. <br> Give each child a sheet of squared paper. Have the children color a row of 10 squares \& write 10 beside it. The second row should have 1 square with the eleventh a different color. Continue through 18. <br> See TE P. 160 for Enrichment Activity for writing numbers 13 to 18. |
| Recognize the numbers 48 to 20 and write the numbers 15 to 20 | 1 | 161-162 | Assign a number from 15 to 20 to each child. Ask the child to write the number on the chalkboard \& say it aloud as it is written. |
| Recognize place value: ten and ones. | 1 | 163-164 | Give the children envelopes or boxes containing 11 to 19 similar shapes. Pass out sheets on which "--.- Ten----Ones" is printed. The children are to count the shapes and record the number of tens and ones; then exchange their envelopes. |

GRADE \＆SUBJECT First Grade Math
TEXTBOOK Mathematics（Houghton－Miffiln）

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \end{gathered}$ | SUPPLEMENTARY MATERIALS／ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont． <br> UNIT 8 －Numbers to 20 |  |  |  |
| Recognize the value of dimes and pennies up to 20ヶ． | 1 | 165－166 | See TE P． 165 for Enrichment Activities <br> Trend Wipe Off Cards（Money） <br> Play Store．Have different items set up in your＂store＂．Have one person be the cashier．Give each student a certain amount of＂play＂money．Let the students take turns buying certain items from the store trying to choos items for the exact amount they have． |
| Write the numbers 11 to 18 ard order numbers to 20. | 1 | 167－168 | Game．＂Name the Next Two＂Have two teams，state a number between 0 and 18 and ask members of Team One to say the next two numbers．Take turns with the teams．Keep score on the board giving one point for a correct answer． The first team to reach 20 points wins． <br> See Enrichment Activity P． 168 |
| Recognize which number is greater and which number is less for numbers 10 to 20 | 1 | 169－170 | Game．＂Say the Lesser Number＂Divide the children into 3 teams．Give each team a set of cards numbered 11 to 20．Play starts with a child from Teams A \＆B each showing one of the cards．A child on Team C scores a point by pointing to the number which is less．Play now rotates so that Teams $B \& C$ show cards and a child on Team $A$ points to the number which is less．After a while，change the rules so that the greater number is requested． |
| Unit Test | 1 | 171－172 |  |
| Review | 1 | 173－174 |  |
| Unit Test | 1 |  | Ditto Master |


| GRADE \& SUBJECT First Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton-Mifflin) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| $\begin{array}{r} \text { UNIT } 9 \text {-Geometry and } \\ \text { Measurements } \end{array}$ |  | 175-194 |  |
| Recognize boxes, cans, balls, and cones. | 1 | 175-176 | Introduce models of the four shapes. Blindfold several chiloren in turn or have them close their eyes. Let them feel a model and try to name its shap See TE P. 176 Enrichment Activity for recognizing boxes, cans, balls and cones. |
| Recognize circles and triangles | 1 | 177-178 | Draw the following or similar shapes on the board $-000 \Delta \Delta \Delta$ Tell the children to look at the shapes. Tap twice on one side of the table, and twice on the other side and again twice on one side. Repeat until the children discover that the number of circles and triangles match the tapping on each side of the table. Have children guess on which side of the table you should tap next, the "circle side" or the "Triangle side". Repeat with other patterns. |
| Recognize squares and rectangles | 1 | 179-180 | TE P. 180 Play "Pick Up Shapes". Place some shapes on the floor. Divide the children into two teams. Say, "I want someone to pick up a square." The first child to pick up the right shape gets a point for his or her team. |
| Compa:o longtha, lunges fand sharront | 1 | 181-182 | Cuisenaire Rods TE P. 182 Enrichment Activity for comparing lengths. |
| Measure length using infor 31 units. | 1 | 183-184 | Choose different objects in the room. Have the students choose 2 different units of measurement (i.e., hands, fingers) and let different students measure the cosen objects using the chosen units of measurement. Then, compare the answers of the students. |
|  |  |  |  |


| GRADE \& SUBJECT $\qquad$ First Grade Math TEXTBOOK $\qquad$ Mathematics (Houghton-Miffiln) |  |  |  |
| :---: | :---: | :---: | :---: |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| $\begin{aligned} & \text { Cont. } \\ & \text { UNIT } 9 \text { - Geometry and } \\ & \text { Measurement } \end{aligned}$ |  |  |  |
| Measure length using a centimeter ruler | 1 | 185-186 | Place centimeter lengths one at a time in a line on the display board to show the construction of a ruler. Number the divisions. Have children measure the length of their fingers, shoes, desk, etc. |
| Measure length using lan inch ruler | 1 | 187-188 | See TE P. 188 Enrichment Activity |
| Tell time to the hour | 1 | 189-190 | Nake clocks using paper plates, paper hands cut from lighweight cardboard or heavy construction paper and use a brass brad to fasten the hands onto the "clock" . Have children draw the numerals on with a dark crayon. Practice positioning hands to make different times. |
| Tell time to the hour. | 1 | 191-192 | Trend Wipe Off Cards (Telling Time) |
| Unit Test | 1 | 193-194 |  |
| Review | 1 | 195-196 |  |
| Unit Test | 1 |  | Ditto Master |
|  |  |  |  |


| GRADE \& SUBJECT First Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton-Mifflin) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| UNIT 10 - Addition Subtraction Facts for 11 and 12 |  | 195-216 |  |
| Add or subtract two numbers with sums to 10 | 1 | 195-196 | See TE P. 196 Enrichment Activity |
| Add two numbers with sums of 9,10 , and 11 | 1 | 197-198 | See TE P. 198 Enrichment Activity |
| Subtract two numbers with sums of 9,10 , or 11. | 1 | 199-200 | Ask children (11) to stand in a line, as at a cafeteria. Say that 4 children have been served and let them leave the group. Ask "How many are left in the line?" Have a child write $11-4=7$ on the chalkboard. Continue with other numbers. <br> See TE P. 200 Enrichment Activity. <br> See TE P. 216A |
| Add two numbers with sums of 10 or 11 | 1 | 201-202 | Relay races, see supplementary activities for Unit 6. <br> Using playing cards, have each student, in a small group, choose 2 (or 3) cards with numbers on them, and add them together, either mentally or written on a separate piece of paper. <br> See TE P. 202 Enrichment activity. |
| Subtract two numbers with sums of 10 or 11 | 1 | 203-204 | Computapes (SRA) Model Tape AS 17 <br> Have a cafeteria with items labeled from $2 ¢$ to $9 ¢$. Tell the children they have llc. Have them select items to buy and tell how many pennies are left over from the llc. <br> See TE P. 204 Enrichment Activity. |
|  |  |  |  |

GRADE \& SUBJECT First Grade Math
TEXTBOOK
Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> UNIT 10 - Addition Subtraction Facts to 11 and 12 |  | . |  |
| Add or subtract two numbers with sums to 11 and add three numbers with sums to 11. | 1 | 205-206 | Flash cards with addition sums to 11 ; include adding zero. Have two teams Let a member of Team I draw a card, hold it up, and state the answer. Alternate, with Team II. Each team should check the answer given by the other team. Score one point for each correct answer. |
| Add two numbers with sums of 10 or 12 | 1 | 207-208 | TE P. 208 Enrichment Activity |
| Subtract two numbers with sums of 10 or 12 | $1$ | 209-210 | Have the children write the addition and subtraction facts for 3 numbers up to sums of 12 Ex: $8,3,11$. $8+3=11,3+3=11,11-8=3,11-3=8$. See TE P. 210 Enrichment Activity |
| Add or subtract two numbers with sums to 12 Use addition or subtract with sums to 12 in devel rebus problem solving sk | $\begin{aligned} & \quad 1 \\ & \text { ion } \\ & \text { oping } \\ & \text { ills } \end{aligned}$ | $\begin{gathered} 211-212 \\ 213 \end{gathered}$ |  |
| Unit Test | 1 | 214 |  |
| Review | 1 | 215-216 |  |
| Unit Test | 1 |  | Ditto Master |

GRADE \& SUBJECT First Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 11 - Numbers to 99 | 10-13 | 217-236 |  |
| Recognize tens to 90 | 1 | 217-218 | One hundred chart. <br> Three children are chosen to stand in a line and raise the fingers of both hands. Ask another child to call out the number of raised fingers and write it on the chalkboard. Continue by tens to 90 . <br> TE P 218 Enrichment Activity. |
| Recognize the value of dimes to 904 . | 1 | 219-220 | Pennies, dimes (real or flannelboard kit). <br> Let the children pretend they are paying for dessert in a restaurant. Have menus with the price of the meal stated. The children will need a number of real, plastic, or paper dimes. They must put the correct number of dimes in front of the desert of their choice. <br> Play "Bank". One chil is the teller and gives out dimes for the pennies presented by each child in turn. |
| Recognize place value: tens and ones. | 1 | 221-222 | Play 'Wait in Line". Give each child a slip of paper on which is written a number from 11 to 19. Have the children pretend that these are numbers drawn at an icecream counter. Call out the number 11. Ask two children who have the number 11 to hold up their fingers and show 11 . Repeat this for the numbers 12 to 19 . <br> See P. 222 Enrichment Activity |
| Recognize and write the numbers 19 to 40. | 1 | 223-224 | Play "Going to the Fair". Write each number from 19 to 30 on a card and have at least as many cards as children. Pretend these are tickets for the carousel or merry-go-round. Each child draws a ticket. Any child who reads the number and tells the number of tens and ones correctly gets an extra ticket. The child with the most tickets wins the game. |


| GRADE \& SUBJECT First Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton-Miffiln) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\underset{\text { PAGES }}{\substack{\text { TEXTBOOK }}}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| Cont. <br> UNIT 11 - Numbers to 99 |  |  |  |
| Recognize and write the numbers 39 to 60 | 1 | 225-226 | Write the numbers 39 to 60 on cards. Each child draws one, states the numbers aloud, and says the number of tens and ones. |
| Recogaize the value of dimes and pennies to 60 c | 1 | 227-228 | See TE P. 228 Enrichment Activity |
| Recognize and write the numbers 59 to 80 | 1 | 229-230 | Pass out cards numbered 59 to 80 and let the children arrange themselves in order across the room. |
| Recognize and write the numbers 79 to 99 | 1 | 231-232 | Make two spinner cards. Let a child spin both pointers, read the number, and write it on the board. (One card for 10's and One card for 1's) If the group is large provide spinners for smaller groups so that each child may have one or more turns. |
| Order numbers to 99 | 1 | $\begin{gathered} 233-234 \\ 235 \end{gathered}$ | Let five children go to the board. Give each a number and ask them to writ the next six numbers. Repeat with other groups and numbers. |
| Unit Test | 1 | $\begin{array}{r} 236 \& \\ 236 a \end{array}$ |  |
| , |  |  |  |

GRADE \& SUBJECT First Grade Math
TEXTB00K Mathematics (Houghton-Miffiin)


GRADE \& SUBJECT First Grade Math
TEXTBOOX Mathematics (Houghton-Mifflin)

| TOPIC | TIME <br> (in days) | TEXTBOOK <br> PAGES | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :--- | :---: | :---: | :---: |
| Cont. <br> UNIT 12 - Two-Place <br> Addition and Subtraction |  |  |  |
| Unit Test |  |  |  |
| Review | 1 | 258 |  |
|  |  |  |  |


| GRADE \& SUBJECT First Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| UNIT 13 - $\begin{gathered}\text { Fractions and } \\ \text { Measurements }\end{gathered}$ | 10-12 | 261-280 |  |
| Identify shapes that are symmetrical | 1 | 261-262 | Construction paper shapes ( squares, triangles, etc.) for each child. Let the children draw a large shape which they think can be folded to make matching parts. Have the children cut out the shape and make matching halves. |
| Recognize one half: | 1 | 263-264 | Place on a table one half of some cookies, apples, pieces of cardboard, etc. Place the other halves on another table. Let the children take turns choosing an object and finding the other half. |
| Recognize one third. | 1 | 265-266 | See TE P. 266 Enrichment Activity |
| Recognize one fourth | 1 | 267-268 | See TE P. 268 Enrichment Activity |
| Tell Time to the hour and half hour. | 2 | $\begin{aligned} & 269-270 \\ & 271-272 \end{aligned}$ | Let children show different hours on a clock and tell what they usually do at that hour. Distinguish between morning and afternoon. <br> Prepare clock faces showing times to the hour or half-hour. Divide the children into 2 teams. Place the cards face down and let a member of the first team draw a card, hold it up and tell the time. Alternate teams and keep the score. |
| Recognize liters and half 1tters | 1 | 273-274 | Containers for liters and half-liters. Have the chlldren pour water and/or sand from a liter container to fill two half-liter containers and vice-versa. |
|  |  |  |  |

GRADE \& SUBJECT First Grade Math
textbook Mathematics (Houghton-Miffiin)


GRADE \& SUBJECT First Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT 14- AdditionSubtraction Facts for $13-18$ | 10-12 | 281-302 |  |
| Add two numbers with sums of 10 or 13 | 1 | 281-282 | See TE P. 282 Enrichment Activity. Numbers $10-13$ |
| Subtract two numbers with sums of 10 or 13 | 1 | 283-284 | Play Kites. Pretend that the children have made kites. Give them a kite shaped piece of paper with some related subtractions for $10 \& 13$ written on it in both horizontal and vertical form. To fly their kites the childre must write all answers correctly. |
| Add two numbers with sums of 10 or 14 | 1 | 285-286 | Label pictures of tools $5 ¢$ to $9 ¢$. The children have 14 pennies each and decide which two tools they can buy. |
| Subtract two numbers with sums of 10 or 14 | 1 | 287-288 | See TE P. 288 Enrichment Activity |
| Add or subtract two numbers with sums of 10 to 14. | 1 | 289-290 | See TE P. 289 |
| Add or subtract two $n$ numbers with sums of 10 or 15 <br> Add or subtract two numbers with sums of 10 to 15. | 2 | 291-292 | Game "Not Enough" Show a bird feeder marked $15 ¢$. Give the children different numbers of pennies from $6 ¢$ to $9 ¢$. A child says I do not have enough money. I would need $\qquad$ more pennies to buy the feeder. <br> See TE P. 292 Enrichment Activity. |
| Add or subsract two numbers with sums of 16 to 18 | 2 | $\begin{aligned} & 295-296 \\ & 297-298 \end{aligned}$ | See TE P. 296 Enrichment Activity. See TE P. 298 for Tract Game |

GRADE \& SUBJECT First Grade Math
TEXTBOOK Mathematics (Houghton-M1ffifn)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\underset{\text { PAGES }}{\text { TEXTBOOK }}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> UNIT 14 - AdditionSubtraction Facts for 13-18 |  |  |  |
| Add or subtract two numbers with sums of 13 to 18 | 1 | 299-300 | Form two teams. State a sum not exceeding 18. A member of Team I must state two numbers which make that sum. The team receives one point for a correct pair of numbers. Alternate teams and repeat with another sum not exceeding 18: The team with the most points wins. |
| Review | 1 | 301-302 |  |
| Unit Test | 1 | 302d-e |  |


| GRADE \& SUBJECT Fourth Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton- Miffiin) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACtivities |
| UNIT I - Addition and Subtraction | 9 | 1-21 |  |
| Add or subtract two numbers with sums to 9 | 1 | 2-5 | Enrichment TE P. 3 |
| Add or subtract two humbers with sums to 13 | 1 | 4-5 | More practice and application |
| Add or subtract two numbers with sums to 18 | 1 | 6-7 | More practice and application Use table to show subtraction facts. TE P. 6 |
| Use number patterns to add or subtract two numbers with sums to 18 | 1 | 8-9 | Enrichment. TE P. 9 |
| Add a 1-digit and a.2digit number with a sum to 20 | 1 | 10-11 | More pracrice and applications TE P. 11 Enrichment TE P. 9 |
| Add a 1 -digit and a 2digit number with a sum to 28 | 1 | 12-13 | Use number patterns TE P. 12. |
| Add three or more 1-digit numbers | 1 | 14-15 | Practice Master No. 1-7 1-8 |
| Add or subtract to solve word problems | 1 | 16-17 | Use seed catalogues TE P. 16 |



GRADE \& SUBJECT Fourth Grade Math

TEXTBOOK $\qquad$ Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| $\begin{array}{r} \text { UNIT II - Numbers and } \\ \text { Neasurement } \\ \hline \end{array}$ | 11-14 | 22-45 |  |
| Use 〈and> to compare two 2-digit numbers and write the numbers that are between two numbers | 1 | 22-23 | Practice Masters No. 2-1, 2-2 |
| Write the standard form of 3-digit numbers and write the numbers that are between two numbers | 1 | 24-25 | Enrichment TE P. 25 |
| Write the standard form of 4-digit numbers and write the numbers that are between two numbers | 1 | 26-27 | Use boxes for place value TE P. 26 |
| Write the standard form of numbers having up to 7 diglts and write the numbers that are between two numbers | 1 | 28-29 | More practice and application TE P. 29 |
| Round a number less than 1000 to the nearest ten and hundred. | 1 | 30-31 | Enrichment TE P. 31 |
| Find the value of money made up of coins and dollars and write this amount in cents (cont. Page 2) |  |  |  |




GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)


GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ (1 n \text { days }) \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT IV - Multipifcatioq and Division | 10 | 72-93 | Review - Lower level may need more time. Practice and application TE P. 73 |
| Use addition to develop multiplication facts "Meaning of Multiplicat <br> Use arrays to develop multiplication facts | on' | $72-75$ $(74-75)$ | Numbers on cards TE P. 74 |
| "Meaning of Division" Use arrays to related multiplication facts to develop division facts. | 1 | 76-77 | Design puzzle TE. P. 77, Numerals on cards TE P. 76. |
| "Two, Three, (Review A) Use 2 as a factor, divisor, and quotient <br> Use 3 as a factor, divisor, and quotient | 1 | $\begin{gathered} 78-81 \\ (78-79) \\ (80-81) \end{gathered}$ | See TE, Practice and appilcation. Flash cards for 2's \& 3's. Enrichment. TE P. 81 |
| Use 4 as a factor, divisor, and quotient | 1 | 82-83 | TE P. 82 Cross Stitches - Flash Cards for $4^{\prime}$ s. |
| Zero to 4 (Review B) Use 2, 3, and 4 as factors and divisors | 1 | $\begin{aligned} & 84-85 \\ & 86-87 \\ & \hline \end{aligned}$ | Flash cards mixed up from $0^{\prime}$ 's through $4^{\prime} \mathrm{s}$. Play games with the flash cards |
| Use 0 through 4 as factors and divisors and quotients |  |  | - |

GRADE \& SUBJECT Poutth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)

| TOPIC |  | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> UNIT IV - Multiplication <br> and Division |  |  |  |
| "Problem Solving" Add, subtract, multiply and divide to solve word problems | 1 | 88 | Students make up own story problems and switch so they work someone else's problems. |
| Unit Test | 1 | 89 | Teacher-made test. |
| Taking Another Look | 1 | 90-91 |  |
| Something Extra | 1 | 92 |  |
| Reviewing Needed Skills | 1 | 93 |  |
|  |  |  | Frank Schaffer "Math Mysteries" are very good for extra work. It is available at Thompson's. <br> Laidlaw Brothers "Lennes Essentials of Arithmetic" good for extra work |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (10 days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT V - Multiplication and Division | 12 | 94-117 |  |
| "5 \& 6" <br> Use 5 as a factor, divisor, and quotient <br> Use 6 as a factor, divisor, and quotient <br> Use 6 as a factor, divisor, and quotient | 2 | $\begin{aligned} & 94-95 \\ & 96-97 \\ & 98-99 \end{aligned}$ | More practice and application TE P. 95. Use chart TE P. 98 Use paper clock TE P. 96 |
| "Zero to 7 (Review A)" Use 0 through 6 as factors, and 1 through 6 as divisors <br> Use 7 as a factor, divisor, and quotient | 2 | $100-101$ $102-103$ | See TE, Flash cards. Enrichment P. 101 TE. Use number cards TE P. 102. More practice and application. |
| "Zero to 8" <br> Use 8 as a factor, divisor, and quotient. <br> Use 0 through 8 as factors, and 1 through 8 as divisors | 2 | $\begin{aligned} & 104-105 \\ & 106-107 \end{aligned}$ | More practice and application. Flash cards. See TE P. 105. Enrichment TE P. 107. |
| "Zero to 9 (Review B) <br> Use 9 as a factor, divisor, and quotient | 2 | 108-109 | More practice and application. Flash cards. Multiplication Chart, TE P. 109 \& P. 111. |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (1n_days) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> UNIT V - Multiplication and Division |  |  |  |
| Cont. Zero to 9 <br> Use 0 through 9 as factors, and 1 through 9 as divisors |  | 110-111 |  |
| Problem Solving <br> Unit test | 1 | 112-113 | Teacher-made test. Extra Unit Test. TE P. 113 |
| Taking another look | 1 | 114-115 |  |
| Something extra | 1 | 116 |  |
| Reviewing needed skills | 1 | 117 | See TE |
|  |  |  | Frank Schaffer "Math Mysteries" <br> Laidlaw Brothers "Lennes Essentials of Arithmetic" good for drill and extra work. |


| GRADE \& SUBJECT Fourth Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics, (Houghton-Miffiln) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline \text { TEXTBOOK } \\ \hline \text { PAGES } \\ \hline \end{array}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| UNIT VI - Measurement | 10 | 118-139 |  |
| Length \& Perimeter Measure the length of an object to the nearest centimeter <br> Find the lengths of the sides of a shape to the nearest centimeter and determine its perimeter <br> Measure the length of an object to the nearest inch | 1 | $\begin{aligned} & 118-119 \\ & 120-121 \\ & 122-123 \end{aligned}$ | See TE. Measure things in the class. Find the perimeter of things in the class. |
| "Area" <br> Find the area of a shape by counting the number of square units that fit inside 1t, or by multiplying its dimensions | : | 124-125 | See TE. Work on graph paper. |
| "Volume (Review A)" Find the volume of a space by counting the number of cubic units that fit inside it, or by multiplying its dimensions | 1 | 126-127 | See TE. Use some real cubes or blocks to help explain difference in volume and area. |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiin)


GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-M1ffiln)


| GRADE \& SUBJECT $\qquad$ Fourth Grade_Math TEXTBOOK $\qquad$ Mathematics (Houghton-Miffiln) |  |  |  |
| :---: | :---: | :---: | :---: |
| TOPIC | $\begin{gathered} \text { TIMR } \\ (\ln \text { iays } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| Cont. <br> UNIT VII - Multiplicatio by Ones | 21-2 |  |  |
| "Three-place Multiplica <br> Multiply a 3 -digit numb <br> by a l-digit number, regrouping ones <br> Multiply a 3-digit numbe <br> by a l-digit number, <br> regrouping ones and tens | $\text { rion" } 1$ | $150-151$ $152-153$ | "Pig" Game. 2 players. Multiply dots on dice. First one to 100 wins. Same player keeps rolling until he wins or rolls a 1 , in which he loses his turn. If "snake eyes" are rolled, he looses turn $+/$ - points.' |
| "Four-place Multiplicat <br> Multiply a 4-digit numbe by a 1-digit number, regrouping as necessary |  | 154-155 |  |
| Multiply money amounts less than $\$ 100$ by a l-digit number, regroup ing as necessary | 1 | 156-157 | Cross number puzzles. |
| Solve word problems using information from a bar graph | 1 | 158 |  |
| Unit Test | 1 | 159 |  |
| - |  |  |  |


| GRADE 8 SUBJECT Fourth Grade Math |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton-Miffiln) |  |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ (1 n-\operatorname{days}) \end{gathered}$ | $\begin{array}{\|c} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{array}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |  |
| UNIT VIII - Division | 12 | 164-183 | Practice, Enrichment, and Masters |  |
| "Division with remainde Divide a number less than 18 by a 1-digit number, with a remainde: | 11 | 164-165 | Masters |  |
| "Division with remainde Divide a 2-digit number by a 1-digit number, with a remainder | 11 | 166-167 | Duplicating Masters "Fundamental Mathematics" Milliken P. 17-20. | $\text { G5. } 3 \& 4, \mathrm{BK} 4-\mathrm{A},$ |
| "Ten as Quotients" Divide a 2-digit or 3-digit multiple of 10 by a l-digit number, with no remainder | 1. | 168-169 | "Enjoy Number Knowledge" Series B-5 No. 13 | - |
| "Two Stage Division" Divide a 2-digit number by a l-digit number with no remainder (both digits of the dividend are multiples of the divisor) | 2 | 170-171 | "Arithmetic Exercises" Milliken GR. 4-2 P. 11-17 |  |
| "Two Stage Division" Divide a 2-digit number by a 1-digit number with no remainder (the first digit of the dividend is not a multiple of the divisor) | 1 | 172-173 | "Math Time Machine" Set F P. 12-17 |  |


| GRADE \& SUBJECT Fourth Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton-M1ffiin) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| Cont. <br> UNIT VIII - Division |  |  |  |
| "Division with Remainde $"$ Divide a 2-digit number by a 1-digit number with remainder |  | 174-175 |  |
| "Two Stage Division" Divide a 3-digit number by a 1-digit number with no remainder (the first two digits of the dividend are multiples of the divisor) |  | 176-177 | - |
| "Two Stage Division" Divide a 3-digit number by a l-digit number with no remainder (the first two digits of the dividend are not multiples of the divisor) | 1 <br> nd | 178-179 |  |
| "Division with remaindef" Divide a 3-digit number by a 1-digit number with a remainder | $\because \quad 1$ | 180-181 |  |
| "Problem Solving" <br> Solve word problems which may require infornat <br> from a table of measure |  | 182 |  |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)


GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (fondays) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT IX - Fractions | 11-14 | 188-209 |  |
| Write a fraction for the shaded part of a region | 1 | 188-189 | Using fraction pies. Filmstrip "Introduction of Fractions" Mathimagination (Creative Pub.) |
| Write a fraction for the indicated part of a group | 1 | 190-191 | See TE P. 191 for more practice and application |
| Write a fraction equal to a given fraction with the aid of a model | 1 | 192-193 | See TE P. 192 2nd Activity Frank Schafer "Fractions" |
| Write a fraction equal to a given fraction by multiplying the numerath and denominator by the same non-zero number | r 1 | 194-195 | Filmstrip "Equivalent Fractions" |
| Write a fraction equal to a given fraction by dividing the numerator and denominator by the same non-zero number | 1 | 196-197 | Use Practice Master 9-5 and Enrichment Activity TE P. 197. |
| Use $>$ or $<$ to compare. two fractions | 1 | 198-199 | See TE P. 199 for game "Start to Finish" |
| Find a fractional part of a whole number using unit fractions | 1 | 200-201 | Use the following diagram: $\mathrm{NC}=$ No Cavities $\mathrm{C}=$ Cavities <br> 6 students <br> (NC) <br> (NC) (NC) <br> (C) (C) (C) <br> $\frac{1}{2}$ of 6 students have no cavities/ 3 students have no cavities " $\frac{1}{2}$ of $6=3$ " |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)


GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (10_days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT X - Multiplication | 18 | 214-237 |  |
| "Multiplication by ones Multiply a 2-digit numb by a 1-digit number, regrouping as necessary | 1 | 214-215 | More practice and application TE P. 215 |
| "Multiplication by ones Multiply a 3 or 4-digit number by a l-digit, regrouping as necessary | 1 | 216-217 | Basic Facts Game See TE P. 216 |
| "Multiplication by tens Multiply two 2-digit numbers, one of which is a multiple of ten | 1 | 218-219 | Enr1chment TE P. 219 |
| ten. <br> "Multiplication by ones and tens" <br> Multiply two 2-digit numbers, one of which is less than 20 | 1 | 220-221 | More practice and application. TE P. 221 |
| "Multiplication by ones and tens: <br> Multiply two 2-digit <br> numbers | 1 | 222-223 | Use numbers on cards TE P. 222 |
| Practice Page | 1 | 328 |  |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Miffiln)

| $!$ TOPIC | $\left(\begin{array}{c} \text { TIME } \\ \text { (in days) } \end{array}\right.$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| Cont. <br> UNIT X - Multiplication | (10) | - |  |
| Review Lesson | 1 |  | Practice Masters 10, 1-5 |
| Evaluation | 1 |  | Teacher-made test |
| Multiplication -"3-digi by 2-digit " Multiply a 3-digit number b;i a 2-digit multiple of ten. <br> Multiply a 3-digit number by a 2-digit number which is less than 20 <br> Multiply a 3-digit number by a 2-digit number | 3 | $\begin{gathered} 224-225 \\ 226-227 \\ \\ 228-229 \end{gathered}$ | Enrichment TE P. 225. More practice and application TE P. 227. |
| Multiply a money amount written as dollars and cents by a 2-digit numb | 1 | 230-231 | More practice and application TE P. 231 |
| Practice Page | 1 | 329 |  |
| - |  |  |  |


| GRADE \& SUBJECT Fourth Grade Math |  |  |  |
| :---: | :---: | :---: | :---: |
| TEXTBOOK Mathematics (Houghton-Miffiln) |  |  |  |
| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (1n days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| Cont. <br> UNIT X - Multiplicatio |  |  |  |
| Word Problems -Review lesson | 1 | 232 | Newspaper ads. See TE P. 232 <br> Practice Masters 10, 6-10 |
| Unit Test | 1 | 233 | May look up to review |
| Unit Test | 1 |  | Houghton-M1fflin prepared |
| Review Multiplication Taking Another Look | 1 | 234-235 |  |
| Something Extra <br> Review Needed Skills | 1 | 236-237 | Cha1lenge for Group 1 <br> McCormick-Mathers Math Kit 118 1972 Available for extra work |
|  |  |  | - |

GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-M1ffiln)

| TOPIC | $\begin{aligned} & \text { TIME } \\ & \text { (1n_days) } \end{aligned}$ | TEXTBOOK PAGES | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT XI - Division | 19 | 238-261 |  |
| Divide a 2 or 3-digit number by a 1 -digit number with a remainder | 1 | 238-239 | Multiplication Basic Facts Review TE P. 238 |
| Divide a 3 -digit number by a 1-digit number with no remainder. (Each dig in the dividend is a multiple of the divisor <br> Divide a 3-digit number by a 1-digit number with no remainder. <br> Divide a 3-digit number by a 1-digit number with no remainder |  | $\left\|\begin{array}{c} 240-241 \\ \vdots \\ 242-243 \\ 244-245 \end{array}\right\|$ | Enrichment TE P. 241 More practice and application TE P. 243. |
| Divide a 3-digit number by a 1-digit number with a remainder | 1 | 246-247 | Enrichment TE P. 247 Long distance calls chart. |
| Practice Page | 1 | 330 | Practice Masters 11, 1-5 |
| Review Lesson | 1 |  | Practice Masters 11, 1-5 |
| Evaluation | 1 |  | Teacher-made test. |




GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK Mathematics (Houghton-Mifflin)

| TOPIC | $\begin{aligned} & \text { TIME } \\ & \text { (in days) } \end{aligned}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT XII - Geometry | 13 | 262-281 | Geoboards, activ ities in which different shapes are formed with a rubber band or string. Visual examples of cylinder, box, pyramid, etc. |
| Identify rectangular boxe cubes, spheres, pyramids, cones, and cylinders as they appear in real ilfe | 1 | 262-263 |  |
| Identify the number of sides and angles in triangles, quadrilaterals and pentagons | 1 | 264-265 |  |
| Match a geometric shape or parts of a shape with Its name | 1 | 266-267 |  |
| Identify an angle as a right angle, angle less than a right angle, or angle greater than a right angle | 2 | 268-269 | Use concrete material,ie; a book that is opened at different angles. |
| Match a triangle with an appropriate description of the triangle | 1 | 270-271 | Practice and enrichment sheets. |
| Select parallel ines and lines that meet at right angles from a group of objects that contain them | 2 | 272-273 |  |



GRADE \& SUBJECT Fourth Grade Math
TEXTBOOK
Mathematics (Houghton-Miffiln)

| TOPIC | $\begin{gathered} \text { TIME } \\ \text { (in days) } \end{gathered}$ | $\begin{gathered} \text { TEXTBOOK } \\ \text { PAGES } \\ \hline \end{gathered}$ | SUPPLEMENTARY MATERIALS/ACTIVITIES |
| :---: | :---: | :---: | :---: |
| UNIT XIII - Fractions and Decimals |  | 286-305 |  |
| Write the simplest form of a fraction | 1 | 286-287 | Review numerators and denominators See TE P. 286. |
| Add fractions with like denominators | 1 | 288-289 | Vegetable Game TE P. 288, Enrichment TE P. 289 |
| Subtract fractions with the denominators | 1 | 290-291 | More practice and application. TE P. 291 <br> Use Construction paper as visual aid. TE P. 290. |
| Add fractions with unlike denominators | 1 | 292-293 | Review common denominators TE P. 292, Enrichment TE P. 293 |
| Subtract fractions with unlike denominators | 1 | 294-295 | Lemonade Stand TE P. 294, More practice and application TE P. 295 |
| Write a fraction as a mixed number | 2 | 296-297 | Use visual aids to illustrate mixed numbers. TE P. 296 More practice and application TE P. 297 |
| Write a decimal for a mixed number using tenths and hundredths | 3 | 298-299 | Use grid paper as visual aid. TE P. 298 More practice and application TE P. 299 |
| Add and subtract decimals using tenths | $s \quad 1$ | 300-301 | More practice and application TE P. 301 |



## APPENDIX D

PARENT DISCLOSURE DOCUMENTS

The Edmond School District is committed to providing an opportunity for all sfudents develop their abilities to the optimum. It is imperative that all students receive a aress Special attention is siven to the fact areas. Special attention is given to the fac rate. Each student is unique and the math projram is seared so that each student can experience success.

This basic study guide will extend the opportunity to parents to become familiar with the topics of study the students will be exposed to at each grade level in math.

Success in achool requires cooperation amons teachers, parents, and students. Tesihers must continue to be aware of the individual differences in students and teach accordingly; students must attend school and complete their work to the best of their abilicy; and parents must help their children by treating para with uncondpional positive regard, supporting the teachers, and
aftendins schoul conferences.
Students will experience more success when thay know that parents and teachers are workins together and that the adults are on their side.

## FIRST GRADE TOPICS OF STUDY

By the end of the year, the firat grade child, according to individual developmental level and capabitity, ahould have learned the ical procesese for the follouing basic areas.

NUMBERS

- recognize and write numbera 0 to 20.
recognize groups of objects with more or less.
read a picture graph and color up to 10 objects.
- order numbers to 20
- recognize place value: tens and ones.
- recognize tens to 90.
- recognize and write the numbers 21 to 99.
- order numbers to 99


## ADDITION

- recognize the aymbole + and -.
- add 1 or 2 to a number with suma to 10 .

| 4 | 5 |
| ---: | ---: |
| +1 | +2 |

- add two numbers with sume to 18

- add three numbers with sume to 10

- add two tens with sums to 90.
$\begin{array}{r}20 \\ +50 \\ \hline\end{array}$
- add two 2-digit numbers with no regrouping.
$\begin{array}{r}65 \\ +24 \\ \hline\end{array}$
$+24$

SUBTRACTION

- recognize the symbols - and -.
- aubtract 1 or 2 from numbers to 10.

| 6 | 5 |
| ---: | ---: |
| -1 | -2 |

- 18 . 18.
- suberact two tens with sums to 90.

| 90 | 80 |
| ---: | ---: |
| -60 | -10 |

- subtract two 2-digit numbers with no regrouping.

TOPICS OF STUDY

MONEY

- recognizing the value of a group of pennies, nickels, and dimes.

GEOMETRY AND MEASUREMENT

- recognizing and identifying shapes.
- comparing and measuring lengths using an inch ruler and a centimeter ruler.
- telling time to the hour.

FRACTIONS AND ME.ASUREIENI

- identifying symetrical shapes
- recognizing $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$.
- telling time to the hour and half-hour.
- recognizing liters and half liters.
- making conversion among cups, pints, and quarts.

Teacher's Name -

Edmond Public Schoola

## FOURTH GRADE TOPICS OP STUDY.

By the end of the year, the fourth grade child according to individual developmental level and capability should have learned the mathematical processes for the following basic areas.

## I. ADDITION <br> Addition of:

- two numbers with sums to 18 .
- a 1 -digit and 2 -digit number with sums $\begin{array}{ll}\text { to } 28 . & 15 \\ & +4\end{array}$
- three or more 1-digit numbers. ${ }^{5}$
- two or three 2-digit numbere with no regrouping. 44
- two or three 2-digit numbers, 28 regrouping ones. +16
- two, three, or four 3-digit numbers
regrouping ones and tens.
two 4-digit numbers,
tens, and hundreds.
- word problems.
- money in amounts less than $\$ 100.00$
II. SUBTRACTION Subtraction of:
- two numbers with oums to $18 . \quad 16$
- two 2-digit numbers, regrouping tens.


## 60

- two 3-digit numbers, regrouping tens and hundreds.
- two 4-digit numbers, regrouping tens, hundreds, and thousands.
- word problems.
- money in amounts less than $\$ 100.00$.
III. Multiplication Multiplication using:
- O through 9 as factors.

\section*{| 5 | 4 | 8 | 7 |
| ---: | ---: | ---: | ---: |
| $\times 1$ | $\times 3$ | $\times 5$ | $\times 9$ |}

Multiplication of:

- multiples of 10 less than 10,000 by a 1 -digit number.
2-xisit $x$

a 2 -digit number by a 1 -digit number | 83 |
| :--- |
| $\times 3$ |

- a 2-digit number by a 1-digit number, regrouping ones. 95
a 3-digit number by a 1-digit number, regrouping ones. 219
$\begin{array}{r}215 \\ \times 5 \\ \hline\end{array}$
- a 3-digit number by a l-digit number, 484 regrouping ones, tens, and hundreds. $x^{3}$
- a 4 -digit number by a 1 -digit number, regrouping as necessary.
- money amounts less than $\$ 100.00$ by a 1-digit number, regrouping as necessary.
- word problems.
- two 2-digit numbers, one of which is a multiple of ten. 85
two 2-digit numbers, one of which is
less than 20
- two 2-digit numbers. $\quad 79$
- a 3-digit number by a 2-digit number 653 which is a multiple a 2 -dig
a 3 digit nuter by a 2 digit
a 3-digit number by a 2-digit number. $\quad 482$
- a money amount written as dollars and cents by a 2 -digit number. $\quad \$ 4.82$

```
IY. DLVISION Division using:
    - 1-i as divisors and quotients. 8/32
    - 5-9 as divisors and quotients. }\frac{2}{9/18}\cdot67\frac{9}{54
nivision of:
    - a number lesa than 18 by a 1-digit
    nu::bar with a remainder.
2\sqrt{}{9}
    4 2-digit nurber by a l-digit
    number with a remainder.
    - a ?-digit or 3-digit multiple of
        lo by a 1-digit number with no 5/ 
    2 --disit number by a l-digit
        nu:ber with no recldinder.
    a 2-digic number by a l-digit
    nu-ber with a remainder.
    - a 3-digit number by a l-digit
        number with no remainder.
            3\longdiv{249}
        a 3-digit by a l-digit number
        with a remainder.
        9\longdiv{357}
    -word problems
    - a 2 or 3-digit number by a st/ 6/ 6/118
    1-digit number. 
```



```
    _ J-disit number by a l-digit }\sqrt{}{915
        nurber with a remainder. 6
    -a 3-Jigit number by a l-digit g
        number with a zero in the quotient. 9 107 1971
    - 3 2 or 3 digit number by a 2-digit
    multiple of 10. 
    - a 2 or 3 digit number by a 2-digit
```

\%. DIVISION Division using:
s-9 as divisors and quotients
nivision of:
by a 1-digit
1 I-digit nurber by a l-digit number with a remainder.$4 \longdiv { 1 9 }$
a 10 -digit or 3 -digit multiple of $r$ eminder.
$\sqrt [ 5 ] { 2 5 0 } \quad 2 \longdiv { 8 0 }$
a - -cinit number by a l-digit
2-disit number by l-digit $\sqrt[3]{69} \quad 7 / 91$
a numer with a ronainder
umber with no rey a $1-d i g i$
a 3-digit by a l-digit number
th a remainder
$7 \longdiv { 3 2 9 }$
-word problems
1-jigit nu:ber. $5 \longdiv { 8 8 } \quad 6 \longdiv { 1 1 8 }$
$\begin{array}{lll}-3 & 3 \\ \text { nueber with no remsinder. } & 3 \sqrt[3]{366} & 7 / 98\end{array}$
a 3 -disit number by a l-digit $\quad 6 \longdiv { 9 1 5 }$
3 3-Jigit number by a 1 -digit $\quad \frac{107}{971}$ R. 8

- a 2 or 3 digit number by a 2-digit
$\begin{array}{lll}32 \text { or } 3 \text { digit number by a } & 2-\mathrm{digit} \\ \text { number with a. remainder. } & 5 0 \longdiv { 7 2 } & 3 6 \longdiv { 1 4 3 }\end{array}$


## NUMBERS AND MEASUREMENT

- use of < (leas than) and > (greater than).
- writing the atandard forme of numbers up to 7 digits.
- rounding-off numbers less than 1000 to the nearest ten and hundred.
- finding the value of money using coins and dollars.
- measuring using metric units and traditional units.
- solving word problems involving units of time.

TOPICS OF STUDY
IN

RACTIONS AND DECIMALS

- writing fractions in the simplest form.
- addition and subtraction of fractions with like denominators.
- addition and subtraction of fractions with unlike denominators.
- writing fractions as mixed numbers.
- addition and subtraction of fraction with decimals using tenths and hundreths.
- writing a decimal for a mixed number using tenths and hundreths.


## GEOMETRY

- identification of shapes and anglea.


## APPENDIX E

## QUESTIONNAIRE

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; $M A=$ Moderately agree; $A=$ Agree $; M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if
they had been given release time and/or pay.
5. The majority of the teachers in the district will
use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

## APPENDIX F

## QUESTIONNAIRE RESULTS

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$\mathbf{S A}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=\mathrm{Agree} ; \mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments :

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA $=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD
guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year.
10 . Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to
the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A. SA MA A MD D SD guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.


## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each sstātement by placing a check under the proper response.
SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

## velopment of curriculum

 guides in this district.2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $\mathrm{SA}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

SA MA A MD D SD


DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; A = Agree; MD = Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:



DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$S A=$ Strongly agree; $M A=$ Moderately agree; $A=$ Agree; $M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides
will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth. 11. The guides will prove to be most beneficial to the new teachers in the district.
10. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
11. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
12. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
13. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; $A=$ Agree; $M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$\mathrm{SA}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments :

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$\mathbf{S A}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

SA MA A MD D SD

-

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

 of therme ardent teucer ho a serener open,

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $\mathbf{S A}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A. SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$\mathbf{S A}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides
will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $\mathrm{SA}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

SA MA A MD D SD guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $S A=$ Strongly agree; $M A=$ Moderately agree; $A=$ Agree; $M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10 . Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $\mathrm{SA}=$ Strongly agree $; \mathrm{MA}=$ Moderately agree; $\mathrm{A}=\mathrm{Agree} ; \mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.


DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $S A=$ Strongly agree; $M A=$ Moderately agree; $A=$ Agree; $M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. A11 teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to
be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $S A=$ Strongly agree; $M A=$ Moderately agree; $A=A g r e e ; ~ M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.
Comments: fhece we car betcer evablexte

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $S A=$ Strongly agree; $M A=$ Moderately agree; $A=$ Agree $; M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
A.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year.
10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

There shoued thace beex a -xichexa uets
SA MA A MD D SD

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; A = Agree; MD = Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

|  | SA MA A MD D SD |
| :--- | :--- |
| There |  |

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10 . Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.
hor anoech orem whoa green indie cermeechan



DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; MA = Moderately agree; A = Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

| SA MA |
| :--- |
| T. There was a need for the development of curriculum |
| guides in this district. |

2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and


DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$\mathrm{SA}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; MA = Moderately agree; $A=$ Agree; $M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments :

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$S A=$ Strongly agree $; M A=$ Moderately agree; $A=$ Agree $; M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.


DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

| SA MA |
| :--- |
| 1. There was a need for the development of curriculum |

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.


DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B. guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups,
developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will bétrałh p mecragrac provided with some sense of continuity through the cilatatthe ch use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

Neuctran quids wad ofitinuit on the pant of the


 to gain another defile.

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA = Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

1. SA MA A MD D SD
2. There was a need for
guides in this district.
3. All teachers should have been involved in developing the guides.
4. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
5. More teachers would have worked on the guides, if they had been given release time and/or pay.
6. The majority of the teachers in the district will use the guides.
7. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
8. It was beneficial to work on the guides with teachers from other schools.
9. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
10. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $\mathbf{S A}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year.
10. Working on the curriculum guides provided an
opportunity for professional growth.
11: The guides will prove to be most beneficial to
the new teachers in the district.
11. If properly implemented, the curriculum guides
will be an asset to all teachers and children within the system.
13: Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14: The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15:- Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Gomments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; $A=$ Agree; MD = Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

| SA MA |
| :--- |
| 1. There was a need for the development of curriculum | guides in this district.

2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$S A=$ Strongly agree $; M A=$ Moderately agree; $A=A$ eree $; M D=$ Moderately
disagree; $D=$ Disagree; and $S D=$ Strongly disagre. .
B.

SA MA A MD D SD guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $\mathrm{SA}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.

SA MA A MD D SD guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

$$
\text { Questions } 7,9,10,+15 \text { - I could ret answer beeacene }
$$

 have had use of cumsicukem queen doe arden syptern and they were enarese.

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; A = Agree; MD = Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

SA MA A MD D SD

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a
teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.
$+$
$1: 1$


## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. $S A=$ Strongly agree; $M A=$ Moderately agree; $A=$ Agree; $M D=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

1. There was a need for the development of curriculun guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.


## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
$\mathrm{SA}=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

1. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
10. The guides will prove to be most beneficial to the new teachers in the district.
11. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
12. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
13. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
14. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response.
SA = Strongly agree; MA = Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.

SA MA A MD D SD guides in this district the development of curriculun
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups,
developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to
the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

DIRECTIONS: Read each item carefully. Please state how you feel about each statement by placing a check under the proper response. SA $=$ Strongly agree; $\mathrm{MA}=$ Moderately agree; $\mathrm{A}=$ Agree; $\mathrm{MD}=$ Moderately disagree; $D=$ Disagree; and $S D=$ Strongly disagree.
B.
B. There was a need for the development of curriculum guides in this district.
2. All teachers should have been involved in developing the guides.
3. Rather than being assigned to an overall activity in developing the guides, teachers should have been allowed to select a particular area of involvement, such as coordinating the activities of groups, developing supplementary activities, and compiling and/or typing the guides.
4. More teachers would have worked on the guides, if they had been given release time and/or pay.
5. The majority of the teachers in the district will use the guides.
6. The guides will be used more effectively and efficiently, if proper implementation procedures are made available to the teachers.
7. It was beneficial to work on the guides with teachers from other schools.
8. All teachers in the same grade levels at different schools are working on and covering the same materials and activities.
9. Working on the curriculum guides broadened my perspective of the range of subject matter, materials, and activities to be covered during the school year. 10. Working on the curriculum guides provided an opportunity for professional growth.
11. The guides will prove to be most beneficial to the new teachers in the district.
12. If properly implemented, the curriculum guides will be an asset to all teachers and children within the system.
13. Children transferring within the system will be provided with some sense of continuity through the use of the guides.
14. The curriculum guides should be used as a resource by the teachers rather than a set of rigid content to be covered.
15. Working on the guides helped to improve a teacher's self-confidence, motivation, interest, and expertise in at least one subject matter area.

## Comments:

## VITA ${ }^{\prime}$

Mabel Ethel Gaskins<br>Candidate for the Degree of<br>Master of Science

## Thesis: THE ROLE OF THE TEACHER IN CURRICULUM DEVELOPMENT IN THE EDMOND ELEMENTARY SCHOOLS

## Major Field: Educational Administration

## Biographical:

Personal Data: Born in Boston, Massachusetts, January 20, 1941, the daughter of Clayton and Rhoda Rocker; married to Richard S. Gaskins and have two children, Keesha, 12 years, and Malik, 8 years.

Education: Graduated from English High School, Lynn, Massachusetts, in June, 1958; received the Bachelor of Science degree in Elementary Education from Boston University, Boston, Massachusetts, in 1963; completed the requirements for the Master of Science degree at Oklahoma State University, in July, 1980.

Professional Experience: Teacher of grades three through six for Lynn Public Schools, Lynn, Massachusetts, 1963-1969; teacher and team-leader for Fairfax County Public Schools, Reston, Virginia, 1970-1973; teacher of grades four and five for Bloomington Public Schools, Bloomington, Minnesota, 1973-1976; part-time recruiter-counselor for Gustavus Adolphus College, St. Peter, Minnesota, 1974-1976; teacher of grades one through four for the Waterford Public Schools, Pontiac, Michigan, 1976-1978; teacher of grade two for the Edmond Public Schools, Edmond, Oklahoma, 1979; internship in Educational Administration and Curriculum Development with the Edmond Public Schools, Edmond, Oklahoma, 1980.

Community Involvement: Board of Directors, Y. W. C. A., Bloomington, Minnesota, 1975-1976; Educational Coordinator and Program Director, Teen City, Inc., Lynn, Massachusetts, 1968-1970; Educational Coordinator, N. A. A. C. P., Lynn, Massachusetts, 1967-1968; Educational Director, Lynn Education Action Program, Lynn, Massachusetts, 1965-1967.

